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SECTION I

SAFETY AND HEALTH MANAGEMENT PROGRAMS
1.0 USE OF THIS MANUAL

This manual is intended to establish the outline and essential details of the safety plan for Ulliman Schutte Construction, LLC (USC). It is not intended to reproduce all safety regulations issued by Federal, State and Local authorities. In particular, this manual is intended to be used in conjunction with Title 29 Code of Federal Regulations Part 1926. Should the reader not have a copy of the CFR Part 1926, a copy should be obtained from the USC Corporate Safety Director.

As new regulations are issued they will be the subject of training sessions and will be added to this Safety Manual.

This manual includes references to the Ulliman Schutte Online Safety Affirmation Enterprise (USOSAFE) system. The USOSAFE system is an intranet-based safety data and information system used by authorized Ulliman Schutte Construction supervisory personnel to document, archive, and share safety information. Any questions on the USOSAFE system should be directed toward the Corporate Safety Director.

This Safety Manual is referenced by and complimentary to the Personnel Policy Manual and the Project Supervisors Manual also issued by the company.
1.1 SAFETY POLICY

A. Our employees are our most valuable asset. It is the policy of Ulliman Schutte Construction to assure, as far as possible, that all employees be provided safe and healthy working conditions.

B. The top management of Ulliman Schutte Construction is committed to safety and recognizes that a like commitment of all Managers, Superintendents, Foremen, and Craft Workers is essential to our success. Every reasonable effort will be made in achieving the goal of accident prevention and health preservation. We are counting on you to do your part in making our program an effective one.

C. The continued success of the company depends not only on production and sales, but also on how safely each job is performed. There is no job so important, nor any service so urgent, that we cannot expend the time required to work safely.

D. The company will assure that an injured worker receives proper care and a timely return to active work duties.

E. I consider the safety of our personnel to be of prime importance, and I expect your full cooperation in making our program effective.

Matthew S. Ulliman
President
1.2 GOALS AND OBJECTIVES

1. Objectives

A. To maintain our Recordable Incident Rate as defined by OSHA at a rate of 5 or lower.
B. To maintain our Lost Time Incident Rate at a rate of 2 or lower.
C. To maintain our Lost Workday Rate at a rate of 20 or lower.
E. To incur no regulatory or OSHA citations or environment mishaps.

2. Scope

A. Injury Prevention Programs will include:
   1. Company employees on the job.
   2. Non-employees at risk of injury or property damage at our jobsites, including:
      - Owners and Engineers
      - Subcontractors
      - Visitors, escorted and unescorted
      - Local Residents
      - Trespassers

B. Occupational Illness Prevention Program will include:
   1. Toxic Materials Controls
   2. Infectious Disease Control
   3. Hearing Protection
   4. Repetitive Motion Trauma Prevention
   5. Prevention of injury due to weather/temperature extremes

C. Property Loss Prevention Program will include:
   1. Equipment and Facilities
   2. Emergency/Crisis Plan
   3. Fire and General Emergency
   4. Site Security Plan

D. Environmental Protection Programs will include:
   1. Hazardous Waste Control and Disposal
   2. Water Pollution Prevention

3. Responsibilities For Safety Will Be Delegated In The Following Way:

A. All supervisory personnel are responsible for:
   1. Providing a safe and healthy work environment for employees, subcontractors, and visitors.
2. Becoming aware of safe and healthy work practices, and recognizing when additional training may be necessary.

3. Safeguarding all equipment, facilities, energy sources and materials under their control.

4. Assuring the proper handling and disposal of waste materials.

5. Identifying which information may be made available to employees and their immediate families that they may wish to use to help prevent off-the-job injuries and illnesses.

6. Recognizing and alerting the authorities to the presence of unauthorized personnel.

B. In addition to the above duties, staff managers, listed by department, are responsible for:

1. Project Management: Proper selection/purchasing of safe equipment and materials. Plan and schedule production times that incorporate safety considerations into target completion dates. Evaluate equipment needs to ensure equipment is utilized properly. Develop and distribute job specific Fire Prevention Plan and Project Safety and Health Plan (see Appendix O).

2. Administrator: Appropriate programs and procedures for staff use, to:
   - Measure management accountability
   - Provide technical assistance to other managers
   - Educate employees and promote safety consciousness

3. Maintenance: Proper and safe maintenance of all equipment.

4. Estimating: Ensure appropriate funding for safety equipment and training expenses are included in financial planning.

5. Legal: Review all company documents to ensure appropriate, accurate wording.

4. Authority to enforce this safety policy will be delegated in the following way:

   A. All employees have the authority to stop any operation they believe may be unsafe.

   B. Project Managers, Superintendents, and Foremen have the authority to direct their subordinates to meet assigned responsibilities and stated objectives.

5. Accountability for this safety policy will be delegated in the following way:

   A. Each manager's efforts and results will be evaluated by the Vice President. This information will be used in each manager's performance appraisal and will have a significant impact on merit increases and bonuses.
6. Standards for decision-making will be as follows:

A. Immediate action must be taken if:

1. Imminent danger to life, health or property is encountered.

2. The possibility of a violation of OSHA, EPA, or Company Safety Policy is suspected.
1.3 RESPONSIBILITIES AND DUTIES

It is the responsibility of the Executive Management of Ulliman Schutte Construction, LLC, to demonstrate a strong commitment to the achievement of our safety objectives. It is their responsibility to develop policies and implement procedures that will assure, to the greatest extent possible, safe and healthy work conditions for all employees. They are required to monitor the results of our efforts and provide any necessary changes in the program or approve any disciplinary action. The Corporate Safety Director, appointed by the President, will be responsible to ensure that all corporate records are maintained as necessary.

When visiting jobsites the Executive Management will observe and comment on the safety efforts and the results of those safety efforts on the projects.

It is the responsibility of the Project Manager to review and be aware of the requirements and responsibilities imposed on each project by this Safety Manual. He or she is responsible to see that the project is in compliance with our safety program. Specifically, he or she shall insure that proper notices are posted, required training is being given and recorded, required periodic inspections are being performed and recorded, and accident reports are properly filled out in a timely manner. The Project Manager will provide all necessary resources to the Project Superintendent so that the Superintendent can perform his duties required by the safety program.

The Project Superintendent is the key to the safe management of the job. The Superintendent will conduct the New Employee Orientation. He will generally conduct the weekly “Toolbox Talks” unless a special topic is to be presented by someone he appoints. He will perform the required periodic inspections and record the results. The Superintendent is responsible for the actual implementation on the project site of all requirements of the safety program.

The Superintendent is responsible to see that any injured employee receives proper first aid and/or medical treatment. The Superintendent will then conduct the Incident Investigation.

The Superintendent will notify the company President of any recordable accident within 24 hours of occurrence.

The Superintendent will insure that all potential employees are drug tested and that only persons who pass the drug test are allowed to work.

The Superintendent will be proactive with any injured employee to insure that they return to work as soon as possible. He will be responsible for selection of light duty assignments to be made available for employees that have been released to work light duty by their doctor.

The Superintendent will monitor the subcontractor’s safety practices and ensure their compliance with Ulliman Schutte Constructions’ safety policies (see Appendix S).

The Craft Foremen will be responsible to check employees daily to observe their condition and performance as it relates to safety. The Foremen will report any unusual conditions that would interfere with the safe performance of the job to the Project Superintendent. The Foremen will instruct employees in safe performance of their job assignments. The Foremen will check the work site and tools to be used to ensure that no unsafe conditions exist. The Foremen will make
available to the individual employee any necessary personal protective equipment and ensure that it is used when required.
1.4 EMPLOYEE RESPONSIBILITY

Employees shall accept the established Safety and Health Program as part of their responsibility to help reduce and eliminate accidents (loss incidents). All employees are expected to show up for work in the proper physical, mental and emotional condition to permit the safe performance of their duties. They will utilize all accident prevention measures, such as observing safe work practices, use of proper safety devices, use of personal protective equipment as required and make prompt reports to their immediate supervisor of each occupational injury or illness.

Employees also have a responsibility to encourage fellow workers to work safely and to report existing or potential hazards as they arise. Employees will be accountable to their supervisors for accidents or unsafe work practices. Disciplinary action will be taken when necessary to improve employee performance.

Each employee of Ulliman Schutte Construction, LLC will:

- Observe and comply with all safety rules and regulations that apply to his/her trade.
- Report all on-the-job accidents, incidents and injuries to his/her supervisor immediately.
- Report all equipment damage to his/her supervisor immediately.
- Follow instructions and ask questions of his/her supervisor when in doubt about any phase of his/her assignment.
- Report all unsafe conditions or situations that are potentially hazardous.
- Operate only equipment or machinery that he/she is qualified to operate. Where licenses or certifications are required to perform certain tasks, no employee shall perform these tasks unless so certified.
- When in doubt, ask for instruction.
- Know what emergency telephone numbers to call in case of fire and/or personal injury. Help to maintain a safe and clean work area.
- Talk with management at any reasonable time concerning problems that affect his/her safety or work conditions.
- Know the location of the Chemical Inventory List and MSDS.

The most important part of making this program effective is the individual employee. Without your cooperation, the most stringent program can be ineffective. Protect yourself and your fellow workers by following the rules. Remember: Work safely so that you can return home each day the same way you left. Your family needs you and this company needs you! Don't Take Chances - Think Safety!
1.5 DRUG AND ALCOHOL POLICY

The Management of Ulliman Schutte Construction, LLC has observed that the use of illegal drugs and alcohol has a very high correlation to the number of accidents and injuries on construction jobs.

In order to mitigate these accidents and injuries, Ulliman Schutte has adopted a policy prohibiting the sale, possession or use of illegal drugs or alcohol while on jobsites, company offices or while operating company vehicles or equipment.

It is required that all prospective employees successfully pass a drug screening test prior to beginning work on any job site.

It has been observed that some construction employees who have successfully passed a pre-employment drug test have been involved in accidents and when tested in conjunction with the accident have failed the drug test. In order to mitigate the possibility of these accidents and injuries, all employees and jobsites will be subject to random drug testing. Additionally, any employee may be required to submit to testing when reasonable cause exists as evidenced by the physical condition, behavior, performance or lack of performance of their duties. If any employee refuses to submit to a required drug test this constitutes a violation of this policy.

The company reserves the right to inspect all employee property on company premises or jobsites to ensure compliance with this policy. Employee property will be searched with reasonable cause and with their cooperation (i.e. Employees may be asked to open lunchboxes, purses, vehicles, etc.). Refusal to cooperate with reasonable search will be grounds for disciplinary action or dismissal.

Any employee involved in an accident or injury that requires medical treatment or loss time injury is required to pass a drug-screening test.

Employees who are taking prescription or nonprescription drugs which limit the performance of their duties are required to inform their immediate supervisor of their limitations. No employee shall perform any duties or operate machinery or equipment if they are taking medication which reduces their ability to safely perform the job.

Any employee required to submit for a drug test must submit urine or blood samples reasonably necessary to complete such testing.

Any violation of this drug and alcohol policy may result in dismissal.
2.0 COMPETENT/QUALIFIED PERSONS

The Occupational Safety and Health Administration’s (OSHA) Construction Standards (29 CFR 1926) require every employer to designate competent persons to conduct frequent and regular inspections of the job site, materials, and equipment.

To comply with OSHA competent/qualified person requirements, each project will have a competent person capable of identifying existing and predictable hazards with the authority to take prompt corrective measures to eliminate them. This individual may designate other competent persons to perform certain tasks, such as supervising scaffold erection.

Competent/qualified persons will be designated for each project and listed on the Safety and Health Competent Person Assignments Form (see Appendix N). This form will be completed and displayed at all operations requiring the presence of a competent/qualified person. The form should be updated and replaced as necessary to reflect current designated competent/qualified persons and their area of expertise and responsibility.
3.0 IDENTIFICATION AND CONTROL OF HAZARDS

The core of an effective safety and health program is hazard identification and control. Periodic inspections and procedures for correction and control provide methods of identifying and eliminating or controlling existing or potential hazards in the workplace. The hazard control system provides a basis for developing safe work procedures and injury and illness prevention training. If hazards occur or recur, this reflects a breakdown in the hazard control system.

This written safety and health program establishes procedures and responsibilities for the identification and correction of workplace hazards.

Jobsite Safety Inspections

Safety inspections of the jobsite are a critical component of hazard identification and control. Inspections will be performed daily by the Superintendent or his designee. One inspection per week will be documented on the Weekly Job Inspection Checklist. In addition, safety inspections will be performed periodically by the President or Vice President, when conditions change, or when a new process or procedure is implemented.

These inspections should focus on the identification and correction of potential safety, health and fire hazards. Inspections will be conducted using the USOSAFE Weekly Job Inspection Checklist, via either a PDA device or on the paper form (see Appendix T). In addition, the "safe work procedures" in Section II of this program will be reviewed by personnel conducting safety inspections of the jobsite.

As part of this safety and health program, the site Superintendent for each project will:

- Identify "high hazard" areas of operation and determine inspection priorities
- Establish inspection responsibilities and schedules
- Review, analyze and take corrective action on inspection findings.
3.1 INCIDENT INVESTIGATION PROCEDURE

A. Purpose:

The purpose of this procedure is to determine and remove causes of incidents, loss incidents and near misses to prevent them from recurring.

B. Scope:

This procedure begins when a loss or near loss incident occurs, or when an employee requests an incident report form. The employee is to request this form whenever he/she experiences or witnesses a loss incident or near loss incident.

C. Policy:

A formalized approach to incident investigation can aid in improving the management system to prevent these incidents from occurring. This procedure is designed to identify problems in the management system therefore reducing the occurrence of loss incidents.

D. Definitions:

**Affected Employee:** Any employee of Ulliman Schutte Construction Company or any subcontractor who is involved in or witnesses an incident.

**Incident:** Any event that causes or could cause injury, illness, property damage, or any form of loss to Ulliman Schutte Construction and/or Subcontractors or the project. This includes loss incidents and near loss incidents (near misses).

**Injury:** Bodily harm such as cuts, bruises, fractures, strains, exposures, etc.

**Loss Incident:** An undesired event that results in an injury, illness, property damage, product damage, or a loss in production.

**Near Loss Incident:** Any interruption in the smooth flow of production that does not result in a loss to the company.

**Supervisor:** Person directly responsible for "Affected Employee".

**Wrkrs. Comp. Dept:** Office staff member responsible for coordinating with appropriate Workers Compensation Authorities.
### E. Responsibilities:

<table>
<thead>
<tr>
<th>POSITION</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affected Employee</td>
<td>1. Seek medical attention</td>
</tr>
<tr>
<td></td>
<td>2. Notify supervisor of incident</td>
</tr>
<tr>
<td>Supervisor</td>
<td>3. Take appropriate emergency action. (i.e. call ambulance, take employee to emergency room, administer first aid, etc.)</td>
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<tr>
<td></td>
<td>4. Begin Incident Investigation by issuing Incident Investigation Witness Report (<em>Appendix B</em>) to Affected Employee and all witnesses.</td>
</tr>
<tr>
<td></td>
<td>5. Setup security at incident site and separate witnesses.</td>
</tr>
<tr>
<td>Supervisor</td>
<td>7. Receive notification and/or form from Affected Employee.</td>
</tr>
<tr>
<td></td>
<td>8. Make notification of incident by phone to the President at 937-910-9900.</td>
</tr>
<tr>
<td>Workers Comp Department</td>
<td>8A. Complete Notification Report Form.</td>
</tr>
<tr>
<td></td>
<td>8B. Ask Supervisor to instruct witnesses to complete Witness Report Form.</td>
</tr>
<tr>
<td></td>
<td>8C. Ask Supervisor to complete Incident Report.</td>
</tr>
<tr>
<td></td>
<td>8D. Request Supervisor submit forms to Workers Compensation Dept</td>
</tr>
<tr>
<td></td>
<td>8E. Notify appropriate company personnel.</td>
</tr>
<tr>
<td>Supervisor</td>
<td>9. In the event of a serious injury/fatality or other emergency (defined in Section 3.4 Crisis Management Plan) follow crisis management plan included in Section 3.3.</td>
</tr>
<tr>
<td>Supervisor/Safety Director</td>
<td>10. Collect required incident information on who, what, where, when, etc. along with Safety Director as needed.</td>
</tr>
<tr>
<td></td>
<td>11. Determine immediate causal factors such as unsafe acts and unsafe conditions using <em>Appendix B</em> as a guide.</td>
</tr>
<tr>
<td></td>
<td>12. Determine potential contributory causes such as availability of correct tools, condition of equip, procedural deficiencies, etc.</td>
</tr>
<tr>
<td></td>
<td>13. Identify potential corrective actions.</td>
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<td></td>
<td>13A. Take corrective action</td>
</tr>
<tr>
<td></td>
<td>14. Complete Incident Investigation Report Form (<em>Appendix A</em>)</td>
</tr>
<tr>
<td>Safety Director</td>
<td>15. Return copy of Incident Investigation Report, Employee/Witness Incident Rpt, and any witness statements to Workers Compensation Department.</td>
</tr>
<tr>
<td></td>
<td>16. Review forms to determine underlying causes of incidents. (i.e. what in the organization is not working, such as physical conditions, management systems, behavioral environment, etc.)</td>
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<tr>
<td></td>
<td>17. Identify possible needs for procedural changes or program improvements.</td>
</tr>
<tr>
<td></td>
<td>18. Inform appropriate managers (Vice President, Project Manager, Supervisor, Foreman) of results.</td>
</tr>
<tr>
<td>Safety Director/Manager</td>
<td>19. Develop a plan of action to correct identified problems.</td>
</tr>
<tr>
<td></td>
<td>20. Distribute results of investigation to all Supervisors.</td>
</tr>
<tr>
<td>Supervisor</td>
<td>20A. Review investigation results and post at jobsite.</td>
</tr>
<tr>
<td>Safety Director</td>
<td>21. Distribute copies of recommendations to all employees involved in the incident.</td>
</tr>
<tr>
<td></td>
<td>22. File Incident Report Form and maintain for a minimum of 5 yrs.</td>
</tr>
</tbody>
</table>
3.2 INCIDENT REPORTS/INVESTIGATION

All incidents are to be immediately reported to the Superintendent. The immediate concern is for the care of the injured person. As soon as his or her care and treatment are provided for, all incident reports are to be completed.

The report should be very specific and detailed. Any witnesses to the incident should be identified and consulted. Photographs should be taken of the site of the incident. It is important to complete the report as soon after the event as possible as items could be overlooked as time passes. The Project Manager should participate with the Superintendent in the preparation of the Incident Report.

If the incident results in a recordable injury, the Superintendent is required to call the President of the Company and inform him of the details of the incident. In the case of a loss time injury, a copy of the Incident Report should be faxed to the main office within 48 hours. If the incident involves serious injury or damage to property, an Officer of the Company is to be notified immediately.

One of the important uses of the report is to help determine the cause of the incident in order to eliminate it in the future. Be sure to note all unsafe acts and unsafe conditions. For this reason, objectiveness is imperative in reporting.

Interviewing of witnesses should be completed in private in order that the witness be free to testify completely. Witness statements should be signed. Only first hand information must be recorded and signed. (Ask if the witness has any ideas on how to eliminate this from recurring in the future).

The Project Manager will notify the company President to coordination notification of our insurance carrier in cases which may result in a claim being made.

A copy of the Incident Report is to be maintained at the job site and to the main office, with the original being sent to the Corporate Safety Director.

Site Security Guidelines

1. Leave all equipment and tools in the position they were at the time of the incident as much as possible. In the case of a serious injury or fatality, nothing is to be moved. Take photographs as soon as possible.

2. Barricade or rope off the immediate area of the incident using caution tape, etc.

3. Separate all witnesses as soon as possible. Attempt to keep them from discussing the incident among each other.

4. Distribute the Witness Report form and require that all witnesses complete it prior to beginning the investigation.
5. Interview all witnesses using the following five-step method:

a. Discuss the purpose of the investigation and the interview. (i.e. fact finding, not fault finding.)

b. Instruct the individual to tell his or her version of the incident with minimal interruptions. Ask what was being done, where and how it was being done, and what happened. Instruct the individual to explain the sequence of events leading up to the incident.

c. Ask questions to clarify answers or fill any gaps.

d. Repeat the facts of the incident to the person being interviewed. This will provide an opportunity to correct any misunderstanding that may have occurred during the interview.

e. Discuss methods of how to prevent the incident from occurring again. Ask the individual for suggestions about eliminating or reducing the impact of the hazards that caused the incident.

6. With the above information, complete the Incident Investigation Report.
3.3 CRISIS MANAGEMENT PLAN

In the event of a jobsite fatality, serious injury, or emergency, the following procedures should be followed:

A. Emergency:

An Emergency is any jobsite fatality, serious injury or situation that poses an immediate threat to life or property. Such situations would include, but would not be limited to, collapse of any structure or portion thereof, fire, explosion, equipment failure (such as a crane collapse or near collapse), release or exposure to toxic gas, smoke, fumes, etc.

B. Immediate actions:

Several immediate and simultaneous actions must take place. These actions should be directed by the Superintendent or the senior staff member in the Superintendent’s absence. These actions are:

1. Protect and administer first aid to the injured.
2. Account for all jobsite personnel.
4. Secure the jobsite.

The Superintendent should immediately go to the scene of the emergency and direct all actions. As soon as the needs are known, emergency help should be summoned. It must be stressed that there should be no hesitation in calling for help. If in doubt as to the need - Call! Someone should remain stationed at the telephones in the job office. All other job staff should secure the site in order to keep unauthorized people from entering the site and to direct the incoming emergency crews.

C. Immediately inform the following:

1. Local Paramedics
2. Local Police Department
3. Project Manager
4. Superintendent
5. Vice President or President
6. Insurance Carrier

D. The Project Manager, Superintendent, and Vice President will immediately proceed to the jobsite if not already present.

E. The Superintendent will designate an employee to receive and direct the Paramedics and Police when they arrive.

F. The area involved will be immediately sealed off and monitored by an employee so that nothing is touched or removed.

G. All witnesses will be immediately identified and their names, addresses and phone numbers recorded.
H. The job will be shut down and all workers asked to leave premises. Crisis management teams from local agencies will be utilized to counsel workers before leaving the jobsite.

I. All gates, except the main gate, will be closed as applicable. Access to the jobsite at the main gate will be controlled by an employee. All unauthorized persons are to be denied access to the site. All unauthorized persons found on the site should be escorted off of the premises.

J. In the case of a death of an Ulliman Schutte Construction, LLC employee, the authorities will be utilized to notify the next of kin. This task, although extremely difficult, needs to be done as quickly as possible.

K. Information regarding the incident will be released to the news media by the President. No information is to be given to anyone over the telephone. Anyone calling and requesting information will be asked to leave their name and number. These calls will be returned as time and conditions permit.

L. The Project Manager and Vice President will prepare a memo for staff distribution as soon as circumstances permit.

M. All questions from clients should be directed to the President.

N. The local Occupational Safety and Health Administration Office (OSHA) must be notified within eight hours of a fatality or incident injuring three or more employees.

This program assumes that each subcontractor has their own program for notification of their management, next of kin and other necessary parties.

A job fatality sets off a chain of events involving safety, legal communication and other factors. Quite often, at the time of the incident it is difficult to ascertain exactly the what, how, and why of the incident. Our concerns need to be directed toward caring for our injured workers, sealing off the area for later inspection by controlling access to the site, avoiding further safety exposure, and notification of all parties involved.
4.0 TRAINING AND EDUCATION

All employees from Superintendents to journeymen and apprentices will receive safety education and training for all phases of work performed by Ulliman Schutte Construction, LLC. All training records will be stored within the USOSAFE system for ease of referral.

The USC Corporate Safety Director or his/her designee will conduct safety training on common jobsite hazards on a predetermined cyclic schedule. This will be beneficial in several ways:

1) All of our employees will receive regular safety training in common jobsite hazards.

2) The Corporate Safety Director or his/her designee will be present on each job at least once per month, allowing him to inspect the job, answer questions, and conduct any additional training that may be necessary or beneficial.

3) Project Superintendents will know the cyclic schedule in advance and can plan work activities around the training session to ensure maximum attendance.

It is understood that from time to time the training dates will have to be adjusted. Both the jobsites and the designated trainer will have conflicts arise that are unavoidable. In these cases, the jobsite and trainer will agree upon a new date and time for the scheduled training session. The revised date should always occur within 10 calendar days of the originally scheduled date (before or after).

The cyclic schedule will only include those projects with 10 or more field employees. Projects with less than 10 employees are responsible to either a) schedule on-site safety training (independent of the cyclic schedule) for the Project with the Safety Director, or b) ensure that employees attend the training sessions already scheduled on a nearby Project.

Any hazard-specific or job-specific training will need to be scheduled on an as-needed basis independently of this cyclic schedule. It is the responsibility of the Project Superintendent and Project Manager to ensure that employees are properly trained before being assigned a task.
4.1 NEW EMPLOYEE ORIENTATION

A disproportionate number of all accidents and injuries involve employees that have been on the job site for less than ninety days. In order to reduce the likelihood of these accidents, Ulliman Schutte requires that all new employees or current employees who are transferred to a new project undergo safety orientation and wear identification which designates the employee as a “new employee”. A new employee is defined as any employee new to the specific job site who has been working at the location less than ninety days.

4.1.1 Orientation

The new employee orientation is to be given by the Project Superintendent. The Superintendent may use this manual as a guide of topics to be covered in the orientation. Orientation is mandatory prior to working on the project. At a minimum, the following will be discussed:

A. Company Safety Policy
B. The employee will be made aware of the high rate of injuries to new employees.
C. The employee will sign a form that acknowledges the orientation (see Appendix P).
D. Personal Protective Equipment
E. Tool Box Safety Talks
F. First Aid
G. Accident Reporting
H. Hazard – Communication Program
I. Fall Protection
J. Fire Protection
K. Trenching & Excavation
L. Electrical Safety
M. Confined Spaces
N. Lead Standard
O. Safe Work Practices Around Crane
P. Drug Policy
Q. Fleet Policy
R. Lockout/Tag Out
S. EEO/Non-harassment
T. Silica Dust
U. View Safety Orientation Video

The new employee will be given a tour of the areas of the site in which he is expected to work. Any special requirement for the specific job site or work assignment will be given at this time.

The employee will be given an opportunity to ask any questions that he or she may have. A copy of the record of the orientation must be sent to the main office.

4.1.2 Red Hat/ Red Stripe Identification Policy

Every new or transferred employee in a non-supervisory role is required to wear a red-colored hardhat. Every new or transferred employee in a supervisory role (Foremen, Superintendent, Project Manager, etc) is required to wear a red label on both sides of their normal hardhat.
All employees, therefore, are required to either wear a either a red hardhat or the red labels on
their existing hardhat for their first 90 days on the Project. At the expiration of the 90-day
period, the red hardhats shall be returned to the Project Superintendent and a new,
classification-suitable hardhat shall be issued. Red labels may be removed from the hardhats of
supervisory personnel at the expiration of the 90-day period.

Red hardhats and red hardhat labels shall be issued by the Project Superintendent.
4.2 SUPERVISOR TRAINING

The supervisor/foreman is responsible for the prevention of incidents while employees perform tasks under his/her direction, as well as thorough accident prevention and safety training for employees he/she supervises. Therefore, all supervisors/foremen will receive training so that they have a sound theoretical and practical understanding of the following:

1. The site-specific safety program
2. OSHA Act and construction regulations
3. OSHA Hazard Communication standard
4. Site emergency response plan
5. First aid and CPR
6. Incident reporting and investigation procedures
7. Hazard assessment in their areas of expertise, and topics appropriate for toolbox talks
8. OSHA record keeping requirements
9. Communication techniques

In addition to the training requirements described above, Project Superintendents will receive additional training on the following topics:

1. Implementation and monitoring of a construction safety program
2. Personnel selection techniques
3. Job site planning
4. OSHA record keeping requirements
4.3 EMPLOYEE TRAINING

General and specialized training will be provided for certain jobs and types of equipment. Training will be conducted on the jobsite, Training Centers, or wherever practical. The following topics are examples:

1. Personal Fall Protection
2. Electrical Safety
3. Excavation Protection
4. Emergency Procedures
5. Power Tool Safety
6. Confined Space
7. Personal Protective Equipment
8. Scaffolding

Review Section 4.0 for a description of the USC cyclic training program.
4.4 SAFETY BULLETIN BOARD

The bulletin board is another method to increase employees' awareness of safety and health and to communicate management's safety message. A safety bulletin board will be located on each jobsite where it will be visible to all employees. The bulletin board will contain information such as:

- Federal and state OSHA posters
- Safety promotions/awards
- Safety meeting dates and times
- OSHA 300A Form (February of each year)
- Emergency phone numbers
- Workers Comp Insurance information poster

Additional items may be posted with the Project Superintendent's approval.
4.5 WEEKLY SAFETY MEETINGS

Supervisors/foremen will conduct weekly work group sessions, also known as toolbox meetings, each Monday immediately prior to the start of work. These toolbox meetings may be held more frequently depending on the circumstances (i.e., fatality, injury, new operations, etc.) The Supervisor/Foreman will provide appropriate materials (handouts, experiences, etc.) to discussion leaders in advance of each meeting. Discussion leaders will be selected for each meeting by the supervisor/foreman.

Active employee participation and a question-and-answer session are recommended during each meeting.

Meetings will be scheduled whenever new operations are introduced into the workplace to ensure that all employees are familiar with the safe job procedures and requirements for performing the job safely.

Employee attendance at toolbox meeting must be recorded on the weekly safety meeting form (see Appendix C). These forms will be submitted to the main office and tracked within USOSAFE. A quarterly report of completion rates will be distributed to the President, Vice President, Project Managers, General Superintendents, and Superintendents.
5.0 RECORDKEEPING

Various types of reports are necessary to meet the record keeping requirements of OSHA, insurance carriers, and other government regulatory agencies. Additionally, some clients may require additional jobsite record keeping requirements.

Ulliman Schutte Construction, LLC has established uniform record-keeping procedures for all jobsites to measure the overall safety and health performance of each project. Incidents will be tracked according to project, Superintendent, and Project Manager.

A. OSHA Records

The Occupational Safety and Health Administration (OSHA) requires Ulliman Schutte Construction, LLC to record and maintain injury and illness records. These records are used by management to evaluate the effectiveness of this safety and health program. The Corporate Safety Director will manage the programs for OSHA record-keeping regulations listed below:

- Obtain a report on every injury or illness
- Record each injury or illness on the OSHA Log and Summary of Occupational Injuries & Illnesses (Form 300)
- Prepare a supplementary record of the occupational injuries and illnesses on company incident report forms
- Prepare the summary OSHA Form 300A, post it no later than February 1, and keep it posted where employees can see it until March 1; provide copies as required or requested.
- Maintain these records in company files for five years.

The jobsite superintendent is responsible for posting the above-required records. The Superintendent is also responsible for submitting a report on every jobsite incident.

B. Medical/Exposure Records

Unless a different retention period is specified by a specific standard, medical records which are related of the required record-keeping procedures for potential hazardous materials exposures will be maintained for 30 years from the time of the end of an employee's employment. These records are confidential information and will remain in the custody of the Safety Director. Information from an employee's medical record will only be disclosed to the employee or his/her designated representative after written consent from the employee.
5.1 JOBSITE RECORDS

The following records are to be maintained at the job site:

1. A current copy of the company Safety Manual
2. The completed First Aid Log (see Appendix D)
3. Copies of the records of the Weekly Tool Box talks
4. Superintendents Weekly Safety Report (paper copies or digitally via USOSAFE)
5. Daily Crane Inspection Reports (paper copies or digitally via USOSAFE)
6. OSHA 300, 300A
7. The file of MSDS Sheets
8. Confined Space Entry Forms
9. First Aid Kit Inspection Reports (including Blood Borne Pathogen Kit)
10. Drug testing information (chain of custody forms, lab information)
11. Records of all Specialized Training Conducted (or available via USOSAFE)
12. New Hire Orientation Forms
13. Records of all correspondence with Doctors and/or Subcontractors
5.2 TRAINING RECORDS

Training records will be maintained within USOSAFE and will be available for review upon request. Experience indicates that supervisors/foremen who receive basic first aid and CPR training are much more safety-conscious and usually have better crew safety performance records. Therefore, all field supervisory personnel may be required to attend basic first aid and CPR training unless they possess a valid (current) first aid and CPR card issued in their name.
6.0 FIRST AID AND MEDICAL ASSISTANCE

Each Ulliman Schutte Construction, LLC project will have adequate first aid supplies and certified, trained personnel available for the treatment of personnel injured on the job. It is also imperative that all treatments be documented in the Superintendent's Daily Report. Prompt medical attention should be sought for any serious injury or if there is doubt of an employee's condition.

A. First Aid Supplies

First-aid supplies will be available and in serviceable condition on each USC construction project. Items which must be kept sterile in the first-aid kit shall be contained in individual packaging. All first-aid kits will contain, but not be limited to, the following items:

- 1 Pkg. - Adhesive bandages, 1" (1 6 per pkg.)
- 1 Pkg. - Bandage compress, 4" (1 per pkg.)
- 1 Pkg. - Scissors and tweezers (1 each per pkg.)
- 1 Pkg. - Triangular bandage, 40" (1 per pkg.)
- 1 Pkg. - Antiseptic soap or pads (3 per pkg.)
- 1 Ea. - Blood Borne Pathogen Kit
- 1 Ea. - Mouth Valve

B. Medical Services

Each USC project will have medical services available either on the jobsite or at a location nearby. Emergency phone numbers will be posted on the jobsite for employees to call in the event of an injury or accident on the jobsite.

C. Emergency Procedures

All employees will be provided with the locations of the first aid stations on each construction project. Instructions for using first aid equipment are to be located at each station. In the event of an emergency, employees should contact any supervisor or individual who is trained in first aid.
7.0 FIRE

Fire is one of the most hazardous situations encountered on a construction project because of the potential for large losses. Prompt reaction to and rapid suppression of any fire is essential. Ulliman Schutte Construction will develop a fire protection program for each jobsite. The program shall provide for effective firefighting equipment to be available without delay and designed to effectively meet all fire hazards as they occur. In addition each fire protection program shall require that:

- All firefighting equipment be conspicuously located and readily available at all times. Fire protection equipment must be provided, at a minimum, within each trailer, within each piece of operated equipment, at each fuel or chemical storage location, and at each welding machine.

- All firefighting equipment be inspected and maintained in operating condition.

- All fire protection equipment be inspected no less than once monthly with documentation maintained for each piece of equipment inspected.

- Discharged extinguishers or damaged equipment be immediately removed from service and replaced with operable equipment.

- All supervisors and employees seek out potential fire hazards and coordinate their abatement as rapidly as possible.

- Each individual assigned safety responsibilities receive the necessary training to properly recognize fire hazards, and to use, inspect, and maintain fire extinguishers.
8.0 JOBSITE EVACUATION

It may be necessary at some point during a project to evacuate the jobsite. The following procedure is designed to make certain that any evacuation is done in an efficient and orderly manner.

This procedure will take effect in any case when the jobsite needs evacuation. Some examples could be flooding, chemical contamination, fire, traffic situation, or any sort of eminent danger, etc.

The best method of informing employees of a jobsite evacuation is by a recognized alarm. The immediate supervisor in any of the above situations is responsible for the gathering of employees in his charge. He will be notified to have his workers meet at a specific location and he will account for all members of his crew.

All employees must be accounted for during and after any evacuation event. Therefore, it is of the utmost importance that no one leaves the premises before being counted and dismissed.

The gathering place will be at the job trailer. Should this area be unsafe, meet at a location determined by the Superintendent. Once you have met at the gathering place you will be instructed as to the status of the situation and you will be directed to go home, go back to work, or to await further information.

Once again, it is imperative that all employees be accounted for during and after an emergency situation. You will be considered "missing" if you cannot be found, so someone will have to look for you until you are accounted for. We do not want to put someone's life in jeopardy by looking in a potentially hostile environment for an employee who has left the site.

This procedure is quite simple and easy to follow, and if followed everyone will be evacuated in an orderly and SAFE fashion.

Your cooperation is expected and appreciated.
9.0 DISCIPLINE

Any employee who refuses to follow the safety regulations is subject to termination. If an employee is discharged for refusing or failing to comply with safety regulations, his or her termination notice will be so noted.

The Superintendent or Project Manager will administer the enforcement of the safety program at the job site. Each warning will be specific as to the nature of the unsafe act or condition and the proper action required.

The Superintendent will generally give a verbal warning for the first offense unless the violation is so severe as to warrant immediate discharge or suspension. A record of this verbal warning will be recorded on the Superintendents Daily Log for the job and within the USOSAFE system.

In the event that the employee is a member of a Labor Union, warnings should be given in the present of the Union Steward.

Discipline is meant to improve performance. To be effective, discipline must be applied in a consistent manner.
SECTION II

SAFE WORK PROCEDURES
INTRODUCTION

Ulliman Schutte Construction, LLC recognizes that construction work is often hazardous. Therefore, in a continuous effort to minimize injuries and illnesses associated with construction activities, the following safe work procedures will be implemented and enforced on all company projects.

These safe work procedures are designed to comply with the general requirements of OSHA 29 CFR Part 1926 regulations for the construction industry. Many of these work procedures have specific training requirements (e.g., competent persons, qualified persons, licensed persons, certified persons, etc.) that are necessary to comply with OSHA regulations.

If detailed safety and health standards compliance information for specific activities like blasting, asbestos abatement, tunneling or confined space high hazard entry is required, contact the Corporate Safety Director to receive assistance.
10.0 PERSONAL PROTECTIVE EQUIPMENT

1.0 Purpose

This program provides instructions for the proper selection, use, and care of personal protective equipment.

2.0 Objective

The primary objective of this program is to protect employees from recognized safety and health hazards in the workplace. The secondary objective is compliance with 29 CFR 1926 Subpart E, "Personal Protective and Life Saving Equipment."

3.0 Scope

This program applies to all Ulliman Schutte Construction, LLC employees. This program is to be used in conjunction with other Ulliman Schutte Construction, LLC safety programs and procedures.

4.0 Responsibilities

4.1 Corporate Safety Director

A. Prepare, administer and review this program.

B. Provide technical assistance in hazard identification and selection of equipment.

C. Develop effective training programs on the selection, use and maintenance of Personal Protective Equipment (PPE)

D. Ensure all employees have completed training in the proper use, maintenance, and decontamination of PPE.

4.2 Project Management

A. Make available a variety of each type of Personal Protective Equipment used.

B. Solicit the opinion of the field employees and the Superintendent on the style of equipment to be purchased.

4.3 Superintendent

A. Evaluate each job to determine what form of PPE is necessary. Obtain help from the Safety Director as necessary.

B. Ensure appropriate PPE is available to employees.
C. Ensure employees are trained in the use of the PPE necessary to complete the job.

D. Ensure appropriate PPE is worn correctly by all employees under his/her control.

4.4 Foreman

A. Ensure appropriate PPE is worn correctly by all employees under his/her control.

B. Ensure employees are trained in the use of the PPE necessary to complete the job.

4.5 Ulliman Schutte Construction Employees

A. Correctly wear PPE necessary for the job.

B. Inspect PPE before each use, remove from service if necessary

C. Clean and properly store PPE after use and as required.

5.0 Program Information

A. While personal protective equipment is seen as part of the job for our industry, as a general rule it is considered a last resort. Whenever possible, the first choice will be to eliminate the hazard. When this is not feasible, appropriate personal protective equipment will be used.

B. This program includes the following types of personal protective equipment:

1. Head Protection
2. Eye and Face Protection
3. Hearing Protection
4. Arm and Hand Protection
5. Foot Protection
6. Torso, Leg and Other

C. Only equipment meeting the appropriate ANSI standard will be considered protective equipment.

D. PPE specific information

1. Head Protection

   Selection and Use

   a. ANSI Z89.1, 2003, Type 1, Class E & G head protection will be worn at all times while in the field.

      This includes the following situations:
      - While operating equipment
      - While working on scaffolds
      - While working on roofs and elevated surfaces
b. Hard hats should not be stored or carried on the rear window shelf of an automobile.

**Inspection and Maintenance**

a. Clean shells by dipping them into hot water (approx. 140 degrees F) containing a good detergent for at least one minute. Shells should then be scrubbed and rinsed in clear hot water. After rinsing, the shell should be carefully inspected for any signs of damage.

b. All components (shells, suspensions, headbands, sweatbands, and any accessories) should be visually inspected daily for signs of dents, penetration, cracks or excess wear. If any defects are found, the item must be replaced.

2. **Eye and Face**

**Selection and Use**

a. Eye and Face protection will meet the requirements of ANSI Z87.1-2003

b. Selection of eye and face protection will be in accordance with Appendix G. At a minimum, safety glasses shall be worn at all times while in the field.

c. Prescription glasses not meeting the requirements of ANSI Z87.1-2003 are not safety glasses. Additional protection is required. See Appendix U for the USC prescription safety glasses limited reimbursement policy.

**Inspection and Maintenance**

a. Daily inspection of eye protection is required.

b. Pitted lenses and lenses with deep scratches will be replaced.

c. Slack, worn out headbands will be replaced.

d. Goggles and spectacles will be cleaned with soap and warm water. All traces of soap will be rinsed and defective parts replaced.

e. Disinfecting will be accomplished by swabbing or immersing all parts in a solution of germicidal deodorant fungicide. Remove parts from solution and let air dry at room temperature.

3. **Hearing Protection**

**Selection and Use**

a. Hearing protection (plugs or muffs) of minimum 20 NRR (Noise Reduction Rating) must be worn during any operation which exposes the worker to noise
levels exceeding the OSHA PEL of 90 dBA (8 hr TWA). Protection must also be worn when the worker is exposed to impact noise exceeding 140 dBA.

b. Hearing protection will not be shared without first disinfecting the equipment.

c. Disposable protection should be used one time then thrown away.

**Inspection and Maintenance**

a. Hearing protection should be inspected before each use for excessive wear, dirt, or damage.

b. Non-disposable protection should be cleaned after each use with warm soapy water.

4. **Hand and Arm Protection**

**Selection and Use**

a. Hand and arm protection will be utilized when the potential for burns, cuts, electrical shock, amputation, and absorption of chemicals exists.

b. Hand protection consists of gloves and/or sleeves. The material they are composed of must be selected based on the hazard that exists. The following can be used as a guide for selection. Contact the Safety Director for assistance:

1. PVC or Neoprene coated for oils, caustics, grease, and most solvents and chemicals.
   a. Not to be used for chlorinated hydrogen carbon material such as carbon tetrachloride, etc.

2. Natural Rubber for acids, acetone, ammonia.
   a. Not to be used for petroleum distillates (oil based)

3. Polyvinyl alcohol for hydrocarbons (oil based)
   a. Not to be used for alcohols or any chemical with strong oxygen content.

**Inspection and Maintenance**

a. All equipment should be inspected before each use for tears, excessive wear, and stretching.
b. All equipment must be disposed of after use if designed as a one-time use. Multi-use equipment must be decontaminated per the manufacturer’s instructions.

5. Foot Protection

Selection and Use

a. Sturdy leather work boots must be worn by all employees while at a jobsite. Metal insoles protecting against puncture wounds will be included.

b. Metatarsal guards must be worn while using jackhammers or tamping equipment

Inspection and Maintenance

a. Boots must be regularly inspected for excessive wear, worn out soles or heels, broken laces, pulled eyelets. Any defects will be corrected or the boots must be replaced.

b. Guards must be inspected before each use. Repair or replace guards that are damaged, dented, cracked, or have defective attachment/fastening systems.

c. All footwear will be laced fully, utilizing all eyelets minus the very top eyelet.

6. Torso, Leg, and Other

Selection and Use

a. When the potential exists for exposure to heat, chemical splashes, radiation, biological or radiation hazards, chain saws, etc., appropriate protective clothing must be used.

b. The selection of protective clothing will be based on the hazard or substance present. The following list can be used as a guide. Contact the Safety Director for assistance in selection:

1. Use of chain saws will require the use of protective chaps.

2. When the potential for chemical splashes exists, appropriate clothing such as aprons will be utilized.

3. Biological hazards will be evaluated on an individual basis. Protective clothing appropriate for the hazard class will be used.

c. Use of the specific equipment will be per the manufacturer instructions.

Inspection and Maintenance
a. All protective equipment will be inspected before each use per the manufacturer's instructions.

c. All protective equipment will be decontaminated and maintained per the manufacturer's instructions.

7. Respiratory Protection

Selection and Use

a. Appropriate respiratory protective devices will be provided to employees when emergencies occur or engineering controls fail or are inadequate to prevent harmful exposure. Employees must wear respiratory protective devices at all times when exposed to hazardous materials and/or dangerous atmospheres.

b. A respiratory protective program will be established and maintained whenever effective engineering controls are not feasible, or while they are being instituted, to prevent the inhalation of harmful dusts, fogs, mists, fumes, gases, or vapors which may result in occupational illness. In accordance with 29 CFR 1910.134, the following program requirements, used by OSHA to evaluate the program, must be implemented and enforced as part of an effective respiratory protective program at each construction project.

1. Written standard operating procedures must be established to govern the selection of respirators.

2. Respirators will be selected by the project safety representative and/or the Safety Director on the basis of hazards to which the worker is exposed.

3. Respirator users will receive instruction and training on the proper use of respirators and their limitations.

4. Respirators must be assigned to workers for their exclusive use.

5. Appropriate surveillance of work area conditions and the degree of employee exposure or stress must be maintained continuously during operations requiring respiratory protection.

6. Regular inspections and evaluations must be conducted to determine the continued effectiveness of the program.

7. Employees will not be assigned to tasks requiring the use of respirators until a physician has determined that they are physically able to perform the work while using a respirator.

8. Employees must be respirator fit tested prior to being assigned a task which requires a respirator.
9. Only NIOSH/MSHA certified respiratory protection may be used by employees.

10. Respirators will be selected based on the chemical and physical properties of the contaminant, as well as the toxicity and concentration. In addition, the nature and extent of the hazard work requirements, and conditions, as well as the limitations and characteristics of the available respirators, will also be factors in proper selection of respiratory protection.

**Inspection and Maintenance**

a. Respirators must be regularly cleaned and disinfected.

b. Respirators must be stored in convenient, clean, and sanitary locations and protected from sunlight and physical damage.

c. Respirators used routinely will be inspected during and after cleaning; worn or deteriorated parts must be replaced.

8. **Fall Protection**

**Selection and Use**

Lifelines, safety harnesses, and lanyards are to be used as a safeguarding measure. Lifelines, safety harnesses, and lanyards are not to be used for hoisting or lowering equipment.

a. Lifelines should be secured above the point of operation to an anchorage or structural member capable of supporting a minimum dead weight of 5,400 pounds. Lifelines that may be subjected to cutting or abrasion shall be a minimum of 7/8-inch wire core manila rope.

Lanyards must be a minimum of 1/2-inch nylon, or equivalent, with a maximum length to ensure a fall of no more than 6 feet.

b. Remember:

    **Never load test harnesses, lifelines, or lanyards**

    and

    **Never use damaged harnesses, lifelines, or lanyards!**

c. Employees must be 100% tied off when exposed to a fall of 6 feet or more.

**Inspection and Maintenance**
a. Inspect fall protection equipment daily prior to use. If any damage is discovered, the equipment must be removed from service immediately.

b. Fall protection equipment must be stored in convenient and clean location and protected from sunlight, chemicals, and physical damage.
11.0 OCCUPATIONAL HEALTH AND ENVIRONMENTAL CONTROLS

A. Medical Services

1. Medical personnel may be available on larger projects to provide first aid medical services to employees. Provisions for prompt off-site medical attention will be made prior to commencement of the project. Names and locations of nearest medical facilities must be posted.

2. In the absence of an infirmary, clinic, hospital, or physician, personnel with valid certificates in first aid training from the U.S. Bureau of Mines, the American Red Cross, or equivalent training will be available at each project to render first aid.

3. First-aid supplies will be readily available to all employees working on the project. These supplies must be checked weekly to ensure that expended items are replaced. The Project Superintendent is responsible to ensure that the first aid kit is properly stocked and equipped with a Blood Borne Pathogen Kit.

4. Suitable facilities for quick drenching or flushing of the eyes and body will be provided within the work area whenever the eyes or body of any person may be exposed to injurious corrosive materials.

B. Sanitation

1. No employee is required to perform work under unsanitary conditions. Adequate supplies of potable water shall be provided at the jobsite. Containers used for drinking water will be clearly marked and not used for any other purpose.

2. Outlets for nonpotable water (i.e., firefighting or washdown purposes) are not to be used by employees for drinking, washing, or cooking purposes.

3. All construction projects must have an adequate number of toilets on the jobsite according to the following:

   - 20 or less workers - 1 toilet
   - 20 or more workers - 1 toilet seat and 1 urinal per 40 workers
   - 200 or more workers - 1 toilet seat and 1 urinal per 50 workers

   Washing facilities must be provided in near proximity to the jobsite for employees engaged in the application of paints, coatings, or other operations where contaminants may be harmful to the employees.
C. Ionizing Radiation

Ionizing radiation is electromagnetic radiation that interacts with gases, liquids, or solids to produce ions. There are five major types: alpha, beta, X (or X-ray), gamma, and neutrons. In an effort to minimize injury or illness associated with exposure to ionizing radiation, the following safety practices will be implemented and enforced at all construction projects:

1. Ionizing radiation sources will not be employed except as specifically required by the contract or client.

2. Any activity involving the use of radioactive materials or x-rays must be performed by competent persons specifically trained in the proper and safe operation of such equipment.

3. In the case of materials used under NRC Commission license, only persons actually licensed, or competent persons under the direction and supervision of the licensee, will perform such work.

4. Specific exposure monitoring, personnel monitoring, warning signs, etc. must be used where activities necessitate compliance with the Standards for Protection Against Radiation in 10 CFR 20. In these special circumstances the Corporate Safety Director will specify the necessary requirements.

D. Non-ionizing Radiation

Non-ionizing radiation is a form of electromagnetic radiation which has varying effects on the body, depending largely on the particular wavelength of the radiation involved. In an effort to minimize injuries or illness associated with non-ionizing radiation, the following safety practices will be implemented and enforced at all company construction projects where potential of exposure to laser light greater than 5 milliwatts exists:

1. Employees should never install, adjust, or operate laser equipment unless they have received training and are qualified. Laser equipment operator qualifications must be in the operator's possession at all times.

2. All areas where lasers are used must have standard laser warning placards posted. Directing laser beams at other individuals is prohibited.

3. Personal Protective Equipment, if required, shall be utilized. (Check instrument evaluation/operation manual)

4. Laser beams should never be directed at other employees.

5. Laser should be turned off when left unattended for a substantial period of time.

6. Labels indicating the maximum output must be on all laser equipment.
E. **Gases, Vapors, Fumes, Dusts, and Mists**

Administrative or engineering controls will be implemented whenever feasible to prevent exposure of employees to inhalation, ingestion, skin absorption, or contact with air contaminants. If such controls are not feasible to achieve full compliance, supervisors will provide employees with the appropriate type protective equipment to prevent exposure. Any equipment and technical measures used for this purpose must comply with all applicable standards and be approved by the project safety and health representative prior to each particular use.

1. Local exhaust ventilation should be used as an engineering control method to prevent employee exposure to hazardous substances or concentrations of dusts, fumes, mists, vapors, or gases.

2. Local exhaust must remain in operation continually during all operations that it is designed to serve. If the employee remains in the contaminated zone, the exhaust system must continue operating until cessation of said operations.

F. **Illumination**

All construction areas, ramps, runways, corridors, offices, shops, and storage areas must be lighted to a minimum illumination intensity of 5-foot candles.

G. **Asbestos**

The Environmental Protection Agency (EPA) Defines Asbestos Containing Material (ACM) as any product that contains more than 1% asbestos.

Asbestos is a widely used, mineral-based material that is resistant to heat and corrosive chemicals. Asbestos fibers enter the body by inhalation of airborne particles or by digestive system. Exposure to asbestos can cause numerous disabling or fatal diseases. Wherever workers are or may become exposed to asbestos containing materials, practices and procedures must be implemented and enforced in accordance with 29 CFR 1926.1101 or State OSHA requirements. These include:

1. Conducting monitoring to determine accurate airborne concentrations of asbestos, tremolite, anthophyllite, actinolite or a combination of these minerals prior to commencing work on any project where employees may be exposed. Based on the requirements of the Asbestos Construction Standard, 29 CFR 1926.1101, the following procedures will be followed to ensure all workers are protected from asbestos exposure. Protection will begin prior to any activities based on the OSHA classes of work activities listed below. No employee will be exposed to an airborne concentration of asbestos in excess of 0.1 fibers per cubic centimeter of air as an eight (8) hour time-weighted average (TWA) or an airborne concentration of 1.0 fibers per cubic centimeter of air as averaged over a 10-minute sampling period.
Work Activities

Class I Asbestos Work

Class I asbestos work is defined as activities involving the removal of sprayed-on or troweled-on:

- Surfacing material
- Thermal system insulation

Surfing material will include, but is not limited to:

- Decorative plaster on ceilings
- Acoustical insulation on decking
- Fireproofing on structural members

Thermal system insulation activities will include, but not limited to:

- Pipe insulation
- Boiler insulation
- Duct insulation

Class I work is expected to generate the highest levels of asbestos exposure. All requirements of 26 CFR 1926.1101, at a minimum, must be followed when asbestos activities involve this class of work.

Class II Asbestos Work

Class II asbestos work involves the removal of any type of asbestos material that is not surfacing or thermal insulation. Examples of material that fall under Class II work include, but are not limited to:

- Floor tile
- Ceiling tile
- Siding
- Roofing
- Transite panels

All requirements at 29CFR 1926.1101 must be followed when activities include work with the above materials.

Class III Asbestos Work

Class III asbestos work is defined as repair and maintenance activities involving intentional disturbances of asbestos-containing or presumed asbestos-containing material (PACM). An example of Class III work would include removing a small section of roofing which leaks and needs to be replaced.
Class III work will be limited to incidental removal of small amounts of asbestos material (no more than the amount that can be placed into a single asbestos waste bag).
Class IV Asbestos Work

Class IV asbestos work is defined as maintenance and custodial activities where workers come in contact with ACM or PACM. Specific work activities include, but not limited to:

- Dusting surfaces
- Vacuuming carpets
- Mopping floors
- Incidental disturbance of ACM or PACM

Examples of incidental disturbances includes polishing floors that contain certain ACM and replacing light bulbs in a fixture attached to a ceiling containing ACM.

2. Utilizing one or any combination of the following control methods to achieve compliance and reduce employee exposure to within the permissible exposure limits:

   - Local exhaust ventilation equipped with High Efficiency Particulate Air (HEPA) filter dust collection systems
   - General ventilation systems
   - Vacuum cleaners equipped with HEPA filters
   - Enclosure or isolation of asbestos dust-producing processes
   - Use of wet methods, wetting agents, or removal encapsulants
   - Prompt disposal of asbestos-containing wastes in leak-tight containers.

3. Any Class I, II or III work area where asbestos exposure is anticipated, regardless of exposure level, shall be established as a "regulated area" per 29 CFR 1926.1101's requirements for such areas.

4. The use of high-speed abrasive disc saws equipped with appropriate engineering controls. Employees are prohibited from using high-speed disc saws not equipped with appropriate engineering controls.

5. The use of compressed air to remove asbestos-containing materials is prohibited unless the compressed air is used in conjunction with an enclosed ventilation system.

6. The use of respirators (1) while feasible engineering and work practice controls are being installed or implemented; (2) during maintenance and repair activities, or other activities where engineering and work practice controls are not feasible; (3) if feasible engineering and work practice controls are insufficient to reduce employee exposure to or below the exposure limits; and (4) in emergencies.

7. The changing of respirator filters whenever an increase in breathing resistance is detected.
8. Washing of face and respirator facepiece whenever necessary to prevent skin irritation.

9. Employees wearing negative-pressure respirators must have quantitative or qualitative fit tests at the time of initial fitting and at least every 6 months.

10. The donning of protective clothing such as coveralls or similar full-body clothing, head coverings, gloves, and foot coverings, or other protective equipment when exposed to airborne concentrations of asbestos that exceed the permissible exposure limits (TWA and/or excursion limit), or performing any Class I, II and III activities.

11. Asbestos-contaminated work clothing must be removed in change rooms and placed and stored in closed, labeled containers that prevent dispersion of the asbestos into the ambient environment.

12. All contaminated clothing and equipment taken out of change rooms or the workplace for cleaning, maintenance, or disposal must be transported in sealed and labeled impermeable bags or other closed impermeable containers.

13. Establishment of decontamination areas for asbestos removal, demolition, and renovation operations. Each decontamination area will consist of an equipment room, shower area, and clean room in series. The clean room will be equipped with a locker or appropriate storage container for each employee. The equipment room must be supplied with impermeable, labeled bags and containers for the containment and disposal of asbestos-contaminated protective clothing and equipment. Where feasible, shower facilities will be contiguous both to the equipment room and the clean change room. Employees must enter and exit the regulated area through the decontamination area.

14. All employees exposed to airborne concentrations of asbestos at or above the PEL and/or excursion limit must receive training prior to or at the time of initial assignment and at least annually thereafter. Training must be provided to all workers involved in Class I, II, III, and IV asbestos work. Only training provided by an EPA or EPA-approved staff agency-accredited training provider under the EPA Asbestos Hazard Emergency Response Act, 40 CFR 763 regulation will be accepted.

15. Vacuuming equipment must be equipped with HEPA filters when used for asbestos-containing materials.

16. Asbestos waste, scrap, debris, bags, containers, equipment, and asbestos-contaminated clothing consigned for disposal must be collected and disposed of in sealed, labeled, impermeable bags or other closed, labeled impermeable containers.

17. All employees who wear, or will be required to wear, negative-pressure respirators and who will or may be exposed to airborne concentrations of asbestos at or above the PEL must participate in the company's medical monitoring program.

18. All employees must have an examination, under the supervision of a licensed physician, which includes medical work history and a physical examination. These examinations will be made available annually.
H. Lead

All construction work involving exposure to lead is covered by OSHA’s 29 CFR 1926.62. This work includes lead paint abatement and work on bridges and steel structures that have paint in it that contains lead. It also includes demolition of any structures that contain lead.

A key component, and one that makes this standard unique, is that there are a number of jobs and tasks in construction where exposure to lead will be over the permissible exposure limit (PEL). Regulation 29 CFR 1926.62 requires that if any worker engaged in any "Presumed Exposure" activities, the worker will be protected by specified measures BEFORE exposure assessments are made.

Presumed Exposure Categories:

Task I: Assumed exposure greater than the PEL, but less than 10 times the PEL.

Examples:

- Manual demolition (i.e. dry walls)
- Manual scraping and sanding
- Heat gun application

Task II: Assumed exposures greater than 10 times the PEL, but less than 50 times the PEL.

Examples:

- Rivet busting
- Clean-tip activities where dry expendable abrasives are used
- Lead burning

Task III: Assumed exposures greater than 50 times the PEL.

Examples:

- Abrasive blasting
- Cutting
- Torch burning

All three categories of tasks with presumed exposures over the PEL require the following to be provided prior to any exposure assessments being made.

- Appropriate respiratory protection.
- Appropriate personnel protective clothing and equipment.
- Changing areas which are free of lead.
- Hand washing facilities.
- Biological monitoring
- Training

A requirement of 29 CFR 1926.62 is that a written compliance program be established and implemented. For specifics of the compliance program, see 29CFR 1926.62 (e)(2).
Lead is a cumulative poison that can affect the kidneys, liver, and brain, leading to seizures, coma, and death. Lead poisoning can occur from acute or chronic exposures and cause either temporary or permanent damage. It may be absorbed into your body by inhalation (breathing) and ingestion (eating). Very small amounts of lead that may be unintentionally ingested via eating, drinking, or smoking on the job can be harmful. Good personal hygiene is essential on any project where lead based materials are present.

It is very important that all employees follow the proper precautions when working with lead. The following safety precautions must be adhered while working with lead on any project:

- Use the exhaust ventilation system, where provided.
- Use the correct, clean respirator
- Keep the worksite clean.
- Use only a HEPA vacuum or wet cleaning method when removing lead dust.
- Never use compressed air for cleaning.
- Eat, drink, or smoke in areas outside of the work area and after washing up.
- Keep all lunch boxes and coffee cups away from the work area.
- Wash hands and face before eating, drinking, or smoking.
- Use protective clothing.
- Keep street clothes separate from work clothes.
- Never wear contaminated clothes home.

I. Silica

Crystalline silica, also referred to as free silica, is an odorless crystalline solid. It causes silicosis. The three most common forms found in industry are quartz, tridymite, and cristobalite. Quartz is the primary source of silica mainly because the earth's crust is approximately 12% quartz. Occupational exposure to crystalline silica dust has long been known to produce silicosis, pneumoconiosis or dust disease of the lung.

Construction Activities with Potential Exposures

- Abrasive blasting of concrete or using silica sand as the abrasive
- Chipping, jack hammering, grinding, drilling and cutting or sawing of rock, including while tunneling
- Crushing, loading, hauling, dumping, sweeping and demolition
- Sawing, hammering, drilling, grinding, chipping, or mixing of concrete
- Dry-sweeping or pressurized air blowing of concrete, rock, or sand dust
WHAT IS SILICOSIS?

Silicosis is a disease of the lungs due to breathing of dust containing crystalline silica particles. Scar tissue formed by inhaling the crystalline silica particles lessens the lungs' ability to intake oxygen from the air. Symptoms of silicosis include: shortness of breath, cough, fatigue, loss of appetite, chest pains, and fever.

- *Chronic Silicosis:* occurs after 10 or more years of exposure to crystalline silica at low concentrations.
- *Accelerated Silicosis:* occurs after 5 to 10 years of the initial exposure at high concentrations of silica.
- *Acute Silicosis:* symptoms develop within a few weeks to 4 or 5 years after the initial exposure at extremely high concentrations of silica.

SILICA EXPOSURE LIMITS

The Occupational Safety and Health Administration (OSHA) has established a PEL, which is the maximum amount of airborne crystalline silica that an employee may be exposed to during a work shift.

**OSHA:** Permissible Exposure Limit (PEL)

\[
PEL = \frac{10 \text{ mg/m}^3}{\% \text{ silica} + 2}
\]

\[
PEL_{(\text{mixture})} = \frac{10 \text{ mg/m}^3}{\% \text{ quartz} + 2 (\% \text{ cristobalite}) + 2 (\% \text{ tridymite}) + 2}
\]

The American Conference of Governmental Industrial Hygienists (ACGIH) has developed TLV’s for silica dust which are considered permissible for exposures 8 hr/day, 5 days/week for the working lifetime of employees. Although they are not legal standards, certain organizations may wish to make use of these recommendations as a supplement to their safety and health program.

**ACGIH Threshold Limit Values (TLV)**

- Quartz: 0.1 mg/m³ (100 ug/m³);
- Cristobalite: 0.05 mg/m³ (50 ug/m³);
- Tridymite: 0.05 mg/m³ (50 ug/m³)

Common Exposure Levels:

Reported exposure level estimates for construction activities involving crystalline silica dust include:

- Dry Cutting: 0.05 mg/m³ to 23.77 mg/m³
- Drilling: 0.32 mg/m³ to 0.80 mg/m³
- Concrete Coring: 14.2 mg/m³
- Sandblasting: 0.52 mg/m³ to 1.80 mg/m³
CONTROLS

Federal regulations mandate that the first level of exposure control must be engineering controls. If exposure levels are not completely safe, administrative controls must be implemented. Only when the first two levels of control fail to meet the permissible exposure limits should personal protective equipment be utilized.

A. Engineering Controls: Below you will find different engineering controls that can be used in order to control the amount of silica that you are exposed to. Remember that you can prevent silica exposure by not allowing it to become airborne in the first place. If it isn't airborne, it can't get into your lungs and cause silicosis.

- **Housekeeping**: Removing dust before it becomes airborne by traffic, vibration, and random air currents will aid in the reduction of exposure.
- **Isolation**: Hazardous operations should be isolated to reduce exposure to employees, such as by using a physical barrier.
- **Wet Work**: Airborne silica dust hazards can be minimized or greatly reduced by applying water.
- **Ventilation**: Local exhaust ventilation captures contaminants at their source before they escape into the worksite.
- **Dust Control**: Use a vacuum with a high-efficiency particulate air filter (BEPA) rather than blowing it with compressed air.

*Always recognize when silica dust may be generated and plan ahead to eliminate or reduce exposure of dust at the source. Awareness and planning are keys to prevention of silicosis.*

B. Work Practice Controls: If engineering controls are infeasible or do not reduce silica levels below the PEL, work practice controls should be used. The following are recommended work practice controls.

- **Restricted Areas**: Post warning signs in areas where there is silica exposure in order to keep other workers out of those work areas.
- **Personal Hygiene**: To minimize worker contact with silica dust hand-washing facilities must be conveniently located.
- **Training**: The training is about exposure to hazards in the workplace and is now required by state and federal hazard communications standards (right to know laws). Under 29 CFR 1926.21 all employees must receive safety training and education.
C. Personal Protective Equipment may be necessary to protect the worker from the environment when it is not feasible to render a completely safe work environment.

- **Protective Clothing:** Change into disposable or washable work clothes at the worksite. Leave work clothes at work!
- **Respirators:** OSHA requires that before you can wear a respirator, you must have a doctor’s permission, you must go through a procedure to make sure your respirator fits properly (called a fit test), and training. Beards and mustaches interfere with the respirator seal to the face, making most respirators ineffective.

**OUR RESPIRATORY PROTECTION PROGRAM MUST BE FOLLOWED!**

- Before you leave the jobsite, wash and change into clean clothes so that you don't carry any silica dust contamination home.
12.0 HAZARD COMMUNICATION

Construction projects sometimes require the use of materials and chemicals that may be hazardous if not handled properly. Employees must be aware of the identity and toxicity or other hazardous properties of the chemicals. Therefore, in an effort to promote and maintain jobsites that are free from controllable safety and health hazards, the company has implemented a Hazard Communication Program in accordance with 29 CFR 1926.59, to protect our employees. Components of this written program include:

- Designation of a Hazard Communication Coordinator
- Chemical Inventory List (job site specific)
- Material Safety Data Sheet (MSDS) Policy
- Container Labeling Policy
- Employee Information and Training

Each jobsite will have a designated Hazard Communication Coordinator who will be responsible to ensure proper implementation of the program. The Coordinator must be a jobsite office employee who is assigned full time to the project.

A Material Safety Data Sheet (MSDS) for each material, chemical, etc. that is used, stored, or located at the jobsite must be maintained within a clearly marked 3-ring binder. Each MSDS must be numbered sequentially within the binder. An alphabetic listing of all the MSDS within the binder and the corresponding index number must be located in the front of the binder and updated regularly.

The MSDS binder must be stored in a location easily accessed by all employees and all employees on the job must know of the binder's existence and purpose, know the location of the binder, and be trained on its usage.

If no pre-printed MSDS is available for a particular item, the OSHA Form 174 (see Appendix R) must be fully completed and used as the MSDS.

All materials, chemicals, solvents, fuels, etc. must be stored in their original, clearly labeled containers whenever possible. Any transfer of material to an alternate container must be performed in strict accordance with the manufacturer's instructions and applicable laws, codes, and regulations. Appropriate Personal Protective Equipment must be worn. Any alternate containers utilized must be appropriate for the material stored and clearly labeled as to the contents and any safety precautions.

Every employee on the project must be made aware of these requirements prior to working on the jobsite.
13.0 **FIRE PROTECTION AND PREVENTION**

Fire on construction projects is a constant hazard that can cause loss of life, equipment and material. To assist with preventing fires on construction projects, all personnel must comply with the following safe work procedures:

A. **Fire Protection**

1. Access to all available firefighting equipment will be maintained at all times.

2. Firefighting equipment will be inspected periodically and maintained in operating condition. Defective or exhausted equipment must be replaced immediately.

3. All firefighting equipment will be conspicuously located at each jobsite.

4. A fire extinguisher, rated not less than 2A, must be provided for each 3,000 square feet of the protected work area. Travel distance from any point of the protected area to the nearest fire extinguisher must not exceed 100 feet. One 55-gallon open drum of water with two fire pails may be substituted for a fire extinguisher having a 2A rating.

5. At a minimum, extinguishers shall be located in all company vehicles, on each piece of operated equipment, at each fuel storage or chemical storage location, in the immediate vicinity of all welding operators, and in the immediate vicinity of all operating liquid-fuel tools.

6. Extinguishers and water drums exposed to freezing conditions will be protected from freezing.

7. Do not remove or tamper with fire extinguishers installed on equipment or vehicles or in other locations unless authorized to do so or in case of fire. If you use a fire extinguisher, be sure it is recharged or replaced with another fully charged extinguisher.

**TYPES OF FIRES**

- **Class A** (wood, paper, trash) - use water or foam extinguisher.

- **Class B** (flammable liquids, gas, oil, paints, grease) - use foam, CO2 or dry chemical extinguisher.

- **Class C** (electrical) - use CO2 or dry chemical extinguisher.

- **Class D** (combustible metals) - use dry powder extinguisher only.

B. **Fire Prevention**

1. Internal combustion engine-powered equipment must be located so that exhausts are away from combustible materials.
2. Smoking is prohibited at or in the vicinity of operations which constitute a fire hazard. Such operations must be conspicuously posted: "No Smoking or Open Flame."

3. Portable battery-powered lighting equipment must be approved for the type of hazardous locations encountered.

4. Combustible materials must be piled no higher than 20 feet. Depending on the stability of the material being piled, this height may be reduced.

5. Keep driveways between and around combustible storage piles at least 15 feet wide and free from accumulation of rubbish, equipment or other materials.

6. Portable fire extinguishing equipment, suitable for anticipated fire hazards on the jobsite, must be provided at convenient, conspicuously accessible locations.

7. Fire fighting equipment must be kept free from obstacles, equipment, materials and debris that could delay emergency use of such equipment. Familiarize yourself with the location and use of the project’s firefighting equipment.

8. Discard and/or store all oily rags, waste, and similar combustible materials in metal containers with metal lids on a daily basis.

9. Storage of flammable substances on equipment or vehicles is prohibited unless such unit has adequate storage area designed for such use.

C. Flammable and Combustible Liquids

1. Explosive liquids, such as gasoline, will not be used as cleaning agents. Use only approved cleaning agents.

2. Store gasoline and similar combustible liquids in approved and labeled containers in well ventilated areas free from heat sources.

3. Handling of all flammable liquids by hand containers will be in approved safety containers with spring closing covers and flame arrestors.

4. Approved wooden or metal storage cabinets must be labeled in conspicuous lettering: "Flammable-Keep Fire Away."

5. Never store more than 60 gallons of flammable liquids or 120 gallons of combustible liquids in any one approved storage cabinet.

6. Storage of containers shall not exceed 1,100 gallons in any one pile or area. Separate piles or groups of containers by a 5-foot clearance. Never place a pile or group within 20 feet of a building. A 12-foot wide access way must be provided within 200 feet of each container pile to permit approach of fire control apparatus.
14.0 SIGNS, SIGNALS AND BARRICADES

Construction activities at the jobsite may present several potential hazards to workers. The use of signs, signals and barricades is essential to make employees aware that an immediate or potential hazard exists. Therefore, the following safe work procedures for signs, signals, and barricades will be implemented and enforced on each construction project.

A. Accident Prevention Signs/Tags

1. **Danger Signs** will be used wherever an immediate hazard (e.g., electrical conductor) exists. The danger signs must have red as the predominant color in the upper panel and a white lower panel for additional sign wording.

2. **Caution Signs** will be used to warn against potential hazards or to caution against unsafe practices. The caution signs must have yellow as the predominant color with a black upper panel (yellow lettering of “caution” on the upper panel) and a yellow lower panel for additional sign wording.

3. Exit **Signs**, when required, will be in legible red letters, not less than 6 inches high, on a white field.

4. **Safety Instruction Signs**, when used, must be white with a green upper panel and white lettering to convey the principal message. Any additional wording must be in black lettering on the white background.

5. Directional **Signals** must be white with a black panel and a white directional symbol. Any additional wording must be in black lettering on the white background.

6. **Traffic Signs** must be posted at points of hazards in all construction areas. All traffic control signs or devices must conform to ANSI D6.1-1971, Manual on Uniform Traffic Control Devices for Streets and Highways.

7. **Accident Prevention Tags** must be used as a temporary means of warning employees of an existing hazard, such as defective tools, equipment, etc.

8. **Out of Order Tags** must be used to designate equipment which requires repair or maintenance. Equipment with such a tag may not be used until the equipment is repaired and the tag is removed.

9. Additional rules, not specifically prescribed in this section, are contained in ANSI Z35.1-1968, Specifications for Accident Prevention Signs and Z35.2-1968, Specifications for Accident Prevention Tags.

10. Ensure foreign language signs are used when and where needed.
B. Signaling

1. Flagmen or other appropriate traffic controls must be provided for operations where signs, signals, and barricades do not provide the necessary protection on or adjacent to a highway or street.


3. Red flags, at least 18 inches square, or sign paddles must be used by flagmen when hand signaling. (Sign paddles are the preferred method)

4. Flagmen are required to wear a red or orange reflectorized warning vest while flagging.

5. Required signs and symbols must be visible at all times when work is being done, and removed promptly when the hazard no longer exists.

C. Barricades

1. Barricades including beams are required for jobsite roadways presenting a hazard to motorized equipment or vehicles.

15.0 MATERIALS HANDLING, STORAGE, USE AND DISPOSAL

Materials handling accounts for 40% of all lost-time incidents that occur in the construction industry. These injuries are often a result of inadequate planning, administrative, and/or engineering approaches. Therefore, in an effort to reduce workplace injuries, the following safe work procedures will be implemented and enforced at all construction projects.

A. General Storage Requirements

1. Stack, rack, block, interlock, or otherwise secure all materials and supplies to prevent sliding, falling or collapse.

2. Post the maximum safe load limits for floors within buildings and structures in a conspicuous location. Never exceed the maximum safe load limit.

3. Keep aisles and passageways clear to provide for the free and safe movement of material handling equipment and employees.

4. When a difference in road or working levels exists, use ramps, blocking or grading to ensure the safe movement of vehicles between the two levels.

5. Do not place material within 6 feet of any hoistway or floor opening inside buildings under construction, nor within 10 feet of an exterior wall which does not extend above the material being stored.

6. Stack bagged materials by stepping back the layers and cross-keying the bags at least every 10 bags high.

7. Do not store materials on scaffolds or runways in excess of supplies needed for immediate operations.

8. Remove all nails from used lumber prior to stacking.

9. Stack lumber on level and solidly supported sills.

10. Do not stack lumber higher than 20 feet (16 feet if handled manually).

11. Stack and block structural steel, poles, pipe, bar stock, and other cylindrical materials, unless racked, so as to prevent spreading or tilting.

12. Attach handles or holders to the load to reduce the possibility of pinching or smashing fingers.

13. Avoid stacking non-compatible materials in the same pile.
B. Materials Handling

1. Do not attempt to lift or move a load that is too heavy for one person - get help!

2. When working with materials stored in silos, hoppers, tanks or similar storage areas, confined spaces may exist. Follow the procedures outlined in Section 31.0.

3. Attach handles or holders to the load to reduce the possibility of pinching or smashing fingers.

4. Wear protective gloves and clothing (i.e., aprons), if necessary when handling loads with sharp or rough edges.

5. When pulling, prying, or lifting objects, be sure you are properly positioned. Always lift with your legs, not your back.

6. Riding loads, slings, the ball, crane hook or other material hoisting equipment is prohibited.

C. Training

Employees will receive instruction on proper materials handling practices during weekly "tool-box" meetings so that they are aware of the following types of injuries associated with manual handling of materials:

- Strains and sprains from lifting loads improperly, or from carrying loads that are too heavy or large.

- Fractures and bruises caused by dropping or flying materials, or getting hands caught in pinch points.

- Cuts and abrasions caused by falling materials which have been improperly stored, or by cutting securing devices incorrectly.

D. Engineering Controls

Engineering controls should be used, if feasible, to redesign the job so that the lifting task becomes less hazardous. This includes reducing the size or weight of the object lifted, changing the height of a pallet or shelf, or installing a mechanical lifting aid.
16.0 HAND AND POWER TOOLS

Tools are such a common part of construction work that it is difficult to remember that they may pose hazards. In the process of removing or avoiding the hazards, workers must learn to recognize the hazards associated with the different types of tools and the safety precautions necessary to prevent injury from those hazards. Therefore, in an effort to minimize accidents resulting from the use of hand and power operated hand tools, management personnel will implement and enforce the following safe work procedures on all construction jobsites.

A. General Requirements

1. Do not use broken, defective, burned or mushroomed tools. Report defective tools to your supervisor and turn tool in for replacement.

2. Always use the proper tool and equipment for any task you may be assigned to do. For example: do not use a wrench as a hammer or a screwdriver as a chisel.

3. Do not leave tools on scaffolds, ladders or any overhead working surfaces. Racks, bins, hooks, or other suitable storage space must be provided and arranged to permit convenient arrangement of tools.

4. Do not strike two hardened steel surfaces together; i.e., two hammers or a hammer and a hardened steel shaft, bearing, etc.

5. The practice of throwing tools from one location to another, from one employee to another, or dropping them to lower levels, is prohibited. When necessary to pass tools or material under the above conditions, suitable containers and/or ropes must be used. (Extension cords are not to be used as drop lines)

6. Wooden tool handles will be sound, smooth, and in good condition and securely fastened to the tool.

7. Sharp-edged or pointed tools should never be carried in employee's pockets.

8. Only non-sparking tools will be used in locations where sources of ignition may cause a fire or explosion.

9. Tools requiring heat-treating should be tempered, formed, dressed, and sharpened by workmen experienced in these operations.

10. Tools designed to accommodate guards must be equipped with such guards when in use.

11. All rotating, reciprocating or moving parts of equipment (belts, blades, gears, shafts, flyheads, etc.) must be guarded to prevent contact by employees using such equipment. Guarding must meet requirements set forth in ANSI B 1 5.1-1953.
12. All hand-held power tools (e.g., circular saws, chain saws, and percussion tools) without a positive "on-off" control must be equipped with a constant pressure switch that will shut off the power when pressure is released.

13. A positive "on-off" control must be provided on all hand-held powered:

   - Platen sanders and grinders with wheels 2-inch diameter or less; and
   - Routers, planers, laminate trimmers, nibblers, shears, scroll saws, and jigsaws with blade shanks one-fourth of an inch wide or less.

14. A momentary contact "on-off" control must be provided on all hand-held powered drills, tapers, fasteners drivers, horizontal, vertical and angle grinders with wheels greater than 2 inches in diameter.

B. Electric Tools

Electric tools present several dangers to the user; the most serious is the possibility of electrocution. Only assigned, qualified operators will operate power, powder-actuated, or air-driven tools. The following safe work procedures will be implemented and enforced at all company construction projects:

1. Tools must either a) have a three-wire cord with ground and be grounded, double insulated; or b) be powered by a low-voltage isolation transformer. A Ground Fault Circuit Interrupter (GFCI) must be used or the tool must be double insulated to prevent the worker from electrical shock hazards.

2. Never remove the third prong from the plug.

3. Never operate a electric tool that has any damage to the power cord.

4. Electric tools should be operated within their design limitations.

5. Gloves and safety footwear are recommended during use of electric tools.

6. When not in use, tools should be stored in a dry place.

7. Electric tools should not be used in damp or wet locations.

8. Work areas should be well lighted.

C. Powered Abrasive Wheel Tools

Power abrasive wheel tools present a special safety problem because they may throw off flying fragments. Only assigned, qualified operators will operate power, powder-actuated or air driven tools. The following safe work procedures will be implemented and enforced at all company construction projects:
1. Portable grinding tools need to be equipped with safety guards to protect workers from flying fragments as well as the moving wheel surface.

2. Inspect and sound- or ring-test abrasive wheels prior to mounting to ensure that there are free from cracks or defects. Also check to ensure that the abrasive wheel RPM rating is appropriate for the tool.

3. When using a powered grinder:
   - Always use eye protection and a face shield.
   - Turn off the power when not in use.
   - Never clamp a hand-held grinder in a vise.

4. To prevent the wheel from cracking, the user should ensure that it fits freely on the spindle.

5. Never stand directly in front of the wheel during start-up because there is always a possibility that the wheel may disintegrate (explode) when accelerating to full speed.

D. Pneumatic Tools

Pneumatic tools are powered by compressed air and include chippers, drills, hammers, and sanders. Only assigned, qualified operators will operate power, powder-actuated or air driven tools. The following safe work procedures will be implemented and enforced at all company construction projects:

1. Pneumatic tools that shoot nails, rivets, or staples, and operate at pressures more than 100 pounds per square inch, must be equipped with a special device to keep fasteners from being ejected unless the muzzle is pressed against the work surface.

2. Eye protection is required and face protection recommended for employees working with pneumatic tools.

3. Hearing protection is required when working with noisy tools such as jackhammers.

4. When using pneumatic tools, check to see that they are fastened securely to the hose to prevent them from becoming disconnected. All hoses exceeding 1/2 inch inside diameter must have a safety device at the supply source or branch line to reduce pressure in the event of hose failure.

5. Airless spray guns that atomize paints and fluids at high pressures (1,000 pounds or more per square inch) will be equipped with automatic or visual manual safety devices that will prevent pulling the trigger until the safety device is manually released.

6. Workers operating a jackhammer are required to wear safety glasses, shoes, metatarsal guards, and hearing protection.

7. Compressed air guns should never be pointed toward anyone.
8. A safety clip or retainer must be installed to prevent attachments from being unintentionally shot from the barrel of the tool.

E. Liquid-Fuel Tools

Liquid-fuel tools are usually powered by gasoline. Vapors that can burn or explode and give off dangerous exhaust fumes are the most serious hazards associated with liquid-fuel tools. Only assigned, qualified operators will operate power, powder-actuated or air driven tools. The following safe work procedures will be implemented and enforced at all company construction projects:

1. Only handle, transport, and store gas or fuel in approved flammable liquid containers.

2. Before refilling the tank for a fuel-powered tool, the user must shut down the engine and allow it to cool to prevent accidental ignition of hazardous vapors.

3. Effective ventilation and/or personal protective equipment is necessary when using a fuel-powered tool inside a closed area. A fire extinguisher must be readily available in the work area.

F. Powder-Actuated Tools

Powder-actuated tools operate like a loaded gun and should be treated with the same respect and precautions. Only assigned, qualified operators will operate power, powder-actuated or air driven tools. The following safe work procedures will be implemented and enforced at all company construction projects:

1. All powder-actuated tools must meet ANSI A10.3 requirements for design, operation and maintenance.

2. Never use powder-actuated tools in an explosive or flammable atmosphere.

3. Before using a powder-actuated tool, the worker should inspect it to determine that it is clean, that all moving parts operate freely, and that the barrel is free from obstructions.

4. Never point the tool at anyone.

5. Do not load a tool unless it is to be used immediately. Never leave a loaded tool unattended, especially where it would be available to unauthorized persons.

6. Suitable eye, face and hearing protections are essential when using a powder-actuated tool.

7. In case of misfire, the operator should hold the tool in the operating position for at least 30 seconds, then attempt to operate the tool for a second time. If the tool misfires again, wait another 30 seconds (still holding the tool in the operating position) and then proceed to remove the explosive load from the tool in strict accordance with the manufacturer's instructions.
8. If the tool develops a defect during use it should be tagged and taken out of service immediately until it is properly repaired.

9. Warning signs should be posted within the area of operation of any powder-actuated tool.

10. Powder-actuated tool operators must be qualified and carry a card certifying this fact at all times. Failure to comply with any or all safety procedures governing the use of powder-actuated tools will be sufficient cause for the immediate revocation of the operator’s card.
17.0 WELDING AND CUTTING

Welding and cutting operations present various safety and health hazards. Health hazards due to inhalation of toxic fumes can cause illness to employees. Safety hazards such as fire may result in fatalities, serious injuries, and/or property damage. Therefore, in an effort to eliminate or reduce the hazards associated with welding and cutting operations the following safe work procedures will be implemented and enforced at all construction projects:

A. **General Requirements**

1. Only qualified welders are authorized to do any welding, heating or cutting.

2. Inspect your work area for fire hazards and proper ventilation before welding or cutting.

3. Avoid welding or cutting sparks and hot slag. Be alert to hot surfaces and avoid touching metal surfaces until they have cooled.

4. Place compressed gas cylinders in an upright position and secure in place to prevent dropping or falling. Handle with extreme care and do not store near any sources of heat.

5. Remove any combustibles when welding or cutting must be done. If removal is not feasible, cover combustibles with a noncombustible material. When welding near any combustible material, another employee must be posted to serve as a fire watch. Make sure this person has a fire extinguisher available and keep him/her in the area after welding/cutting is completed until all danger of fire is past.

6. When working in the vicinity of welding operations, wear approved goggles and avoid looking directly at the flash as serious flash burns could result.

7. When opening valves on tanks that have regulators installed, be sure the pressure adjustment screw is all the way out and do not stand in front of the regulator. An internal failure could rupture the regulator and cause the adjustment screw to become a missile.

8. In addition to other Personal Protective Equipment, persons performing cutting or welding must wear long sleeve shirts and hats to prevent sparks or hot metal from causing burns to the skin.

B. **Gas Welding and Cutting**

1. When transporting, moving, and storing compressed gas cylinders, always ensure that the valve protection cap is in place and secured.

2. Secure cylinders on a cradle, cart, slingboard, or pallet when hoisting. Never hoist or transport by means of magnet or choker slings.

3. Move cylinders by tilting and rolling them on their bottom edges. Do not allow cylinders to be dropped, struck, or come into contact with other cylinders violently.
4. Secure cylinders in an upright (vertical) position when transporting by powered vehicles.

5. Do not hoist cylinders by lifting on the valve protection caps.

6. Do not use bars under valves or valve protection caps to pry cylinders loose when frozen. Use warm, not boiling, water to thaw cylinders loose.

7. Remove regulators and secure valve protection caps prior to moving cylinders, unless cylinders are firmly secured on a special carrier intended for transport. (Valves and regulators must be closed when not in use)

8. Close the cylinder valve when work is finished, when cylinders are empty, or when cylinders are moved at any time.

9. Secure compressed gas cylinders in an upright position (vertical) except when cylinders are actually being hoisted or carried.

10. Store Oxygen cylinders at least 20’ from fuel gases.

C. **Arc Welding and Cutting**

1. Use only manual electrode holders which are specifically designed for arc welding and cutting.

2. All current-carrying parts passing through the portion of the holder must be fully insulated against the maximum voltage encountered to ground.

3. All arc welding and cutting cables must be completely insulated, flexible type, and capable of handling the maximum current requirements of the work in progress.

4. Report any defective equipment to your supervisor immediately and remove the equipment from service.

5. Shield all arc welding and cutting operations, whenever feasible, by noncombustible or flameproof screens to protect employees and other persons working in the vicinity from the direct rays of the arc.

D. **Fire Prevention**

1. Locate the nearest fire extinguisher in your work area in case of future need for an emergency. Fire extinguishing equipment must be immediately available in the work area.

2. Never use matches or cigarette lighters. Use only friction lighters to light torches.

3. Never strike an arc on gas cylinders.
4. Move objects to be welded, cut, or heated to a designated safe location. If the objects cannot be readily moved, then all movable fire hazards in the vicinity must be taken to a safe place or otherwise protected.
5. Do not weld, cut or heat where the application of flammable paints, or the presence of other flammable compounds, or heavy dust concentrations, creates a hazard.

6. Additional employees must be assigned to guard against fire while the actual welding, cutting, or heating is being performed when the operation is such that precautions are not sufficient.

7. Prior to applying heat to a drum, container, or hollow structure, provide a vent or opening to release any built-up pressure during the application of heat.

8. Never cut, weld, or heat on drums, tanks, or containers that have contained flammable liquids until they have been completely cleaned.
18.0 ELECTRICAL

Electricity is a serious workplace hazard that must be respected at all times. It is important to remember that even a little electric current can kill you! The best protection around electricity is distance - ample distance between you and the conductive materials. The following safe work procedures will be implemented and enforced on all company construction projects.

A. General Requirements

1. Learn what electrical equipment you are authorized to use - learn what switches you can operate and what buttons you can push. If you are not sure, ask your supervisor.

2. When handling acid or batteries, wear face shields and protective clothing such as rubber gloves and aprons. Immediately flush any acid coming into contact with your skin. Avoid breathing acid vapors. (Prohibit sparks or flames in areas where acid or batteries are used).

3. Be alert to and strictly obey all warning and danger signs around electrical apparatuses. Do not close (turn on) a switch that has a danger tag on it signed by or placed there by someone else.

4. Do not open any electrical enclosures. The one exception is that you may open the door on a circuit breaker panel board to operate the switches, but never open other types of electrical enclosures.

5. Do not use extension cords or any power tools or equipment when the cords are frayed, worn out or the wires are bare. Report such hazards to your supervisor or turn the equipment in for repair.

6. Report all unguarded or broken light bulbs. Do not hang lights by their cords unless the light was designed to be suspended in that manner.

7. Ground Fault Circuit Interrupters must be used.

B. Lockout and Tagging of Equipment

1. Equipment or circuits that are de-energized for work activities must be rendered inoperative, be locked-out and have tags attached at all points where such equipment or circuits can be energized.

2. Tags must have the name of the person and the date that work is being performed. The tag may only be removed by the person who placed it on the equipment.

C. Installation Safety Requirements

1. Live parts of electrical equipment operating at 50 volts or more must be guarded against accidental contact.
2. Entrance to rooms and other guarded locations containing exposed live parts must be marked with conspicuous warning signs forbidding unqualified persons from entering.

3. All pull boxes and breaker boxes must be labeled to indicate the equipment they service.

4. Electric installations that are over 600 volts and that are open to unqualified persons must be made with metal-enclosed equipment or enclosed in a vault or area controlled by a local disconnect. In addition, equipment must be marked with appropriate caution signs.

5. Conductors and equipment must be protected from overcurrent in accordance with their ability to safely conduct current and the conductors must have sufficient current carrying capacity to carry the load.

6. Fuses and circuit breakers must also be located or shielded so that employees will not be burned or otherwise injured by their operation.

D. Safety-Related Maintenance and Environmental Considerations.

1. All wiring components and electrical utilization equipment in hazardous locations must be maintained in a dust-tight, dust ignition-proof, or explosion-proof condition without loose or missing screws, gaskets, threaded connections, seals, or other impairments to a tight condition.

2. Unless identified for use in the operating environment, no conductors or equipment can be located:
   - In damp or wet locations.
   - Where exposed to gases, fumes, vapors, liquids, or other agents having a deteriorating effect on the conductors or equipment.
   - Where exposed to excessive temperatures.

E. Ground-Fault Circuit Interrupters

All 120 volt receptacle outlets on construction sites must have include Ground Fault Circuit Interrupters (GFCI) for employee protection.
19.0 SCAFFOLDING

Due to the potential hazards associated with scaffolding, the following safe work procedures will be implemented and enforced at all company construction projects:

A. General Requirements

1. Never erect, move, dismantle, or alter any scaffold, except under the supervision of a competent person.

2. Scaffolds and their components must be capable of supporting without failure at least 4 times the maximum intended load.

3. Guardrails and toeboards must be installed on all open sides and ends of platforms more than 4 feet above the ground or floor.

4. The footing or anchorage for scaffolds must be sound, rigid, and capable of carrying the maximum intended load without settling or displacement. Unstable objects such as barrels, boxes, loose brick, or concrete blocks, cannot be used to support scaffolds or planks.

5. Guardrails must be 2 x 4 inches or the equivalent, approximately 42 inches high, with a midrail, when required. Supports must be at intervals not to exceed 8 feet. Toeboards must be a minimum of 4 inches in height.

6. Any damaged or weakened scaffold including accessories must be removed from service and repaired or replaced immediately.

7. An access ladder or equivalent safe access must be provided for each scaffold.

8. Scaffold planks must provide a complete floor at the scaffold working level. No gaps between planks will be permitted.

9. Scaffold planks shall extend over their end supports not less than 6 inches nor more than 12 inches. All planking must be Scaffold Grade, or equivalent, as recognized by approved grading rules (fire resistant wood products may be required - check specifications or client).

10. Load-carrying members of wood scaffold framing must be a minimum of 1,500 fiber (stress Grade) construction grade lumber.

11. Overhead protection must be provided for employees working on a scaffold who are exposed to overhead hazards.

12. Slippery conditions on scaffolds must be eliminated before use. Any spills, precipitation, or other occurrence which may create a slippery condition must be eliminated immediately.
20.0  FLOOR AND WALL OPENINGS

Due to the potential hazards involved in floor and wall openings, the following safe work procedures will be implemented and enforced at all company projects:

A.  General Requirements

1.  All floor openings must be guarded by a standard railing and toeboards or marked cover.

2.  Ladder-way floor openings or platforms must be guarded by standard railings with toeboards on all exposed sides, except at entrance to opening, where a swinging gate allows passage through the railing.

3.  Barricades for warning workers of hazards must be at least six feet back from the edge of the hazard and 42" high.

4.  Hole covers must be strong enough to support possible loads and secured in place to prevent slipping. Cover must be secured and marked as: HOLE or COVER.

5.  Guard all open-sided floors or platforms six feet or more above the adjacent floor or ground level with a top rail, midrail, and toeboard.

6.  Guard all wall openings that have a drop of more than 4 feet, and where the bottom of the opening is less than 3 feet above the working surface. Guards shall include a top rail, midrail, and toeboard.

7.  Do not store materials within 6 feet of floor openings or the roof edge.
21.0 CRANES, DERRICKS, HOISTS

Accidents involving cranes often are caused by human actions or inaction. Therefore, this company will employ competent and careful operators who are physically and mentally fit and thoroughly trained in the safe operation of crane and rigging equipment, and the safe handling of loads. Upon employment, the crane operator must be assigned to work with the crane and rigging foreman only on selective work which will be monitored closely for a period of not less than one week.

A. General Requirements

The target goal of this company is zero crane accidents. To achieve this goal, the following safe work procedures will be implemented and enforced at all company projects:

1. Crane operators are required to comply with crane manufacturer’s specifications and limitations applicable to the operation of any and all cranes, derricks, and hoists.

2. Rated load limits and recommended operating speeds, special hazard warnings, or instructions must be posted on all equipment.

3. Hand signals to crane and derrick operators must conform with the applicable ANSI standard for the type of crane being used (see Appendix V).

4. A competent person will inspect all machinery and equipment prior to each use and during use to verify the unit is in safe operating condition (see Appendix H).

5. Any defective parts must be repaired or replaced before use.

6. A competent person will perform an annual inspection of the hoisting machinery and provide a copy of the dates and results of inspections for each hoisting machine and piece of equipment to the site Superintendent.

7. All moving parts or equipment (belts, gears, shafts, pulleys, sprockets, spindles, drums, fly wheel, etc.) must be guarded to prevent contact by employees.

8. Accessible areas within the swing radius of the rear of the rotating superstructure of the crane must be barricaded to prevent an employee from being struck or crushed by the crane.

9. Exhaust pipes must be guarded or insulated to prevent contact by employees.

10. Windows in cabs must be of safety glass, or equivalent, that introduces no visible distortions.

11. Where necessary, a ladder or steps must be provided to allow access to a cab roof.

12. Platforms and walkways must have anti-skid surfaces.
13. A fire extinguisher of 5 BC rating must be accessible at all operator stations or cabs of equipment.

14. No part of a crane or load is permitted within 10 feet of electric power lines, except where electrical distribution and transmission lines have been de-energized and visibly grounded. A person will be designated to observe clearance of the equipment and provide timely warning to the crane operator.

15. No employee is permitted to work beneath a suspended load.

B. Site Superintendent Responsibilities

As part of the Ulliman Schutte Construction safety and health program, site Superintendents are required to:

1. Develop a working knowledge of client's requirements for operating construction cranes, derricks or hoists on project property.

2. Conduct a detailed crane standards review meeting with supervisory staff members.

3. Provide a copy of company crane and rigging procedures to supervisory personnel, crane operators and riggers.

4. Interview prospective crane operators prior to site employment to ascertain competence and qualifications.

5. Check the prospective crane operator's past experience with previous employers if possible.

6. Conduct daily inspections to observe compliance with established USC and client crane and rigging procedures.

7. Immediately shut down any crane operations that jeopardize the safety of any jobsite personnel.

8. Immediately notify the Corporate Safety Director of any crane or rigging accidents or operational problems.

9. Assure that crane rental companies furnish:
   - Current "Crane Hook Magna Flux Certificate" authorized by a certified testing laboratory, manufacturer, or metallurgist.
   - Copy of last annual inspection of crane as required by OSHA.
   - Results of crane operator's physical examination (if crane operator is to be furnished by rental company).

10. Arrange for crane operators be physically checked-out in the machine.
21.1 MOBILE CRANES

Cranes shall be operated only by designated operators who are properly trained and qualified for the piece of equipment to be operated.

The operator shall have final responsibility and control over the crane operations. When there is any doubt as to safety, the operator shall have the authority to stop and refuse to handle the load until safety has been assured.

The operator shall be responsible for:

1. Proper placement of the crane in relationship to the load.
2. Leveling the crane to within 1 degree of level.
3. Proper placement and use of outriggers for all lifts.
4. Determining the stability of the ground or footing.
5. Respond only to uniform hand signals given by the appointed signal person (With the exception of a stop signal given by anyone).
6. The installation and maintenance of crane swing radius protection.
7. Ensuring anti-two-block devices are present and operating on all hydraulic cranes.
8. Ensuring the boom angle indicator is operating and is readily visible to the operator.
9. Verifying telescoping booms are marked or equipped with a device to clearly indicate at all times the boom's extended length to the operator.
10. Obtaining a copy of the bill of lading with the item weight clearly legible. No crane will be loaded beyond its rated capacity.
11. Performing a visual inspection of equipment prior to its first operation on each work shift. The "Crane Safety Checklist" shall be completed each day the equipment is to be utilized. The annual certificate of inspection must be provided when a crane enters the site and annually.
21.2 RIGGING REQUIREMENTS

1. All rigging equipment shall be inspected prior to each use. Damaged or defective slings shall be immediately removed from service and destroyed.

2. Rigging, including slings, shall be hung on a rigging frame to eliminate bends and kinks.

3. All rigging devices including slings shall have permanently-affixed identifications stating size, grade, rated capacity and manufacturer.

4. The load shall be attached to the hook by means of slings or other approved devices, and no open hooks shall be used. Hooks shall have hook safety latches or shall be safety wired (moused) to prevent slings from jumping off the hook.

5. A shackle shall be used to retain two or more choker eyes in the hook.

6. Hooks shall not be changed, defaced or deformed in any manner. Hooks that have been exposed to excessive heat such as welding, burning, grinding, etc., will not be allowed on-site.

7. The operator shall position the hook over the load in a manner to prevent load swing.

8. Shake out hooks will be used only for shaking out materials.

9. Wire rope slings shall be lubricated as necessary during use. Slings shall be lubricated no less frequently than every four months when in storage.

10. "Shop-made" grabs, hooks, clamps or other lifting devices are prohibited.

11. Eyes in wire rope bridles, slings or bull wires shall not be formed by wire clips or knots.

12. Protruding ends of strands in splices on slings or bridles shall be covered or blunted.

13. All rigging equipment shall have a safety factor of five.

14. Lifting beams, spreader bars, etc., will be certified by a licensed engineer as to configuration and capacity and will be labeled as to that configuration and capacity.

15. Slings shall not be shortened by knots, bolts, or other makeshift devices.

16. Wire rope slings shall be padded or softeners used to protect against damage due to sharp corners.

17. Slings used in a basket hitch shall have the loads balanced to prevent slippage.

18. Loads handled by slings shall be landed on cribbing or dunnage so that slings will not be pulled from under or be crushed by the load.

19. Slings subjected to shock loading shall be immediately removed from use and destroyed.
20. Mechanical coupling links, bolts or clevis pins shall not be used for chain repairs.

21. Synthetic web slings shall be removed from service when subjected to acid or caustic burns, melting/charring, abrasion of sling or stitching, or when wear threads are visible.
22.0 MOTOR VEHICLES AND MECHANIZED EQUIPMENT

This company recognizes the potential hazards associated with motor vehicles and mechanized equipment on construction projects. Therefore, in an effort to minimize accidents resulting from their use, the following safety procedures will be implemented and enforced on all company projects:

1. All equipment left unattended at night adjacent to highways or construction areas, will have lights, reflectors, and/or barricades to identify location of the equipment.

2. Supervisory personnel will ensure that all machinery and equipment is inspected prior to each use to verify that it is in safe operating condition.

3. Rated load capacities and recommended rules of operation will be conspicuously posted on all equipment at the operator’s station.

4. Wire rope will be taken out of service when one of the following conditions exist:
   - In running ropes, 6 random distributed broken wires in one lay or broken wires in one strand or one lay.
   - Wear of one-third the original diameter or outside individual wires.
   - Kinking, crushing, hoist caging, heat damage, or any other damage resulting in distortion of the rope structure.
   - In standing ropes, more than two broken wires in one lay in sections beyond connections, or more than one broken wire at an end connection.

5. An accessible fire extinguisher of 5 BC rating or higher will be available at all operator stations.

6. When vehicles or mobile equipment are stopped or parked, the parking brake will be set. Equipment on inclines will have wheels chocked as well as the parking brake set.

7. All vehicles or combinations of vehicles will have in operable condition at least two (2) headlights and be in compliance with the light-duty vehicle policy.
22.1 LIGHT-DUTY VEHICLE POLICY

Policy: Our business requires that certain employees operate company-owned or leased light-duty vehicles (cars, vans, pickups, etc.) and/or use their personally owned vehicles on company business. Employees will be responsible for ensuring safe operation, maintenance, and, when required, inspection of the vehicle as detailed in this policy. Employees must not operate an unsafe vehicle or operate a vehicle in an unsafe or unlawful manner.

Objective: To reduce the costs associated with light-duty vehicle operation and to assist in the prevention of losses involving light-duty vehicles.

Scope: This policy applies to all employees assigned or authorized to use company-owned or leased light-duty vehicles, including rental cars.

The driver qualification portion of the policy also applies to any employee who operates a personally-owned light-duty vehicle on company business.

The training portion of the policy applies only to those employees driving company vehicles more than 1,000 miles per year or personally-owned vehicles on company business (paid mileage or vehicle allowance) more than 10,000 miles/year. A light-duty vehicle is defined as any vehicle designed for highway use with a gross vehicle weight rating (GVWR) of less than 10,000 lbs. This includes passenger cars, vans, and pickups.

I. Vehicle Assignment

A. The Vice President is responsible for:

1. Determining those employees or departments to which light-duty vehicles will be assigned. The type, style, and equipment associated with the vehicle should be dependent upon the reason the vehicle is needed, safety of the driver and passengers, vehicle cost and fuel economy, sanitation considerations, and load requirement of the vehicle.

2. Ensuring the employees assigned to operate company-owned or leased light-duty vehicle are qualified and trained to do so in a safe manner.

B. Spouse Use

Spousal use of company vehicles is discouraged. Such use should be reserved for emergency or special circumstances only. Children of employees or any other unauthorized persons are not permitted to drive company vehicles under any circumstances.

Spouses of employees assigned company-owned or leased light-duty vehicles are authorized to operate such vehicles only if:

1. Through a motor vehicle record (MVR) check (see Driver Qualification procedures below), the Controller confirms that the spouse:
a. Possesses a current valid motor vehicle operator's license, and

b. Has no less than an “acceptable” MVR for the preceding thirty-six (36) months (see Motor Vehicle Grading Criteria Chart below).

2. The Controller grants permission for the spouse to operate the vehicle and this permission is renewed every year. A motor vehicle record check must be performed as part of that renewal process with the criteria listed in B.1 applied.

C. Other Employee Use:

1. The employee assigned a company-owned vehicle is responsible for ensuring that only qualified employees are allowed to operate the vehicle for business use. The assigned employee is liable for all damages and losses to the vehicle incurred by an unqualified driver. **No one** other than the employee assigned a company vehicle or his/her authorized spouse may operate the vehicle for personal use.

II. Driver Qualification

A. The supervisor is responsible to submit a request for driving qualification of an applicant's or employee's driving record to the HR department prior to any assignment involving the operation of a light-duty vehicle, including personally-owned vehicles when on company business (i.e. paid or unpaid mileage). The following procedures should be followed:

1. At the time of hire or before initial assignment of the vehicle, the department supervisor will complete a Driver Request for Qualification Status Form (see Appendix J). This form must be sent to the HR department, which will order the driver's record. A signed acknowledgement of receipt of the USC Light-duty Vehicle Policy (see Appendix J.1) must accompany the request form.

2. The Controller will review each driving record to ensure that the employee possesses a current, valid motor vehicle operator's license and to assess the recorded violations. A Notice of Driver Qualification Status (see Appendix I) will be sent to the requesting party indicating the employee's driving status. Driving status is based on the driver's record. The employee/applicant has no driving privileges until the approved Notice is issued by the Controller.

3. The driver qualifications are as follows:

   • Authorized employee of company.
   • Must be at least 18 years of age.
   • Have at least one year of experience in the class of vehicle operated.
   • Must meet licensing requirements.

4. Drivers will not qualify for driving privileges if, during the last 36 months, the driver had any of the following experiences:

   • Been convicted of a felony.
- Been convicted of sale, handling or use of drugs.
- Has automobile insurance canceled, declined or not renewed.
- Been convicted of an alcohol- or drug-related offense while driving.
- Had driver’s license suspended or revoked.
- Driving record in the poor range on the grading criteria listed below

5. **No new employee who has a poor MVR will be approved as a company-owned vehicle driver.** Existing drivers whose record falls to “borderline” will be placed on 12 months probation. Existing drivers whose record falls to “poor” will lose driving privileges.

6. Loss of driving privileges (whether state or company imposed) may result in termination unless another position for which the employee is qualified is available that does not require the employee to drive.

B. The Controller will retain a copy of the Notice of Driver Qualification Status. This information will be used for tracking subsequent record checks.

C. At least once every year the Controller will order updated Motor Vehicle Reports of all Authorized Drivers from the applicable state agencies and revise the Authorized Drivers List. Any changes in Driver Status will result in a revised Notice of Driver Qualification Status.

D. The following chart shall be used to determine the grade of the Motor Vehicle Report for all employees, spouses and applicants for company driver qualification.

**Motor Vehicle Grading Criteria (Last Three Years)**

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<th>Number of Minor Violations</th>
<th>Number of at-fault accidents</th>
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<tr>
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</tr>
<tr>
<td>4</td>
<td>Poor</td>
</tr>
<tr>
<td>Any major violation</td>
<td>Poor</td>
</tr>
</tbody>
</table>
### Minor Violation:
Any minor violation other than a major except:

- Motor vehicle equipment, load or size requirement
- Improper/failure to display license plates
- Failure to sign or display registration
- Failure to have driver’s license in possession (if valid license exists)

### Major Violations

- Driving under influence of alcohol/drugs
- Failure to stop/report an accident
- Reckless driving/speeding contest
- Driving while impaired
- Making a false accident report
- Homicide, manslaughter or assault arising out of the use of a vehicle
- Driving while license is suspended/revoked
- Careless driving
- Attempting to elude a police officer

### III. Personal Cars Used on Company Business

The company does not assume any liability for bodily injuries or property damage the employee may become personally obligated to pay arising out of an accident occurring in connection with operation of his/her own car. The reimbursement to the employee for the operation of his/her car on company business includes the allowance for the expense of automobile insurance. You are required to have minimum liability limits of $100,000/$300,000. The company does not specify and assumes no responsibility for any other coverage employees carry on their own cars since this is a matter of individual status and preference. You may be asked to provide evidence of minimum required coverage.

### IV. Traffic Violations

Fines for parking or moving violations are the personal responsibility of the assigned operator. The company will not condone nor excuse ignorance of traffic citations that result in court summons being directed to itself as owner of the vehicle.

Each driver is required to report all citations of moving violations to the Corporate Safety Director within 24 hours. This requirement applies to violations involving the use of any vehicle (company, personal or other) while on company business, or a violation, the conviction of which, will reduce the MVR grade to poor. Failure to report violations will result in appropriate disciplinary action. Management reserves the right to suspend driving privileges pending court action on serious violations.

Please be aware that traffic violations incurred during non-business (personal use) hours will affect your driving status as well and are subject to review.
V. Accidents Involving Company Vehicles

In the event of an accident:

- Do not admit negligence or liability of any kind whatsoever.
- Do not attempt settlement, regardless of how minor.
- Get name, address and phone number of injured person and witnesses if possible.
- Exchange vehicle identification, insurance company name and policy numbers with the other driver.
- Take a photograph of the scene of accident if possible.
- Call the police if injury to others is involved. You may want to call police even if there are no injuries.
- Complete the accident report in your vehicle.
- Turn all information over to the Corporate Safety Director within 24 hours.

VI. Driver Training

A. At any time and for any reason, USC may require any company driver to enroll in a vehicle driver training program. A “company driver” is any employee who drives company-owned light-duty vehicles more than 1,000 miles/year or personal vehicles for company business (paid mileage) more than 10,000 miles/year.

VII. Vehicle Operation, Maintenance, and Inspection

A. Operation

1. All employees assigned to use company-owned or leased light-duty vehicles are responsible for ensuring that:

   a. The vehicle is not driven in any manner that would discredit the company.
   
   b. The use of cellular phones while operating a motor vehicle is discouraged. Any cell phone use must be done safely.
   
   c. The hauling or towing of objects does not exceed the manufacturer’s limits as listed in the owner’s manual.
   
   d. No alterations or modifications are performed on the vehicle without prior approval from the Corporate Equipment Manager.
   
   e. Seat belts are worn by all occupants whenever the vehicle is in motion.
   
   f. All accidents resulting in any personal injury and/or property damage are reported to his/her supervisor immediately.
g. Assigned vehicles are returned in good condition upon request or termination.

h. No employee driving a company-owned vehicle shall pick up hitchhikers or carry any type of radar detector or firearms.

2. The supervisor of employees who operate company-owned light-duty vehicles is responsible for ensuring that vehicle accidents are promptly reported (see Vehicle Accident Reporting Procedure).

3. The company will not be responsible for the loss or damage of personal possessions carried in or on a company-owned vehicle.

B. Maintenance

1. Employees assigned a company-owned light-duty vehicle are responsible for safety and maintenance of the vehicle, including the following:

   a. Ensuring that required preventive maintenance activities (e.g. oil changes, brakes, tires, etc.) are performed on a timely basis and at a reasonable cost.

   b. Forwarding applicable receipts and/or invoices (with vehicle #, mileage, and employee name) to the Accounts Payable Department. For maintenance/repairs paid for by the employee, reimbursement will be given only if a standard approved Expense Reimbursement Form accompanies the receipt.

   c. Major repairs in excess of $250 must be pre-approved by the Equipment Manager.

C. Inspection

1. Employees assigned a company-owned or company-leased light-duty vehicle are responsible for ensuring that the following items are visually checked at least weekly:

   a. Tire pressure

   b. Fluid levels
      - windshield washer
      - engine oil
      - automatic transmission
      - brakes
      - radiator/cooling system

   c. Lights
      - brake
      - turn signals (front and rear)
      - headlight (upper and lower beams)
      - emergency flashers (front and rear)
      - license plate
      - instrument panel

   d. Windshield wiper and blades
2. Employees assigned company-owned light-duty vehicles are responsible for ensuring that any safety inspections required by any state, local, or federal law or regulation are performed on such vehicles by qualified individuals.

3. All company-leased vehicles should be inspected according to requirements established by the leasing agency.

VIII. Personal Use

Company vehicles are provided primarily for business purposes; however, occasional personal use is permitted. **Personal use is a privilege extended only to authorized employees.** The privilege of personal use may be withdrawn at any time without notice by the company.

The following rules apply to personal use of company vehicles:

A. No one other than the employee assigned a company vehicle or his/her authorized spouse (in limited situations) may operate the vehicle for personal use.

B. An employee may drive a company-owned or leased light-duty vehicle to and from work if any of the following applies:
   1. Vehicle will be parked at the employee's residence for the benefit of the company,
   2. Employee is on 24-hour call,
   3. Employee's job responsibilities are at various locations and he/she must proceed to them directly from home for least-cost purposes.

C. Company-owned or leased light-duty vehicles will not be allowed outside the continental United States unless the situation is first approved by an officer of the company.

D. During personal use, travel will be limited to a 50-mile radius of home unless permission is received from the applicable supervisor. Personal trailers, including boat and recreational vehicles, are not to be pulled.

E. **Company vehicle is not to be driven while under the influence or alcohol or any controlled substance. Possession, transportation or consumption of alcohol or illegal drugs by anyone in the vehicle is not allowed and may result in termination.**

F. Driver and all passengers must wear available personal restraints.

G. Report any accident immediately to police and to your supervisor.

H. Employees shall compensate the company for the first $500.00 of damage sustained while a company-owned vehicle is used for personal reasons.
I. All personal use of vehicles shall be subject to taxation or reimbursement to the company, as required by IRS regulations.

Any exceptions to these rules require advance, written approval by the Vice President. Violation of these rules will result in disciplinary action from termination of driving privileges to discharge.
23.0 EXCAVATIONS

Trenching and excavation work presents a serious risk to all employees. The greatest risk, and one of primary concern, is a cave-in. Cave-in accidents are much more likely to result in worker fatalities than any other excavation-related accidents. Due to the hazards associated with excavation work, the following safe work procedures will be implemented and enforced at all company construction projects.

1. A competent person must conduct inspections of excavations prior to the start of work each day and as necessary throughout each shift. Inspections must also be made after every rainstorm or other hazard-increasing occurrence. An inspection checklist must be completed either on the USOSAFE PDA or on paper (see Appendix K.1).

2. Trenches five (5) feet or more in depth must be shored, shielded or sloped back to the angle of repose. Any excavation in unstable soil will require shoring or sloping. Soil determination must be made and documented by competent person (see Appendices K & L).

3. A competent person must:
   - Monitor water removal equipment and operations
   - Inspect excavations subject to runoff from heavy rains.
   - Conduct daily inspections of excavations

4. Remove or support all surface encumbrances whenever their location creates a hazard to employees.

5. Identify underground installation (e.g., sewer, utility, fuel) locations prior to opening an excavation. Contact utility companies or owners to advise on the proposed work and ask for the locations of utility underground installations prior to opening an excavation.

6. Protect, support or remove underground installations, as necessary, to safeguard employees working in open excavations.

7. Structural ramps used by employees as a means of access or egress from excavations must be designed by a competent person.

8. Structural ramps for access and egress of equipment must be designed by a competent person qualified in structural design.

9. All excavations or trenches that are four (4) feet or more in depth must have a stairway, ladder, ramp or other safe means of access and egress within twenty-five (25) feet of travel in any direction.

10. The entire area around any trench or excavation must be barricaded at all times.

11. No employees are permitted underneath loads handled by lifting or digging equipment.
12. A warning system (e.g., barricades, signals, or stop logs) must be used when mobile equipment is operated adjacent to an excavation.

13. Testing must be conducted in excavations where oxygen deficient atmospheres exist or could reasonably be expected to exist before employees are permitted to enter excavations greater than four (4) feet in depth.

14. Take adequate precautions, such as proper respiratory protection or ventilation, to prevent employee exposure to oxygen deficient and other hazardous atmospheres.

   Emergency rescue equipment must be readily available where hazardous atmospheric conditions exist or may reasonably be expected to develop during work in an excavation.

15. Never work in excavations where water has accumulated or is accumulating, unless adequate precautions have been taken to protect you against the hazards posed by water accumulation.

16. Backfilling and removal of trench boxes or supports shall progress together from the bottom of the trench. Jacks, supports, or braces shall be released slowly, and in unstable soil, ropes shall be used to pull out the jacks and braces from above and clear of the excavation. All personnel shall be clear of the trench.

17. Materials must be placed 2 feet or more from the edge of the excavation. Precautions must be taken to prevent such materials from falling into the excavation.

18. Any excavation over 20’ deep must be designed by a Professional Engineer.

19. Refer to Subpart B 1926.650 ~ .652 including Appendix A thru F for complete regulations.
24.0 CONCRETE AND MASONRY CONSTRUCTION

Compliance with company safety requirements listed below should greatly reduce or eliminate the injuries and accidents that may occur during concrete and masonry construction:

1. All protruding reinforcing steel onto which employees could fall must be guarded to eliminate the hazard of impalement.

2. Employees are not permitted behind the jack during tensioning operations.

3. Signs and barriers must be erected during tensioning operations to limit employee access.

4. Employees are prohibited from riding in concrete buckets.

5. Employees are prohibited from working under concrete buckets while the buckets are being elevated or lowered into position.

6. Employees are required to wear protective eye, head, and face equipment when involved in placing, pouring, or pumping concrete.

7. Employees are required to wear a safety harness or equivalent fall protection when placing or tying reinforcing steel more than six (6) feet above any working surface.
25.0 STEEL ERECTION

Due to the hazards associated with steel erection, the following safety procedures will be implemented and enforced at all company projects:

1. Permanent floors must be installed so there is not more than eight (8) stories between the erection floor and the uppermost permanent floor, except when structural integrity is maintained by the design.

2. During skeleton steel erection, a tightly planked temporary floor must be maintained within two stories or 30 feet, whichever is less below and directly under that portion of each tier of beams on which any work is being performed.

3. During skeleton steel erection, where the requirements of the preceding paragraph cannot be met, and where scaffolds are not used, safety nets must be installed and maintained whenever the potential fall distance exceeds two (2) stories or 25 feet.

4. Personal fall protection must be utilized during steel erection higher than 6 feet. All safety precautions for safety harnesses, lifelines and lanyards described in Section 8.0 must be followed.

5. A safety railing of 1/2-inch wire rope or equivalent must be installed around the perimeter of all temporary floored buildings, approximately 42 inches high, during structural steel assembly.

6. When placing structural steel members, the load must not be released from the hoisting line until the member is secured by at least two bolts, or the equivalent, at each connection, drawn up wrench tight.
26.0 **FALL PROTECTION**

The fall protection standards of Federal OSHA can be found in Subpart M, Sections 1926.500 through 1926.503. These standards are hereby made a part of this Fall Protection Program. One hundred percent (100%) fall protection is required for all exposures above six feet including steel erection. Where the requirements of this program differ from Federal or State OSHA standards, the most stringent requirements will apply. In summary, this program requires the following:

1. Fall protection is required when employees are working six feet or more above lower levels. If the fall distance is less than six feet but the employee could fall into dangerous equipment, fall protection must be provided.

2. Unprotected sides and edges or leading edge work must be protected by the use of one of the following:
   - guardrail system
   - personal fall arrest system
   - safety net system

   Unless it can be demonstrated that it is infeasible or creates a greater hazard to use these systems. Federal OSHA defines infeasible as "impossible to perform the construction work using one of these fall protection systems or that it is technologically impossible to use one of these three systems to provide fall protection." The presumption is that it is feasible and will not create a greater hazard to implement at least one of the above fall protection systems.

3. Training of all employees using personal fall arrest systems must be conducted by a competent person. Evidence of the training must be documented.

   A competent person is defined as an individual knowledgeable of fall protection equipment, including the manufacturer's recommendations and instructions for the proper use, inspection and maintenance; and who is capable of identifying existing and potential fall hazards; and who is knowledgeable of the rules contained in this section regarding the erection, use, inspection, and maintenance of fall protection equipment and systems.

4. Types of Systems

   A. Guardrail Systems

   Guardrail systems are usually the first choice when the situation permits them. If used, they must meet the following requirements:

   1. Top rails of guardrail systems must be 42 inches above the walking/working surface plus or minus 3 inches. Guardrail systems must be able to withstand a force of 200 pounds in any outward or downward direction at any point along the top edge without deflecting to a height of less than 39 inches. If wire rope is used for top rails, it must be flagged at not more than six-foot intervals with high visibility material.
2. Midrails must be used between the top rail and the walking/working surface when there is no wall or parapet wall at least 21 inches high. Midrails must be able to withstand downward or outward pressure of 150 pounds.

3. When guardrail systems are used around holes which are used as points of access (such as ladderways), they must be provided with a gate or be so offset that a person cannot walk directly into the hole.

B. Personal Fall Arrest Systems

The minimum personal fall protection system allowed for use on Ulliman Schutte Construction projects will consist of a fully body harness, lanyard with a deceleration device such as a ripstitch shock absorber built in, and locking snaphooks. A double-legged lanyard must be utilized where required to ensure 100% tie-off.

1. Lanyards and vertical lifelines must have a minimum breaking strength of 5,000 pounds. If vertical lifelines are used, each employee must have a separate lifeline.

2. Self-retracting lanyards which automatically limit free-fall to two feet or less must have a minimum tensile strength of 3,000 pounds.

3. Personal anchorages must be independent of any anchorage being used to support or suspend platforms and must be capable of supporting 5,000 pounds. If a designed system is used, than a factor of 2 to 1 of the maximum intended load may be used to determine anchorage point strength.

4. Personal fall arrest systems must be rigged so that the employee can neither free fall more than six feet nor contact any lower level. If the combined tool and body weight exceeds 310 pounds, modification of the system may be necessary.

5. The attached point of the body harness must be located in the center of the wearer’s back near shoulder level.

6. Personal fall arrest systems may not be attached to guardrail systems unless they are designed for that purpose by a competent person and capable of supporting 5,000 pounds for each person attached.

7. Positioning devices must be rigged so that the employee cannot free fall more than two feet. They must be secured to an anchorage capable of supporting 3,000 pounds.

8. Safety harnesses, lanyards and lifelines are to be inspected daily, by the wearer, prior to use. The systems will be inspected weekly by the foreman or safety person and that inspection will be documented. (Components which are damaged or incomplete are to be immediately removed from service).
C. Safety Net Systems

Safety nets may be the only reasonable choice in some situations. They must meet the following requirements if used:

1. Safety nets must be installed as close as practicable under the walking/working surface but in no case more than 25 feet below.

2. They must extend outward from 8 to 13 feet depending on the vertical distance to the net.

3. Unless it is unreasonable to do so, they must be drop-tested after installation, relocation, major repair and at six-month intervals if left in one place.

4. They must be inspected at least once a week for wear, damage and other deterioration.

5. Materials, scrap pieces, equipment or tools which fall into the net must be removed as soon as possible and at least before the next shift.

D. Fall Protection Plans

If it is determined that the work cannot be done using one of the conventional fall protection systems described above, then a written fall protection plan must be developed prior to performing the work. It must include the following:

1. A qualified person must write it and only a qualified person may make changes to it, which must also be in writing.

2. It must be developed specifically for the area where the work will be performed.

3. A copy of the plan must be maintained at the jobsite.

4. It must be implemented under the supervision of a competent person.

5. It must document why the use of conventional fall protection methods are either infeasible or create a greater hazard.

6. It must include a written discussion of other measures which will be taken to reduce or eliminate the fall hazard(s).

7. The plan must identify each location where conventional fall protection methods cannot be used. These locations must then be classified as Controlled Access Zones.

8. The plan must include the name or other method of identification for each employee who is designated to work in a Controlled Access Zone. No other employee may enter a Controlled Access Zone.
E. Controlled Access Zones

Controlled Access Zones may only be used when a Fall Protection Plan has been developed as described above. They must meet the following criteria:

1. They must be defined by a control line or by some other method that restricts access.

2. The lines must be erected not less than 6 feet nor more than 25 feet from the unprotected edge except when erecting precast concrete members.

3. When erecting precast concrete members, the control line must be not less than 6 feet nor more than 60 feet or half the length of the member being erected, whichever is less, from the leading edge.

4. The control line must extend along the entire length of the unprotected edge and be approximately parallel to it.

5. The control line must be connected on each side to a guardrail system or wall.

6. For bricklaying, the line must be not less than 10 feet nor more than 15 feet from the working edge.

7. Additional control lines must be placed at each end to enclose the Controlled Access Zone.

8. Control lines should consist of rope, wire, tape or equivalent material. Each line must be flagged or clearly marked with high visibility material at not more than 6-foot intervals.

9. Each line must be rigged and supported in such a way that the lowest point, is not less than 39 inches and the highest point not more than 45 inches above the walking/working surface.

10. Each line must have a minimum breaking strength of 200 pounds.

F. Safety Monitoring Systems

These may only be used for work on precast concrete erection work in conjunction with a warning line system when it can be demonstrated that it is infeasible or it creates a greater hazard to use conventional fall protection equipment.
1. A safety monitor must be designated to monitor the safety of employees working in a Controlled Access Zone. The safety monitor must meet the following requirements:

- The monitor must be competent to recognize fall hazards.
- The monitor must warn an employee when it appears that the employee is unaware of a fall hazard or is acting in an unsafe manner.
- The monitor must be on the same walking/working surface in visual sight of each employee and close enough to communicate effectively with them.
- The monitor must not have any other responsibilities which could take that person's attention away from the monitoring function.
- Each employee working in a Controlled Access Zone must be directed to comply promptly with fall hazard warnings from safety monitors.

G. Warning Line Systems

Warning line systems used must comply with 29 CFR 1926.502

1. The warning line must be erected around all sides of the work area. When mechanical equipment is not being used, it must be erected not less than six feet from the edge. When mechanical equipment is being used, the warning line must not be less than six feet from the edge parallel to the machine travel and not less than 10 feet from the edge perpendicular to the machine travel.

2. Warning lines must consist of ropes, wires, or chains and supporting stanchions erected as follows:

- The rope, wire or chain must be flagged at not more than six-foot intervals with high visibility material
- The line’s lowest point above the working service may not be less than 34 inches and its highest no more than 39 inches
- Stanchions must be able to withstand a force of 16 pounds applied horizontally against the stanchions 30 inches above the working surface perpendicular to the warning line in the direction of the edge.
- The rope, wire or chain must have a minimum tensile strength of 500 pounds
- The line must be attached to each stanchion such that pulling, on the line in one section will not result in taking up slack in the adjacent section before the stanchion tips over

H. Holes and Falling Objects

1. Holes in walking/working surfaces large enough to step in or trip in must be covered. Holes larger than 2 inches through which objects could fall on employees below must also be covered.
2. Covers for holes in floors, roofs, or other walking/working surfaces must be capable of supporting at least twice the load of employees, materials or equipment that might be imposed on them at one time. All covers must be fastened down and marked with the word "HOLE" or "COVER." Covers in roadways must be able to support twice the maximum axle load of the largest vehicle expected to cross them. Cover must be fastened down.

3. Employees walking or working below potential falling objects must be protected from them. Toeboards must be at least 3.5 inches high and able to withstand a downward or outward force of 50 pounds. When tools, materials or equipment are piled higher than the toeboards, other measures such as panels or screens must be used.

I. Training

Employees that work at heights greater than six feet above a lower level must be trained on the requirements and contents of the standard.

The brands and types of fall protection equipment or devices that have been chosen for use on the project must be demonstrated to the employee. All employees will be taught to select the proper fall protection equipment or device for the task that they will perform. Training must also include the proper donning, daily inspection for damage or wear, proper care and storage of all components and a stern directive that if there is anything suspected wrong with any component of their fall protection system, it is not to be used and is to be reported to their supervisor immediately for examination and determination. All defective components will be removed from service and either destroyed or repaired to manufacturer specifications.

All employees are to be instructed that they must use 100% fall protection when working 6’ or higher as required under program.

Any employee that is not sure how or where to anchor fall protection must ask their supervisor.

If new types, brands or systems are brought to the project, training must be updated.

All training will be completed by the site competent person, Corporate Safety Director, or outside vendors and trainers. Any equipment brought to the site will be inspected before use.
27.0 DEMOLITION

A. Preparatory Operations

1. Prior to starting demolition operations, an engineering survey must be performed by a competent person to determine the condition of the framing, floors, and walls.

2. All electric, gas, water, steam, sewer, and other service lines must be shut off, capped, or otherwise controlled.

3. If hazardous chemicals, gases, explosives, flammable materials, or similarly dangerous substances have been used in pipes, tanks, or other equipment on the property, testing and purging must be performed to eliminate the hazard prior to demolition.

B. Stairs, Passageways, and Ladders

1. Only use stairways, passageways, and ladders designated as means of access to the structure of a building.

2. Stairs, passageways, ladders and incidental equipment must be periodically inspected and maintained in a clean and safe condition.

3. Stairwells must be properly illuminated and completely and substantially covered over at a point not more than two floors below the floor on which work is being performed.

C. Mechanical Demolition

1. Never enter any area which may be adversely affected by demolition operations when hoe ramming, balling or clamming is being performed unless you are needed to perform these operations.

2. During demolition, a competent person must make continued inspections as the work progresses to detect hazards resulting from weakened or deteriorated floors, or walls, or loosened material.
28.0 BLASTING AND USE OF EXPLOSIVES

Explosives, if required, will be used, handled, and stored in accordance with Federal, State, and local regulations.

A. Blasting Qualifications

Ulliman Schutte Construction, LLC requires blasters to be licensed and have knowledge and experience in the field of transporting, storage, handling, and the use of explosives and have a working knowledge of state and local laws and regulations which pertain to explosives. They will be required to be present during blasting operations.

B. General Requirements

1. Only authorized and qualified individuals are permitted to handle and use explosives.

2. Smoking, firearms, matches, open flame lamps, and other fires, flame or heat-producing devices and sparks are prohibited in or near explosive magazines.

3. Explosives not being used must be kept in a locked magazine.

4. Appropriate authorities must be notified of any loss, theft, or unauthorized entry into a magazine.

5. Employees authorized to prepare explosive charges must use every reasonable precaution to ensure employee safety (audible/visual warning signals, flags, barricades, etc.).

C. Storage of Explosives

1. All explosives, if stored on site, will be stored in accordance with local, County, State and Federal regulations.

2. All explosives received and used will be recorded and a record will be maintained on file for inspection.

3. Explosives will be stored in magazines that are clean, well vented, grounded, properly located, and well constructed, with locks, proper signs and pendants.

4. Blasting caps, electric blasting caps and primers shall not be stored with explosives.

5. Tools and equipment must not be stored in any powder magazine.

6. The area around the magazine will be kept clear of any materials for 25 feet, and constructed to insure proper drainage.

7. Magazines will be located and spaced in accordance with the Table of Distances.
D. **Surface Transportation of Explosives**

1. Motor vehicles or conveyances transporting explosives must be driven by a licensed driver and properly placarded. The magazines will be constructed with wood or non-sparking material bed and floor.

2. Vehicles will be equipped with two fire extinguishers

3. Never transport explosives, blasting agents, and blasting supplies with other materials or cargoes. Blasting caps must never be transported in the same vehicle with other explosives.


E. **Drilling**

1. On a daily basis, a competent person will inspect all drilling and associated equipment prior to use.

2. Air track drills will have adequate water and chemical supply to control any dust hazards. When jackhammers do not have a water supply, the operator will wear an approved respirator adequate for the exposure level.

3. It will be forbidden to drill in old holes and bootlegs. The area will be checked before any drilling is started. Loading of drill holes will not be done within 50 feet of any active drilling operation.

4. Dry drilling will not be permitted underground.

5. Appropriate personal protective equipment will be required when drilling.

6. The face will be scaled to help eliminate rock falls from the face when collaring holes.

7. All air hoses will be secured with safety chains or cables. All air hoses will be bled off before disconnecting.

8. The face will be inspected for misfires and bootlegs before drilling starts.

9. All jackleg drills will have their legs securely placed before collaring the hole.

10. Adequate ventilation and lighting will be provided during drilling operations.

F. **Loading of Explosives or Blasting Agents**

1. All loading and firing will be directed and supervised by a licensed blaster thoroughly experienced in this field.

2. Establish procedures for safe and efficient loading of explosives and blasting agents prior to actual loading.
3. Never deepen drill holes that have contained explosives or blasting agents.

4. Never leave explosives or blasting agents unattended at the blast site.

5. Do not operate equipment within 50 feet of loaded holes.

6. Never use or load explosives underground in the presence of flammable gases or combustible dusts.

7. The blasters must maintain an up-to-date record of explosives, blasting agents, and blasting supplies used and stored on the jobsite.

8. Blasting signals will be given prior to surface blasting:
   a. A one-minute series of long blasts will be given 5 minutes before a shot.
   b. A one-minute series of short blasts will be given immediately before a shot.
   c. A prolonged blast will be given when the area has been inspected and the area is clear.

9. The area will be guarded to keep people out.

10. Extreme caution will be taken to help eliminate flying rock from the blast, including the use of blasting mats.

11. After the required downtime, all misfires will be reshot or washed out before any other operation starts.

12. When leaving the blast area, the blaster will be the last man out of the area. The crew will move back a safe distance from the area to be blasted.

G. Blasting

1. The Blasting Supervisor is responsible for accounting for all personnel. Before any blasts can be detonated, the area will be cleared and inspected to see that there are no people or vehicles in the area.

2. After all blasts, the area will be inspected for misfires by the blasters. This will be done before the all clear signal is given.

3. The detonation of explosives will be done from a safe location far enough from the blast to ensure the safety of the blaster and his crew.
29.0 POWER TRANSMISSION AND DISTRIBUTION

A. General Requirements

1. An inspection or a test must be performed to determine existing conditions prior to starting work.

2. Electric equipment and lines should be considered energized until determined to be de-energized.

3. Determine operating voltage of equipment and lines prior to working on or near energized parts.

B. Tools and Protective Equipment

1. Rubber protective equipment must be in accordance with American National Standards Institute (ANSI) J6 series.

2. Always visually inspect rubber protective equipment prior to use.

3. Wear Harnesses with straps or lanyards when working at elevated locations on poles, towers, or other structures.

C. Mechanical Equipment

1. Visually inspect equipment each day to ensure that it is in good condition.

2. Perform test at the beginning of each shift to ensure that the brakes and operating systems are in proper working condition.

D. Material Handling

1. Prior to unloading steel poles, cross arms and similar material, examine the load to determine if the load is hazardous to employees.

2. Never store materials or equipment under energized bus, energized lines, or near energized equipment (Area should be roped off or marked as not storage area).

3. Use tag lines or other suitable devices to control loads being handled by hoisting equipment.
30.0 STAIRWAYS AND LADDERS

Stairways and ladders are a major source of injuries and fatalities among construction workers. Due to the potential hazards involved in using stairways and ladders, the following safety procedures will be implemented and enforced at all construction projects:

A. General Requirements

1. Ladders that project into passageways or doorways where they could be struck by personnel, moving equipment, or materials being handled must be protected by barricades or warning signs.

2. Face the ladder and use both hands when going up and down ladders. Materials and tools should be lowered or raised by a rope or other mechanical means.

3. Hold on to the railing on stairways.

4. The areas around the top and base of ladders must be free of tripping hazards such as loose materials, trash, and electrical cords. The same holds true for the bottom of stairways and on stairway platforms.

B. Ladders

1. Ladders must be capable of supporting four times the maximum intended load.

2. Ladder rungs, cleats, and steps must be parallel, level and uniformly spaced (not less than 10 inches nor more than 14 inches).

3. Do not tie or fasten ladders together to provide longer sections unless they are specifically designed for such use.

4. All stepladders must be equipped with a metal spreader or locking device.

5. Do not paint wooden ladders, except to stencil for identification.

6. Maintain ladders free from oil, grease, and other slippery hazards.

7. Ladders must extend at least 3 feet above the upper landing surface and be secured.

8. The horizontal distance for the base of the ladder should extend one foot for every four feet in vertical distance.

9. Wood job-made ladders must be used at an angle so that the horizontal distance is one-eighth the working length of the ladder.

10. Do not use ladders on slippery surfaces unless they have been properly secured or provided with slip-resistant feet.
11. Do not move, shift, or extend ladder while occupied.


13. Ladders must be inspected by a competent person on a periodic basis and after any occurrence that could affect their performance.

14. Ladders with structural defects must be tagged with "DO NOT USE" or similar language and withdrawn from service until repaired.

15. Never use a metal ladder when working on electrical equipment or near electrical equipment where contact is possible.

16. Any employee who uses or will use a ladder or stairway will receive training by a competent person in the following areas:
   - Types of fall hazards
   - Correct procedures for erecting, securing, maintaining, and disassembling ladders, stairways, and fall protection systems
   - Proper construction (man-made), use, placement, and handling of ladders
   - Maximum intended load-carrying capacities
   - Requirements contained within 29 CFR Subpart X

C. Stairways

1. Stairways that will not be permanent parts of the structure must have landings of not less than 30 inches in the direction of travel.

2. A platform must be provided where doors or gates open directly on a stairway.

3. Metal pan landings and metal pan treads must be secured in place before filling with concrete or other material.

4. Maintain all parts of stairways free from hazardous projections, such as protruding nails.

5. Eliminate slippery conditions on stairways before stairways are used to reach other levels.

6. Storage of any materials or tools on stairs or platforms is strictly prohibited at all times.
31.0 CONFINED SPACE ENTRY

Scope:

This procedure applies to the entrance of employees into both permit required and non-permit required confined spaces. The requirements contained herein apply to operations at Ulliman Schutte Construction projects that fall under the OSHA 1910 General Industry Standards.

A. Purpose

The purpose of the procedure is to ensure compliance with OSHA 1910.146, permit required confined spaces. This procedure provides guidance on recognition and identification of permit-required confined spaces, personnel protective requirements for entrance, appropriate personal protective equipment, monitoring equipment, entry permits and rescue requirements.

B. Responsibility

The Project Manager shall be responsible for the full compliance of the requirements of this procedure. This shall include:

1. Identification and posting of all permit required confined spaces
2. Issuance of completed confined space entry permits
3. Determination and evaluation of potential confined space hazards
4. Maintenance and issuance of required confined space entrance equipment as necessary, such as monitors, winches, harnesses, etc.
5. Training of all employees affected by this procedure

Project Superintendents are responsible for knowing the requirements and restrictions of this procedure. They shall ensure the maintenance of “Permit-Required Confined Space” placards on their respective work sites and ensure that no employee is allowed to enter such a space without authority per this procedure. Once work has begun in a permit-required confined space on their site, they shall become the “Entry Supervisor” as defined in this procedure.

C. Identify the Space

All too often, employees think of confined spaces only in terms of a tank or other container. It is much more. There are two conditions that define a confined space. A confined space is any working area in which:

1. Ventilation is insufficient to remove dangerous air contamination or eliminate an oxygen deficiency.
2. Access and egress are difficult due to the location or size of the opening.
Confined spaces include such areas as storage vessels, furnaces, railroad tank cars, manholes, concrete vaults, and pits. Other work requires employees to enter underground vaults, boilers, petroleum storage tanks and other areas that meet the definition of a confined space.

D. Determine The Danger

Once you can recognize confined spaces, you must be able to determine the degree of danger. In other words, the atmosphere inside the space must be carefully tested.

First open the lid or door to the space just enough to allow entry of a test probe. Do not jerk the door or lid open. There may be something toxic, flammable or explosive inside and you may end up inhaling or igniting these gases.

Each Ulliman Schutte project will maintain at least one air quality testing instrument. These monitors are capable of testing the oxygen level, flammable and combustible (LEL) concentrations and/or Hydrogen Sulfide or Carbon Monoxide levels, depending upon the instrument used.

The atmosphere in a confined space shall be tested prior to entering the space. To test the area, lower the monitor into the confined space but never allow your head to enter or go below the space entrance until testing is complete. Each project site must maintain twenty (20) foot test extensions, which allow a space to be tested remotely. Instruction on the test monitors and extensions will be provided when the monitor is delivered to your site.

Once the testing equipment starts registering, take note. Your primary concern is the level of oxygen. There must be at least 19.5% oxygen in the atmosphere to provide safe breathing. But, the possibility of a flammable or toxic atmosphere must be considered.

1. When the Area is Safe:

   Once conditions in the confined space are tested and determined to be safe, the Superintendent or competent person in charge must fill out the confined space entry permit included in this procedure (see Appendix M.1). This permit should be filled out daily or as necessary, depending on the space and the permit requirements.

   The reading obtained from the test equipment must be legible. For the safety of the crew, the instrument itself must be calibrated at frequent intervals to ensure accurate readings. A wrong reading can cause death and serious injury. Only qualified persons may calibrate the instruments using the required calibration gases. The log will be checked by Project Superintendents to insure that it is completely and accurately filled out for every entry into a confined space.

   Unfortunately, there is no universal tester that will instantly identify every toxic substance that might be found in a confined space. You should be aware of what substances may be found under certain conditions.

2. Taking Care of the Test Equipment
It is very important for crew members to understand how vital test instruments are to their safety. These instruments are not as durable as tools. They must be handled with care.

TOSSING TESTING INSTRUMENTS INTO THE BACK OF A TRUCK CAN DAMAGE THEM AND CAUSE ERRONEOUS READINGS. HANDLE WITH CARE!

E. Ventilate The Space

If the initial test is not within acceptable limits, the confined space shall be vented to improve the atmosphere. Some spaces have a built-in ventilator and all that is required is to flip a switch. But, in many cases, your crew must insert a ventilator tube and connect a blower to force air into the confined space. This forced-air ventilation cleans out residual toxic gasses and puts oxygen into the space. But, be careful!!! There are several factors you must take into consideration to ensure that the space is safely ventilated:

1. Size: The size of the confined space will dictate how long it should be ventilated before entry. If possible, ventilation should continue while employees are working in the space.

2. Hose Placement: Don’t just drop the blower into the space. The hose must be positioned against a wall so the air circulation bounces from wall to wall. If the hose is just hung in the middle, air pockets containing toxic gases may linger in the corners even though the blower has been operated for the specified time or even longer.

3. Blower Location: Since the blower is taking in air from the surrounding atmosphere, it is important to position the blower so that it does not suck in the very air that it is blowing out of the space. Also, make sure that the blower is placed away from the processes that generate harmful gases such as chemical fumes or vehicle exhaust. You want to pull breathable air into the space.

You should also consider ignition possibilities when finding a spot for the blower. The blower itself can be a source of ignition so you will want to place it away from flammable objects and gases.

F. Retest

After ventilating an area, test the atmosphere again. The atmosphere will either be ready to sustain human life or it won’t. If the readings still indicate a problem after ventilating the space, the employees must notify their entry supervisor.

With additional atmosphere testing, the entry supervisor and employees should attempt to determine what dangerous contaminants are in the confined space. The Safety Director shall be contacted at this time to help determine what additional actions are required to permit safe entry. At this point, it may be necessary to place employees into protective
equipment such as respiratory protection, protective clothing, escape harness or even self-contained breathing apparatuses.

No persons are permitted to wear respirators until they are trained and in compliance with USC’s Respiratory Protection Program!

G. Follow Entry And Emergency Procedures

Once the preceding steps are completed, workers are almost ready for entry. They just need to follow a few more procedures. Some very simple procedures take on a great importance when working in confined spaces. With these procedures, the workers are not only ready for a safe entry, they are also prepared for an accident, should one occur. Specifically, these procedures include:

1. Choosing a Buddy: When someone enters the space, someone else always stands by outside to help in an emergency. This person is trained to:
   - recognize the effects of hazardous substances on entrant
   - communicate with the entrant
   - perform CPR & first aid

2. Wearing Respiratory Protection: If the work crew knows that the space may have been contaminated with something dangerous or that the oxygen level is low, they must wear respiratory protective equipment. This also applies to the buddy remaining outside the entrance. We do not want to leave anything to chance!

   The only time respirators are not required for the occupant and “buddy” is when the space is known to contain nothing but healthy, oxygen-sufficient air.

3. Establishing Communication: The buddy and entrant must be able to communicate. However, limited visibility sometimes makes hand communication impossible. Other spaces are so large that voice communication is not practical. To keep communication open, even with these obstacles, some entrants and buddies may be equipped with two-way radios.

   For further safety, the buddy must also have communication with another outside worker. As an extra precaution against the unexpected, one other individual is required to remain within shouting or signaling distance to assist in a rescue effort.

4. Strapping on the Harness: The person entering wears a harness so that he or she can be removed quickly if overcome by fumes. DON’T USE A BELT! If a person wearing a belt becomes unconscious, he or she will bend at the waist while being pulled out and perhaps become stuck in a narrow passage.

5. Checking the Space: Always note the physical obstructions before entering a space. Sometimes something as routine as making sure a ladder is correctly placed can make the difference between a safe entry and a dangerous fall.

6. Bringing the Test Equipment into the Space: Even when good readings are taken, the crew should always take their test equipment into the confined space with
them. It has an audible alarm that will alert them if toxic gasses begin to accumulate.

Even if the alarm doesn’t sound, it is good safety sense to teach our workers to recheck their equipment frequently. You can’t depend on the nose to tell when something is wrong.

Management and all employees must be aware of the possible hazards associated with confined space work. With the use and implementation of this procedure’s requirements, we can all be assured of a safe working environment.

H. Permit-Required Confined Spaces

The project Superintendent shall inspect each work site covered by this procedure.

During the inspection, every potential confined space into which employees might enter shall be evaluated. This evaluation shall include:

1. Possible air contaminates or oxygen-deficient or enriched atmospheres
2. Engulfment hazards
3. Confined space entrance and exit and accessibility of each portal

When the evaluation is completed, all confined spaces shall be placarded either by “permit-required confined space” or “non-permit required confined space.” All employees at each site shall be trained on the meaning of the placards and actions to be taken prior to entering or working in such spaces.

I. Permit-Required Confined Space Entry

Entry into any permit-required confined space shall be conducted based upon the requirements of the “confined space entry permit”. The USC permit found on each project shall be completed and all applicable items noted shall be in place before work in the space.

J. Subcontractor

No subcontractor shall be permitted to enter or work in a permit-required confined space on any Ulliman Schutte site until the Project Manager has been advised of their presence and intended work. At that time, training shall be conducted to include:

1. Information about permit spaces including hazards identified and experience in the particular space
2. Apprise the subcontractor of precautions and procedures for work in or around permit spaces
3. Coordinate entry operations
4. Permit-required confined space entry requirements as outlined in this procedure or their own permit required space entry procedure

Once the subcontractor has conducted their entry operations and required work in the space, the subcontractor shall be debriefed regarding the permit space program and any hazards confronted or created in permit spaces during entry operations.

K. Training

Prior to any work in permit required spaces, the following training shall be conducted to include:

1. Entry Supervisor:
   * All items to be listed on entry permit.
   * Authorizing entry
   * Overseeing entry
   * Terminating entry

2. Entrants:
   * Use of any and all needed equipment.
   * Communication with attendants.
   * Alert attendant when a warning symptom or other hazardous condition exists.
   * Symptoms of exposure or warning of an impending hazard.
   * Exit as quickly as possible when warned by attendant.

3. Attendant:
   * Check permits of authorized entrants.
   * Prevent entry by those without a permit.
   * Maintain a continuous count of those in confined space.
   * Monitor activity in the confined space.
   * Remain outside the confined space until relieved by another qualified attendant.
   * Attendants shall not perform any other duty that will interfere with the duties above.

L. Rescue Services

All work conducted in permit-required confined spaces in which employees will be exposed to immediately dangerous or life or health atmospheres (IDLH) will be done under the direction of the Project Superintendent. This atmosphere condition will be determined based on the space evaluation, air monitoring and space condition(s). In this situation, rescue services will be provided based upon space location, contaminant, and size.

If an outside service is to be used, this service shall be notified by the Entry Supervisors prior to work beginning in the space. The outside rescue service should be given the opportunity to examine the confined space in order to establish a rescue plan prior to work beginning. This service should be informed of the work hours when employees will be in the space and the fastest way they can be contacted if needed.
If the space permits, all work done in IDLH atmospheres and/or where air-supplied respirators are worn, all entrants shall wear full body harnesses with life lines attached. Any space deeper than five (5) feet requires the use of a mechanical lifeline for rescue purposes.
32.0 MULTI-PRIME JOBSITES

A multi-prime jobsite is one in which the owner employees a number of separate prime contractors to perform work on the same project. On a multi-prime jobsite, each company must have a corporate safety program, and, if required, a site-specific plan. Whenever USC is responsible for supervising and controlling all construction work performed on a multi-prime construction project, the following safety practices will be implemented and enforced.

A. Project Safety and Health Requirements

1. A site-specific Safety and Health Plan which includes a description of the responsibilities and duty of all levels of supervision will be developed.

2. All contractors are responsible for developing, implementing, monitoring and enforcing their safety and health program.

3. The Site Superintendent will have final authority and responsibility for the Project Safety and Health Plan and must:
   a. Evaluate contractor safety and health programs to determine their appropriateness to the specific project and work to be performed;
   b. Monitor and document implementation of safety and health programs;
   c. Ensure correction or abatement of all hazardous conditions and compliance with OSHA 1910/1926 and any applicable state safety regulations;
   d. Monitor regularly for potentially hazardous conditions;
   e. Immediately notify the responsible contractor of any conditions or acts that may cause illness or injury to employees;
   f. Maintain a current list of all Senior Contractor Supervisors; and
   g. Maintain the daily reports by documenting the daily occurrences related to the project safety and health program including all injury, illness, and accidents for the entire project with sub-records of same on each contractor.

4. Written reports describing noncompliance with safety and health standards, project safety and health programs, and hazardous conditions must be submitted to the Site Superintendent.

5. Contractors who have established a pattern of noncompliance with the project safety and health program and/or laws and regulations must develop a Special Safety and Health Plan which details procedures for correcting and preventing future occurrences of noncompliance. This plan must be approved and monitored by the Site Superintendent.
6. If a contractor fails to correct hazardous conditions, or continues to place employees in hazardous conditions, the Site Superintendent must notify the Project Manager and the Safety Director for corrective action (where imminent danger situations exists, the Site Superintendent will take appropriate action such as suspending operations in the affected area.)

7. Critical structures or complex processes that require planning, design, inspection and/or supervision by a licensed professional will be determined by the Project Manager.

8. Supervisors and employees not complying with the company safety and health program will be subject to disciplinary action as outlined in Section 9.0.

B. Contractor Requirements

1. Each contractor must designate an individual who has final authority and responsibility for the Contractor’s Safety and Health Program.

2. The contractor’s designated individual must:
   - Ensure compliance with this standard and correction or abatement of all hazardous conditions;
   - Determine whether any work being performed by the company requires planning, design, inspection and/or supervision by a licensed professional;
   - Conduct or cause to have conducted daily inspections, and document and correct all observed or potentially hazardous conditions and noncompliance; and
   - Report and document all injuries, illnesses and accidents; investigate and implement measures to prevent recurrence.

3. The contractor’s designated individual must stop hazardous work and notify the Site Superintendent of all hazardous conditions that are not within the control of the contractor.

4. Contractors are prohibited from working until the designated individual or designated representative is present on the project.

C. Pre-Work Planning

1. Each contractor must conduct a physical survey of the jobsite prior to the start of work and make a survey of the work to be performed by reviewing the drawings and conducting discussions with one or more of the following:
   - The Owner
   - Engineer
2. A hazard analysis will be conducted and implemented at the initiation of the construction project and for critical stages of work to describe potential hazards and actions required to provide a safe and healthful workplace.

3. All affected contractors will meet to coordinate and assign responsibility for all items identified in the hazard analysis.

D. Emergency Plan

The Ulliman Schutte Construction Site Superintendent will prepare a project-specific emergency plan and communication that describes procedures to be followed in the event of serious injuries, fatalities, structural failures and other emergencies.

E. Training

1. Contractors are responsible for the safety and health training of their employees.

2. Employees assigned to supervisory positions will receive training on how to carry out the safety and health responsibilities of the positions to which they are assigned.

3. Each non-supervisory employee will receive training in safety and health requirements that includes, but is not limited to, the following:

   - New Hire Orientation
   - Job Specific Training
   - Site-Specific Training
   - Safety Meeting
33.0  INSPECTIONS AND INSPECTION REPORTS

Periodic job site inspections will be made to assure compliance with the requirements of this safety program. Reports of these inspections are to be maintained at the job site or available digitally via USOSAFE. Where available, all checklists should be completed on a USOSAFE PDA. All inspection checklists completed on paper must be copied and sent to the Corporate Safety Director.

The primary safety inspection is the Superintendent’s Weekly Job Inspection Checklist. This checklist must be completed on a USOSAFE PDA or on the paper form included in Appendix T.

All cranes and operated equipment must be inspected daily. This checklist must be completed on a USOSAFE PDA or on the paper forms included in Appendices H and H.1.

All excavations must be inspected daily and upon any change in conditions. This checklist must be completed on a USOSAFE PDA or on the paper form included in Appendix K.1.

All safety training including the weekly “Tool Box” safety talks must be documented and attendance recorded. These records will be maintained at the job site with a copy sent to the Corporate Safety Director.

A log will be kept at the job site of all First Aid administered.

The Incident Reporting Requirements including the First Report of Injury and the Incident Investigation Form are described in detail in Sections 3.1 and 3.2.

All First Aid Kits including the Blood Borne Pathogen Kit will be inspected weekly as a part of the Weekly Job Inspection Checklist. Report any use of the Blood Borne Pathogen Kit to the Safety Director.
34.0 LOCKOUT/TAGOUT

The Lockout/Tagout Standard requires an Energy Control Program that includes:

1. Documented Energy Control Procedures (see Appendix Q)
2. Employee Training Program
3. Periodic Inspections

The purpose of the control program is to ensure that there is no unexpected start-up of machinery or equipment. Also to be prevented is unexpected energization.

Written procedures must include:

1. A statement on how the procedures will be used.
2. The procedural steps needed to shut down, isolate, block, and secure machines or equipment.
3. The steps designating the safe placement, removal and transfer of lockout/tagout devices and who has the responsibility for them.
4. The specific requirements for testing machines or equipment to determine and verify the effectiveness of locks, tags and other energy control measures.
5. The employer or an authorized employee must notify affected employees before lockout or tagout devices are applied and after they are removed from the machine or equipment.

The procedures must include the following steps: (1) preparing for shutdown, (2) shutting down the machine or equipment, (3) isolating the machine or equipment from the energy source(s), (4) applying the lockout or tagout device(s) to the energy-isolating device(s), (5) safely releasing all potentially hazardous stored or residual energy, and (6) verifying the isolation of the machine or equipment prior to the start of servicing or maintenance work.

Employee training must be conducted. THE CERTIFICATION OF THIS TRAINING MUST INCLUDE THE EMPLOYEE’S NAME AND DATES OF TRAINING.

This training will cover:

1. Requirements for Energy-Isolation Devices
2. Requirements for Lockout/Tagout Devices
3. Periodic Inspections
4. The Application of Controls and Lockout/Tagout Devices
5. Removal of Locks and Tags
35.0 PERSONAL ELECTRONIC DEVICE POLICY

Personal Electronic Devices shall not be used by personnel on the jobsite during work hours unless such a device is required for the performance of the duties assigned as determined by the Project Manager, Project Superintendent, or an Officer of the Company. Personal Electronic Devices include cellular telephones, texting devices, music players, web browsing devices, and similar items.

Personal emergency calls shall be directed to the project field office such that an employee may be notified and provided the opportunity to respond in the case of a personal emergency.

Superintendents, Project Managers, Project Engineers, field supervisors, foremen and other field personnel who are specifically authorized to use a personal electronic device for Company purposes shall not engage in personal communications during work hours while on the jobsite.

Texting or entering of data while operating any company vehicle is prohibited at all times.

Violation or abuse of this policy shall result in disciplinary action in accordance with the USC safety policies, up to and including termination.
APPENDICES
INCIDENT INVESTIGATION REPORT

Case Number: ____________

Project Name: ____________________________  Project No. ____________

Report Completed by (Supt./Foreman): _______________  Date of Report: ____________

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<thead>
<tr>
<th>6. Home Address</th>
<th>7. Associate's Usual Occupation</th>
<th>8. Occupation at Time of Incident</th>
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<tr>
<th>9. Length of Employment</th>
<th>10. Time in Occupation at Time of Incident</th>
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<tbody>
<tr>
<td>&lt; 1 mo.</td>
<td>&lt; 1 mo.</td>
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<tr>
<td>6 mos. To 5 yrs.</td>
<td>6 mos. To 5 yrs.</td>
</tr>
<tr>
<td>1 – 5 mos.</td>
<td>1 – 5 mos.</td>
</tr>
<tr>
<td>More than 5 yrs.</td>
<td>More than 5 yrs.</td>
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</table>

11. Employment Category

- Regular, Full Time
- Temporary
- Non-employee
- Regular, Part Time
- Seasonal

12. Case Number and Names of Others Injured in Same Incident

13. Nature of Injury and Part of Body

14. Name and Address of Physician

15. Name and Address of Hospital

16. Time of Injury

A. _______ am or pm

B. Time Within Shift

C. Type of Shift

17. Severity of Injury

- Fatality
- Lost workdays _____ days away from work
- Lost workdays _____ days of restricted activity
- Medical Treatment (Physician)
- First Aid
- Other, Specify _______________________

18. Specific Location of Incident

- On Employer's Premises?  Yes  No

19. Phase of Employee's Workday at Time of Injury

- During Rest Period
- Entering or Leaving Jobsite
- During Meal Period
- Performing Work Duties
- Working Overtime
- Other _______________________

20. Describe How the Incident Occurred

Unsafe Acts:

Unsafe Conditions:

21. Incident Sequence. Describe in reverse order of occurrence events preceding the injury and incident. Starting with the injury and moving backward in time, reconstruct the sequence of events that led to the injury.

A. Injury Event

B. Incident Event

C. Preceding Event #1

D. Preceding Event #2, #3, etc.

22. Injured’s Supervisor at Time of Accident:

Appendix A
# Witness Report

## I. General Information

<table>
<thead>
<tr>
<th>Date/Time of Incident</th>
<th>Name of Injured</th>
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<tbody>
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<table>
<thead>
<tr>
<th>Jobsite</th>
<th>Location of Incident</th>
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</thead>
<tbody>
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</table>

<table>
<thead>
<tr>
<th>Type of Incident:</th>
<th>Injury</th>
<th>Property Damage</th>
<th>Illness</th>
<th>Chemical Spill</th>
<th>Near Miss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
<td></td>
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## II. Specific Information

<table>
<thead>
<tr>
<th>Trade:</th>
<th>Union Local:</th>
<th>Time in Trade:</th>
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<tbody>
<tr>
<td>Carpenter</td>
<td></td>
<td>1 year or less</td>
</tr>
<tr>
<td>Concrete Mason</td>
<td>____________</td>
<td>2 – 4 years</td>
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<tr>
<td>Operator</td>
<td></td>
<td>5 – 10 years</td>
</tr>
<tr>
<td>Laborer</td>
<td>City/State of Local</td>
<td>10 or more</td>
</tr>
<tr>
<td>Ironworker</td>
<td>Time on this jobsite</td>
<td></td>
</tr>
<tr>
<td>Foreman</td>
<td>____________</td>
<td></td>
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<tr>
<td>Superintendent</td>
<td>____________</td>
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</table>

## III. Task Performed at Time of Incident

- Demolition
- Materials Handling/Lifting (What Material? ________________)
- Operating Powered Hand Tool (What Tool? ___________________)
- Operating Small Equipment (What Equipment? ________________)
- Operating hand Tool (non-powered) (What Tool? ________________)
- Operating Equipment (What Equipment? ________________)
- Other

## IV. Activity at Time of Incident

- Carrying
- Climbing
- Cutting
- Walking
- Driving
- Jumping
- Lifting
- Prying/Pulling
- Reaching
- Running
- Kneeling
- Other ____________

## V. Equipment Involved

- Rubber Tire Backhoe
- Wheelbarrow
- Crane
- Bidwell
- Mixer Bull Dozer
- Manlift (scissors, boom)
- Pile Driver Lead
- Welder
- Trackhoe
- Roller/Sheepsfoot
- Pile Driver Hammer
- Partner Saw
- Forklift
- Tamper
- Skid Steer Loader
- Other ________________
### VI. MATERIAL INVOLVED

<table>
<thead>
<tr>
<th>Box/Container</th>
<th>Lumber</th>
<th>Stairway</th>
<th>Symon Panels</th>
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<tbody>
<tr>
<td>Ladder (step extension)</td>
<td>Block/Brink</td>
<td>Structural Steel</td>
<td>EFCO Forms</td>
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<tr>
<td>Drum/Barrel</td>
<td>Slings</td>
<td>Oxygen/Acetylene Bottles</td>
<td>Rebar</td>
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<tr>
<td>Scaffold Frames</td>
<td>Other</td>
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### VII. INCIDENT TYPE

- Caught In, Under or Between
- Fall from Elevation
- Fall on Same Level
- Contact with Chemicals
- Contact with Electrical Current
- Contact with Temperature Extremes

### VIII. INJURY/ILLNESS TYPE

- Cut/Scrape
- Burn
- Concussion
- Contusion (bruise)
- Amputation
- Dislocation
- Fracture
- Muscle Strain
- Respiratory Arrest/Difficulty
- Other

### IX. BODY PART

- Arm (right/Left)
- Head/Face/Neck
- Fingers (which finger/hand)
- Back
- Elbow (right/left)
- Hand (right/left)
- Knee (right/left)
- Leg (right/left)
- Feet (right/left)
- Ankle (right/left)
- Trunk (waist)
- Wrist (right/left)
- Other

### X. PRIMARY FACTORS

- Congestion/Close Clearances
- Equipment Design
- Equipment Failure
- Faulty/Damaged Equipment
- Floor/Work Surface (condition)
- Housekeeping
- Illumination
- Inadequate Guards/Barriers/Warnings
- Unsecured Material/Tools
- Other

### XI. SECONDARY FACTORS

- Inadequate Work Procedures
- Improper Equipment
- Lack of Knowledge/Skill/Experience
- Lack of Supervision/Leadership
- Maintenance of Tool/Equipment
- Time Constraints
- Other

### XII. WHAT ACTION CAN BE TAKEN TO PREVENT RECURRENCE OF INCIDENT?

### XIII. SIGNATURES

Witness: ____________________  Supervisor: ____________________
ULLIMAN SCHUTTE CONSTRUCTION, LLC

TOOLBOX SAFETY TALK RECORDING FORM

Date: 

Job No.: 

Project Name: 

Superintendent: 

Speaker: 

Total Number of Personnel Present: 

Total on Project: 

Topics Discussed:

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

Comments:

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

Superintendent Signature: 

Date: 

*** Dated Attendance Sign-in Sheet Must Be Attached***
## FIRST AID LOG

<table>
<thead>
<tr>
<th>DATE</th>
<th>TIME</th>
<th>NAME</th>
<th>AGE</th>
<th>CRAFT</th>
<th>SS NO.</th>
<th>IMMEDIATE SUPERVISOR</th>
<th>INJURY/ILLNESS</th>
<th>DESCRIPTION OF ACCIDENT</th>
<th>TREATMENT GIVEN BY</th>
<th>FAV</th>
<th>RTW</th>
<th>DV</th>
<th>LTA</th>
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</tr>
</tbody>
</table>

**LEGEND**

- **FAV** - First Aid Visit
- **RTW** - Return to Work
- **DV** - Doctor Visit
- **LTA** - Lost Time Accident
OSHA's Form 301
Injuries and Illnesses Incident Report

This Injury and Illness Incident Report is one of the first forms you must fill out when a recordable work-related injury or illness has occurred. Together with the Log of Work-Related Injuries and Illnesses and the accompanying Summary, these forms help the employer and OSHA develop a picture of the extent and severity of work-related incidents.

Within 7 calendar days after you receive information that a recordable work-related injury or illness has occurred, you must fill out this form or an equivalent. Some state workers’ compensation, insurance, or other reports may be acceptable substitutes. To be considered an equivalent form, any substitute must contain all the information asked for on this form.

According to Public Law 91-596 and 29 CFR 1904, OSHA's recordkeeping rule, you must keep this form on file for 5 years following the year to which it pertains.

If you need additional copies of this form, you may photocopy and use as many as you need.

Completed by
Title
Phone Date

Information about the employee
1) Full Name
2) Street
City State Zip
3) Date of birth
4) Date hired
5) [ ] Male [ ] Female

Information about the physician or other health care professional
6) Name of physician or other health care professional

Information about the case
10) Case number from the Log
(Transfer the case number from the Log after you record the case.)
11) Date of injury or illness
12) Time employee began work AM/PM
13) Time of event AM/PM [ ] Check if time cannot be determined
14) What was the employee doing just before the incident occurred? Describe the activity, as well as the tools, equipment or material the employee was using. Be specific. Examples: "climbing a ladder while carrying roofing materials"; "spraying chlorine from hand sprayer"; "daily computer key-entry."
15) What happened? Tell us how the injury occurred. Examples: "When ladder slipped on wet floor, worker fell 20 feet"; "Worker was sprayed with chlorine when gasket broke during replacement"; "Worker developed soreness in wrist over time."
16) What was the injury or illness? Tell us the part of the body that was affected and how it was affected; be more specific than "hurt", "pain", or "sore." Examples: "strained back"; "chemical burn, hand"; "carpal tunnel syndrome."
17) What object or substance directly harmed the employee? Examples: "concrete floor"; "chlorine"; "radial arm saw." If this question does not apply to the incident, leave it blank.
18) If the employee died, when did death occur? Date of death

Attention: This form contains information relating to employee health and must be used in a manner that protects the confidentiality of employees to the extent possible while the information is being used for occupational safety and health purposes.

Public reporting burden for this collection of information is estimated to average 22 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Persons are not required to respond to the collection of information unless it displays a current valid OMB control number. If you have any comments about this estimate or any other aspects of this data collection, including suggestions for reducing this burden, contact: U.S. Department of Labor, OSHA Office of Statistics, Room N-3644, 200 Constitution Ave, NW, Washington, DC 20210. Do not send the completed forms to this office.
## OSHA's Form 300 (Rev. 01/2004)

### Log of Work-Related Injuries and Illnesses

You must record information about every work-related injury or illness that involves loss of consciousness, restricted work activity or job transfer, days away from work, or medical treatment beyond first aid. You must also record significant work-related injuries and illnesses that are diagnosed by a physician or licensed health care professional. You must also record work-related injuries and illnesses that meet any of the specific recording criteria listed in 29 CFR 1904.8 through 1904.12. Feel free to use two lines for a single case if you need to. You must complete an injury and illness incident report (OSHA Form 301) or equivalent form for each injury or illness recorded on this form. If you're not sure whether a case is recordable, call your local OSHA office for help.

### Identify the person

<table>
<thead>
<tr>
<th>Case No.</th>
<th>Employee's Name</th>
<th>Job Title (e.g., Welder)</th>
<th>Date of Injury or Onset of Illness (mo./day)</th>
<th>Where the event occurred (e.g., Loading dock north end)</th>
<th>Injury or illness, parts of body affected, and object/substance that directly injured or made person ill (e.g., Second degree burns on right forearm from acetylene torch)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A)</td>
<td>(B)</td>
<td>(C)</td>
<td>(D)</td>
<td>(E)</td>
<td>(F)</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
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<tr>
<td>4</td>
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<tr>
<td>5</td>
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<td></td>
<td></td>
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<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Describe the case

### Classify the case

CHECK ONLY ONE box for each case based on the most serious outcome for that case:

- Injury
- Skin Disorder
- Respiratory Condition
- Poisoning
- Hearing Loss
- All other illnesses

Enter the number of days the injured or ill worker was:

- Away from work
- Remained at work
- Job transfer or restriction (days)
- Other recordable cases
- On job transfer or restriction (days)

Check the "injury" column or choose one type of illness:

### Page totals

Be sure to transfer these totals to the Summary page (Form 300A) before you post it.

Public reporting burden for this collection of information is estimated to average 14 minutes per response, including time to review the instruction, search and gather the data needed, and complete and review the collection of information. Persons are not required to respond to the collection of information unless it displays a currently valid OMB control number. If you have any comments about these estimates or any aspects of this data collection, contact US Department of Labor, OSHA Office of Statistics, Room N-3644, 200 Constitution Ave, NW, Washington, DC 20210. Do not send the completed forms to this office.
OSHA's Form 300A (Rev. 01/2004)
Summary of Work-Related Injuries and Illnesses

All establishments covered by Part 1904 must complete this Summary page, even if no injuries or illnesses occurred during the year. Remember to review the Log to verify that the entries are complete.

Using the Log, count the individual entries you made for each category. Then write the totals below, making sure you've added the entries from every page of the log. If you had no cases write "0."

Employees former employees, and their representatives have the right to review the OSHA Form 300 in its entirety. They also have limited access to the OSHA Form 301 or its equivalent. See 29 CFR 1904.35, in OSHA's Recordkeeping rule, for further details on the access provisions for these forms.

| Number of Cases |
|-----------------|-----------------|-----------------|-----------------|
| Total number of deaths | Total number of cases with days away from work | Total number of cases with job transfer or restriction | Total number of other recordable cases |
| (G) | (H) | (I) | (J) |

| Number of Days |
|-----------------|-----------------|
| Total number of days away from work | Total number of days of job transfer or restriction |
| (K) | (L) |

Injury and Illness Types

<table>
<thead>
<tr>
<th>Total number of...</th>
</tr>
</thead>
<tbody>
<tr>
<td>(M)</td>
</tr>
<tr>
<td>(1) Injury</td>
</tr>
<tr>
<td>(2) Skin Disorder</td>
</tr>
<tr>
<td>(3) Respiratory Condition</td>
</tr>
</tbody>
</table>

Post this Summary page from February 1 to April 30 of the year following the year covered by the form.

Public reporting burden for this collection of information is estimated to average 58 minutes per response, including time to review the instruction, search and gather the data needed, and complete and review the collection of information. Persons are not required to respond to the collection of information unless it displays a currently valid OMB control number. If you have any comments about these estimates or any aspects of this data collection, contact US Department of Labor, OSHA Office of Statistics, Room N-3644, 200 Constitution Ave, NW, Washington, DC 20210. Do not send the completed forms to this office.

Employment information

<table>
<thead>
<tr>
<th>Your establishment name</th>
</tr>
</thead>
<tbody>
<tr>
<td>-------------------------</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Street</th>
</tr>
</thead>
<tbody>
<tr>
<td>City</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Industry description (e.g., Manufacture of motor truck trailers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Industrial Classification (SIC), if known (e.g., SIC 3715)</td>
</tr>
</tbody>
</table>

OR North American Industrial Classification (NAICS), if known (e.g., 336212)

<table>
<thead>
<tr>
<th>Total number of deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Cases</td>
</tr>
<tr>
<td>------------------</td>
</tr>
<tr>
<td>Total number of days away from work</td>
</tr>
<tr>
<td>Total number of days of job transfer or restriction</td>
</tr>
</tbody>
</table>

Injury and Illness Types

<table>
<thead>
<tr>
<th>Total number of...</th>
</tr>
</thead>
<tbody>
<tr>
<td>(M)</td>
</tr>
<tr>
<td>(1) Injury</td>
</tr>
<tr>
<td>(2) Skin Disorder</td>
</tr>
<tr>
<td>(3) Respiratory Condition</td>
</tr>
</tbody>
</table>

Sign here

Knowingly falsifying this document may result in a fine.

I certify that I have examined this document and that to the best of my knowledge the entries are true, accurate, and complete.

<table>
<thead>
<tr>
<th>Company executive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
</tr>
<tr>
<td>Phone</td>
</tr>
<tr>
<td>Date</td>
</tr>
</tbody>
</table>

Title
Figure 1. Recommended Eye and Face Protectors
Source: 29 CFR 1926.102 (a)(5) Table E-1

Eye and face protectors are identified below by number and type. Refer to Table 1 for recommended usage applications.

1. GOGGLES, Flexible Fitting, Regular Ventilation
2. GOGGLES, Flexible Fitting, Hooded Ventilation
3. GOGGLES, Cushioned Fitting, Rigid Body
4. SPECTACLES, Metal Frame, With Sideshields*
5. SPECTACLES, Plastic Frame, With Sideshields*
6. SPECTACLES, Metal-Plastic Frame, With Flat-Fold Side shields*
7. WELDING GOGGLES, Eyecup type, Tinted Lenses**
7A. CHIPPING GOGGLES, Eyecup Type, Clear Safety Lenses (not illustrated)
8. WELDING GOGGLES, Eyecup type, Tinted Plate Lens**
8A. CHIPPING GOGGLES, Coverspec Type, Clear Safety Lenses (not illustrated)
9. WELDING GOGGLES, Coverspec Type, Tinted Plate Lens**
10. FACE SHIELD (Available With Plastic or Mesh Window, Tinted/Transparent)
11. WELDING HELMETS**

*These are also available without side shields for limited use requiring only frontal protection.
** See Table 2, Filter Lens Shade Numbers for Protection Against Radiant Energy.

Table 1. Eye and Face Protector Selection Guide
Source: 29 CFR 1926.102(a)(5)

<table>
<thead>
<tr>
<th>Operation</th>
<th>Hazards</th>
<th>Recommended protectors: (see Figure 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetylene-burning, Acetylene-cutting, Acetylenewelding</td>
<td>Sparks, harmful rays, molten metal, flying particles</td>
<td>7,8,9</td>
</tr>
<tr>
<td>Chemical handling</td>
<td>Splash, acid burns, fumes</td>
<td>2,10 (for severe exposure add 10 over 2)</td>
</tr>
<tr>
<td>Chipping</td>
<td>Flying particles</td>
<td>1,3,4,5,6,7A,8A</td>
</tr>
<tr>
<td>Electric (arc) welding</td>
<td>Sparks, intense rays, molten metal</td>
<td>9,11 (11 in combination with 4,5,6 in tinted lenses advisable)</td>
</tr>
</tbody>
</table>
How dark do lenses on welding helmets and goggles need to be?

The intensity of light or radiant energy produced by welding, cutting, or brazing operations varies according to a number of factors including the task producing the light, the electrode size, and the arc current. Table 2, Filter Lens Shade Numbers for Protection Against Radiant Energy, shows the minimum protective shade for a variety of welding, cutting, and brazing operations. To protect employees who are exposed to intense radiant energy, begin by selecting a shade too dark to see the welding zone. Then try lighter shades until you find one that allows a sufficient view of the welding zone without going below the minimum protective shade.

Table 2. Filter Lens Shade Numbers For Protection Against Radiant Energy
Source: 29 CFR 1926.102(b)(1)

<table>
<thead>
<tr>
<th>Welding operation</th>
<th>Shade Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shielded metal-arc welding 1/18-,3/32-,1/8-,5/32-inch-diameter electrodes</td>
<td>10</td>
</tr>
<tr>
<td>Gas-shielded arc welding (nonferrous) 1/16-,3/32-,1/8-,5/32-inch diameter electrodes</td>
<td>11</td>
</tr>
<tr>
<td>Gas-shielded arc welding (ferrous) 1/16-,3/32-,1/8-,5/32-inch diameter electrodes</td>
<td>12</td>
</tr>
<tr>
<td>Shielded metal-arc welding 3/16-,7/32-,1/4-inch diameter electrodes</td>
<td>12</td>
</tr>
<tr>
<td>5/16-,3/8-inch diameter electrodes</td>
<td>12</td>
</tr>
<tr>
<td>Atomic hydrogen welding</td>
<td>10-14</td>
</tr>
<tr>
<td>Carbon-arc welding</td>
<td>14</td>
</tr>
<tr>
<td>Soldering</td>
<td>2</td>
</tr>
<tr>
<td>Torch brazing</td>
<td>3 or 4</td>
</tr>
<tr>
<td>Light cutting, up to 1 inch</td>
<td>3 or 4</td>
</tr>
<tr>
<td>Medium cutting, 1 inch to 6 inches</td>
<td>4 or 5</td>
</tr>
<tr>
<td>Heavy cutting, over 6 inches</td>
<td>5 or 6</td>
</tr>
<tr>
<td>Gas welding (light), up to 1/8 inch</td>
<td>4 or 5</td>
</tr>
<tr>
<td>Gas welding (medium), 1/8 inch to ½ inch</td>
<td>5 or 6</td>
</tr>
<tr>
<td>Gas welding (heavy), over ½ inch</td>
<td>6 or 8</td>
</tr>
</tbody>
</table>
## DAILY CRANE CHECKLIST

**Crane No.**

**Operator:**

**Eqt. Hours:**

**Project No.:**

### Radiator Coolant

- **OK:** [ ]
- **Comment:**

**Date:**

**Time:**

### Hydraulic Fluid

- **OK:** [ ]
- **Comment:**

### Torque Conv. Fluid

- **OK:** [ ]
- **Comment:**

### Engine Oil

- **OK:** [ ]
- **Comment:**

### Air Filters

- **OK:** [ ]
- **Comment:**

### Drive Belts

- **OK:** [ ]
- **Comment:**

### Control Point Grease

- **OK:** [ ]
- **Comment:**

### Overall Cleanliness

- **OK:** [ ]
- **Comment:**

### Exhaust System

- **OK:** [ ]
- **Comment:**

### Air Compressor

- **OK:** [ ]
- **Comment:**

### Steering Mechanism

- **OK:** [ ]
- **Comment:**

### Brakes

- **OK:** [ ]
- **Comment:**

### Outrigger Controls/Locks

- **OK:** [ ]
- **Comment:**

### Lights/Reflectors

- **OK:** [ ]
- **Comment:**

### Horn

- **OK:** [ ]
- **Comment:**

### Windshield, Wipers

- **OK:** [ ]
- **Comment:**

### Tires

- **OK:** [ ]
- **Comment:**

### Undercarriage

- **OK:** [ ]
- **Comment:**

### Anti-Two Block Syst.

- **OK:** [ ]
- **Comment:**

### Boom Angle Indicator

- **OK:** [ ]
- **Comment:**

### Load Indicator

- **OK:** [ ]
- **Comment:**

### Mirrors

- **OK:** [ ]
- **Comment:**

### Cable Spooling OK

- **OK:** [ ]
- **Comment:**

### Limit Devices

- **OK:** [ ]
- **Comment:**

### Instruments

- **OK:** [ ]
- **Comment:**

### Operators Manual

- **OK:** [ ]
- **Comment:**

### Signal Charts In Cab

- **OK:** [ ]
- **Comment:**

### Load Chart

- **OK:** [ ]
- **Comment:**

### Pinch Point Stickers

- **OK:** [ ]
- **Comment:**

### Swing/Rotation Stickers

- **OK:** [ ]
- **Comment:**

### Electrical Hazard Stickers

- **OK:** [ ]
- **Comment:**

### Current Annual Inspection

- **OK:** [ ]
- **Comment:**

### Operator Certification

- **OK:** [ ]
- **Comment:**

### Hook Condition

- **OK:** [ ]
- **Comment:**

### Sling Condition

- **OK:** [ ]
- **Comment:**

### Chain Condition

- **OK:** [ ]
- **Comment:**

### Wire Rope Condition

- **OK:** [ ]
- **Comment:**

### Sheave/Block Condition

- **OK:** [ ]
- **Comment:**

### Brake/Clutch Parts/Lining:

- **OK:** [ ]
- **Comment:**

### Fire Extinguisher

- **OK:** [ ]
- **Comment:**

### Prelift Meeting Held

- **OK:** [ ]
- **Comment:**

### Outrigger Cribbing/Blocking

- **OK:** [ ]
- **Comment:**

### Overhead Utilities

- **OK:** [ ]
- **Comment:**

### Perimeter Protection

- **OK:** [ ]
- **Comment:**

### General Comments:

---

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**Revision 2016.04.07**
# Daily Equipment Checklist

**Ulliman Schutte Construction**

**Daily Equipment Checklist**

<table>
<thead>
<tr>
<th>Item</th>
<th>OK</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Extinguisher</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Backup Alarm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Horn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glass</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brakes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Controls</td>
<td></td>
<td></td>
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<tr>
<td>Tires</td>
<td></td>
<td></td>
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<tr>
<td>Steering System</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wipers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lights</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leaks</td>
<td></td>
<td></td>
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<tr>
<td>Cleanliness</td>
<td></td>
<td></td>
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<tr>
<td>Safety Triangle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cables/Slings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Load Charts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undercarriage</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Comments**

---

**Ulliman Schutte Construction LLC © 2016**

Revision 20016.04.07
ULLIMAN SCHUTTE CONSTRUCTION, LLC

NOTICE OF DRIVING QUALIFICATION STATUS

TO: Supervisor/ Requesting Party ___________________________    Date: ______________

RE: Employee/ Applicant: _________________________________

FROM: ____________________________________, VP / CFO

Based on a review of the driving record, driving privileges for the above applicant have been:

_____ Approved   Applicant possesses acceptable qualifications for the operation of a light-duty vehicle for business purposes.

Please communicate this information to the driver / applicant and extend your appreciation for maintaining a driving record that reflects safe driving practices.

_____ Probation Applicant has a Motor Vehicle Report Grade of Borderline for the preceding 36 months and is therefore placed on probationary status.

If this applicant receives any additional moving violations, driving privileges for operating a light-duty vehicle on company business will be suspended until his/her driving record improves. Please communicate this information to the driver / applicant by copy of this Notice and take any corrective action needed.

_____ Denied/ Suspended Applicant is not eligible to operate a light-duty vehicle for Ulliman Schutte Construction, LLC business purposes due to the following:

_____ Does not possess a current, valid motor vehicle operator's license.

_____ Has a Motor Vehicle Report Grade of Poor. This suspension remains in effect until the applicant's driving record improves and the checked items above no longer apply. The employee's job activities cannot include driving until this suspension has expired. Contact the Vice President if you need assistance in alternative job placement due to this suspension.

Please communicate this information to the driver/applicant by copy of this Notice and take any corrective action needed.

Copy: Employee's Personnel File
ULLIMAN SCHUTTE CONSTRUCTION, LLC
Request for Driver Qualification Status

Employee/ Applicant ___________________________

SSN ______________________________________

Address ______________________________________

Drivers License:  State____________________

Number________________________

Expiration____________________

Driver of  (check all that apply):
Company Vehicle yes ____  no ____

Personal vehicle for company use yes ____  no ____

Requested by_______________________________

Jobsite location_______________________________

Date ______________________________________
ULLIMAN SCHUTTE CONSTRUCTION
LIGHT-DUTY VEHICLE POLICY – TO BE RETAINED BY EMPLOYEE

Policy: Our business requires that certain employees operate company-owned or leased light-duty vehicles (cars, vans, pickups, etc.) and/or use their personally owned vehicles on company business. Employees will be responsible for ensuring safe operation, maintenance, and, when required, inspection of the vehicle as detailed in this policy. Employees must not operate an unsafe vehicle or operate a vehicle in an unsafe or unlawful manner.

Objective: To reduce the costs associated with light-duty vehicle operation and to assist in the prevention of losses involving light-duty vehicles.

Scope: This policy applies to all employees assigned or authorized to use company-owned or leased light-duty vehicles, including rental cars.

The driver qualification portion of the policy also applies to any employee who operates a personally-owned light-duty vehicle on company business.

The training portion of the policy applies only to those employees driving company vehicles more than 1,000 miles per year or personally-owned vehicles on company business (paid mileage or vehicle allowance) more than 10,000 miles/year. A light-duty vehicle is defined as any vehicle designed for highway use with a gross vehicle weight rating (GVWR) of less than 10,000 lbs. This includes passenger cars, vans, and pickups.

I. Vehicle Assignment

A. The Vice President is responsible for:

1. Determining those employees or departments to which light-duty vehicles will be assigned. The type, style, and equipment associated with the vehicle should be dependent upon the reason the vehicle is needed, safety of the driver and passengers, vehicle cost and fuel economy, sanitation considerations, and load requirement of the vehicle.

2. Ensuring the employees assigned to operate company-owned or leased light-duty vehicle are qualified and trained to do so in a safe manner.

B. Spouse Use

Spousal use of company vehicles is discouraged. Such use should be reserved for emergency or special circumstances only. Children of employees or any other unauthorized persons are not permitted to drive company vehicles under any circumstances.

Spouses of employees assigned company-owned or leased light-duty vehicles are authorized to operate such vehicles only if:

1. Through a motor vehicle record (MVR) check (see Driver Qualification procedures below), the Controller confirms that the spouse:
a. Possesses a current valid motor vehicle operator's license, and

b. Has no less than an “acceptable” MVR for the preceding thirty-six (36) months (see Motor Vehicle Grading Criteria Chart below ).

2. The Controller grants permission for the spouse to operate the vehicle and this permission is renewed every year. A motor vehicle record check must be performed as part of that renewal process with the criteria listed in B.1 applied.

C. Other Employee Use:

1. The employee assigned a company-owned vehicle is responsible for ensuring that only qualified employees are allowed to operate the vehicle for business use. The assigned employee is liable for all damages and losses to the vehicle incurred by an unqualified driver. **No one** other than the employee assigned a company vehicle or his/her authorized spouse may operate the vehicle for personal use.

II. Driver Qualification

A. The supervisor is responsible to submit a request for driving qualification of an applicant's or employee's driving record to the HR department prior to any assignment involving the operation of a light-duty vehicle, including personally-owned vehicles when on company business (i.e. paid or unpaid mileage). The following procedures should be followed:

1. At the time of hire or before initial assignment of the vehicle, the department supervisor will complete a Driver Request for Qualification Status Form. This form must be sent to the HR department, which will order the driver's record.

2. Management will review each driving record to ensure that the employee possesses a current, valid motor vehicle operator's license and to assess the recorded violations. A Notice of Driver Qualification Status will be sent to the requesting party indicating the employee's driving status. Driving status is based on the driver's record. The employee/applicant has no driving privileges until the approved Notice is issued by the HR department.

3. The driver qualifications are as follows:

- Authorized employee of company.
- Must be at least 18 years of age.
- Have at least one year of experience in the class of vehicle operated.
- Must meet licensing requirements.

4. Drivers will not qualify for driving privileges if, during the last 36 months, the driver had any of the following experiences:

- Been convicted of a felony.
- Been convicted of sale, handling or use of drugs.
- Has automobile insurance canceled, declined or not renewed.
- Been convicted of an alcohol- or drug-related offense while driving.
- Had driver’s license suspended or revoked.
- Driving record in the poor range on the grading criteria listed below

5. No new employee who has a poor MVR will be approved as a company-owned vehicle driver. Existing drivers whose record falls to “borderline” will be placed on 12 months probation. Existing drivers whose record falls to “poor” will lose driving privileges.

6. Loss of driving privileges (whether state or company imposed) may result in termination unless another position for which the employee is qualified is available that does not require the employee to drive.

B. The Controller will retain a copy of the Notice of Driver Qualification Status. This information will be used for tracking subsequent record checks.

C. At least once every year the Controller will order updated Motor Vehicle Reports of all Authorized Drivers from the applicable state agencies and revise the Authorized Drivers List. Any changes in Driver Status will result in a revised Notice of Driver Qualification Status.

D. The following chart shall be used to determine the grade of the Motor Vehicle Report for all employees, spouses and applicants for company driver qualification.

**Motor Vehicle Grading Criteria (Last Three Years)**

<table>
<thead>
<tr>
<th>Number of Minor Violations</th>
<th>Number of at-fault accidents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
</tr>
<tr>
<td>----------------------------</td>
<td>-----</td>
</tr>
<tr>
<td>0</td>
<td>Clear</td>
</tr>
<tr>
<td>1</td>
<td>Acceptable</td>
</tr>
<tr>
<td>2</td>
<td>Acceptable</td>
</tr>
<tr>
<td>3</td>
<td>Borderline</td>
</tr>
<tr>
<td>4</td>
<td>Poor</td>
</tr>
<tr>
<td>Any major violation</td>
<td>Poor</td>
</tr>
<tr>
<td>Minor Violation:</td>
<td>Major Violations</td>
</tr>
<tr>
<td>----------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Any minor violation other than a major except:</td>
<td>• Driving under influence of alcohol/drugs</td>
</tr>
<tr>
<td>• Motor vehicle equipment, load or size requirement</td>
<td>• Failure to stop/report an accident</td>
</tr>
<tr>
<td>• Improper/failure to display license plates</td>
<td>• Reckless driving/speeding contest</td>
</tr>
<tr>
<td>• Failure to sign or display registration</td>
<td>• Driving while impaired</td>
</tr>
<tr>
<td>• Failure to have driver’s license in possession (if valid license exists)</td>
<td>• Making a false accident report</td>
</tr>
<tr>
<td></td>
<td>• Homicide, manslaughter or assault arising out of the use of a vehicle</td>
</tr>
<tr>
<td></td>
<td>• Driving while license is suspended/revoked</td>
</tr>
<tr>
<td></td>
<td>• Careless driving</td>
</tr>
<tr>
<td></td>
<td>• Attempting to elude a police officer</td>
</tr>
</tbody>
</table>

III. Personal Cars Used on Company Business

The company does not assume any liability for bodily injuries or property damage the employee may become personally obligated to pay arising out of an accident occurring in connection with operation of his/her own car. The reimbursement to the employee for the operation of his/her car on company business includes the allowance for the expense of automobile insurance. You are required to have minimum liability limits of $100,000/$300,000. The company does not specify and assumes no responsibility for any other coverage employees carry on their own cars since this is a matter of individual status and preference. You may be asked to provide evidence of minimum required coverage.

IV. Traffic Violations

Fines for parking or moving violations are the personal responsibility of the assigned operator. The company will not condone nor excuse ignorance of traffic citations that result in court summons being directed to itself as owner of the vehicle.

Each driver is required to report all citations of moving violations to the Corporate Safety Director within 24 hours. This requirement applies to violations involving the use of any vehicle (company, personal or other) while on company business, or a violation, the conviction of which, will reduce the MVR grade to poor. Failure to report violations will result in appropriate disciplinary action. Management reserves the right to suspend driving privileges pending court action on serious violations.

Please be aware that traffic violations incurred during non-business (personal use) hours will affect your driving status as well and are subject to review.
V. Accidents Involving Company Vehicles

In the event of an accident:

- Do not admit negligence or liability of any kind whatsoever.
- Do not attempt settlement, regardless of how minor.
- Get name, address and phone number of injured person and witnesses if possible.
- Exchange vehicle identification, insurance company name and policy numbers with the other driver.
- Take a photograph of the scene of accident if possible.
- Call the police if injury to others is involved. You may want to call police even if there are no injuries.
- Complete the accident report in your vehicle.
- Turn all information over to the Corporate Safety Director within 24 hours.

VI. Driver Training

A. At any time and for any reason, USC may require any company driver to enroll in a vehicle driver training program. A “company driver” is any employee who drives company-owned light-duty vehicles more than 1,000 miles/year or personal vehicles for company business (paid mileage) more than 10,000 miles/year.

VII. Vehicle Operation, Maintenance, and Inspection

A. Operation

1. All employees assigned to use company-owned or leased light-duty vehicles are responsible for ensuring that:

   a. The vehicle is not driven in any manner that would discredit the company.

   b. The use of cellular phones while operating a motor vehicle is discouraged. Any cell phone use must be done safely.

   c. The hauling or towing of objects does not exceed the manufacturer’s limits as listed in the owner’s manual.

   d. No alterations or modifications are performed on the vehicle without prior approval from the Corporate Equipment Manager.

   e. Seat belts are worn by all occupants whenever the vehicle is in motion.

   f. All accidents resulting in any personal injury and/or property damage are reported to his/her supervisor immediately.
g. Assigned vehicles are returned in good condition upon request or termination.

h. No employee driving a company-owned vehicle shall pick up hitchhikers or carry any type of radar detector or firearms.

2. The supervisor of employees who operate company-owned light-duty vehicles is responsible for ensuring that vehicle accidents are promptly reported (see Vehicle Accident Reporting Procedure).

3. The company will not be responsible for the loss or damage of personal possessions carried in or on a company-owned vehicle.

B. Maintenance

1. Employees assigned a company-owned light-duty vehicle are responsible for safety and maintenance of the vehicle, including the following:

   a. Ensuring that required preventive maintenance activities (e.g. oil changes, brakes, tires, etc.) are performed on a timely basis and at a reasonable cost.

   b. Forwarding applicable receipts and/or invoices (with vehicle #, mileage, and employee name) to the Accounts Payable Department. For maintenance/repairs paid for by the employee, reimbursement will be given only if a standard approved Expense Reimbursement Form accompanies the receipt.

   c. Major repairs in excess of $250 must be pre-approved by the Equipment Manager

C. Inspection

1. Employees assigned a company-owned or company-leased light-duty vehicle are responsible for ensuring that the following items are visually checked at least weekly:

   a. Tire pressure
   b. Fluid levels
      - windshield washer
      - engine oil
      - automatic transmission
      - brakes
      - radiator/cooling system
   c. Lights
      - brake
      - turn signals (front and rear)
      - headlight (upper and lower beams)
      - emergency flashers (front and rear)
      - license plate
      - instrument panel
   d. Windshield wiper and blades
2. Employees assigned company-owned light-duty vehicles are responsible for ensuring that any safety inspections required by any state, local, or federal law or regulation are performed on such vehicles by qualified individuals.

3. All company-leased vehicles should be inspected according to requirements established by the leasing agency.

VIII. Personal Use

Company vehicles are provided primarily for business purposes; however, occasional personal use is permitted. **Personal use is a privilege extended only to authorized employees.** The privilege of personal use may be withdrawn at any time without notice by the company.

The following rules apply to personal use of company vehicles:

A. No one other than the employee assigned a company vehicle or his/her authorized spouse (in limited situations) may operate the vehicle for personal use.

B. An employee may drive a company-owned or leased light-duty vehicle to and from work if any of the following applies:

1. Vehicle will be parked at the employee's residence for the benefit of the company,
2. Employee is on 24-hour call,
3. Employee’s job responsibilities are at various locations and he/she must proceed to them directly from home for least-cost purposes.

C. Company-owned or leased light-duty vehicles will not be allowed outside the continental United States unless the situation is first approved by an officer of the company.

D. During personal use, travel will be limited to a 50-mile radius of home unless permission is received from the applicable supervisor. Personal trailers, including boat and recreational vehicles, are not to be pulled.

E. **Company vehicle is not to be driven while under the influence or alcohol or any controlled substance. Possession, transportation or consumption of alcohol or illegal drugs by anyone in the vehicle is not allowed and may result in termination.**

F. Driver and all passengers must wear available personal restraints.

G. Report any accident immediately to police and to your supervisor.

H. Employees shall compensate the company for the first $500.00 of damage sustained while a company-owned vehicle is used for personal reasons.
I. All personal use of vehicles shall be subject to taxation or reimbursement to the company, as required by IRS regulations.

Any exceptions to these rules require advance, written approval by the Vice President. Violation of these rules will result in disciplinary action from termination of driving privileges to discharge.
Acknowledgment and Consent Agreement

I have read, or have had read to me, the entire contents of USC’s Light-Duty Vehicle Policy and agree to comply with all requirements. I have been given an opportunity to ask questions and fully understand the meaning of the policy. Additionally, I understand that I should contact a company supervisor should I have any future questions or concerns. By signing below, I acknowledge having receipt of this policy and consent to agree to abide by the contents.

Name (printed)__________________________________________________________

Signature ___________________________________  Today’s Date________________
ULLIMAN SCHUTTE CONSTRUCTION, LLC

SOIL CLASSIFICATION FLOW CHART

IS TRENCH DEEPER THAN 5 FOOT?

YES

IS SOIL SUBMERGED OR IS WATER PRESENT IN TRENCH?

NO

IS SOIL COHESIVE OR NON-COHESIVE? (PERFORM GRAIN SIZE TEST)

COHESIVE

DETERMINE COHESIVE SOIL STRENGTH (PERFORM THUMP PENETRATION OR PENATOMETER TEST)

< .5 TSF

.5 – 1.5

> 1.5 TSF

IS SOIL FISSURED OR LAYERED?

YES

IS SOIL SUBJECT TO VIBRATIONS OR HAS IT BEEN PREVIOUSLY DISTURBED?

NO

HAS SOIL BEEN PREVIOUSLY DISTURBED?

YES

IS SOIL SUBJECT TO VIBRATIONS?

NO

TYPE "A" SOIL

TYPE "B" SOIL

TYPE "C" SOIL

DOES SOIL APPEAR TO BE STABLE?

YES

NO SHORING NECESSARY PROCEED WITH CAUTION

NO

YES

TYPE "A" SOIL

SLOPE ¾:1

TYPE "B" SOIL

SLOPE 1:1

TYPE "C" SOIL

SLOPE 1 ½:1

NOTE: ALL EXCAVATIONS DEEPER THAN TWENTY FEET MUST BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER.
DAILY EXCAVATION INSPECTION

Project No.
Competent Person:

Area: Work Description:

Weather:
Excavation Depth:
Soil Conditions:
Drainage:
Soil Type(s):
Protective System:
Employees Trained:
Ladder within 25' of All Workers:
Ladders Extend 3' above Top of Excavation:
Excavated Mat'ls Stored at least 2' from Edge:
Existing Utilities Located and Protected:
Trench Shields at Least 18 Inches above Sides:
Warning Vest Required due to Vehicular Traffic:
Confined Space in Excavation due to Fumes/Access:

Comments:
ULLIMAN SCHUTTE CONSTRUCTION, LLC

SOIL CLASSIFICATION DETERMINATION CHECKLIST

COMPETENT PERSON ____________________________  DATE __________

GRAIN SIZE TEST

Take a sample of material and roll it into a ball 2" in diameter. Attempt to roll ball into a string 1/8" in diameter. Record results below:

_______ Cannot form a ball out of soil----> Course Granular Non-Cohesive Soil
_______ Can form ball, but cannot roll into a string ----> Non-Cohesive Soil
_______ Can form ball and roll into 1/8" diameter string ----> Cohesive Soil

THUMB PENETRATION TEST

Attempt to stick thumb into soil on the side of trench. Record results below.

_______ Takes great effort to penetrate soil. Cannot get thumb into soil past end of finger nail ----> 1.5 TSF or greater
_______ Can penetrate soil with thumb to first knuckle with great effort ----> .5 to 1.5 TSF
_______ Can penetrate soil with thumb past first knuckle with relative ease ----> less than .5 TSF

PENATROMETER TEST

Visual Observations

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cracks in Side of Trench</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cracks in Top of Trench</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Previously Disturbed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Layered Soil</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fissured Material</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjacent Structure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vibration Present</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utilities Present</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Present in Trench</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

_______ TSF
Permit - Required Confined Space Decision Flow Chart

1 Spaces may have to be evacuated and re-evaluated if hazards arise during entry.
ULLIMAN SCHUTTE CONSTRUCTION, LLC
CONFINED SPACE ENTRY PERMIT

<table>
<thead>
<tr>
<th>Date &amp; Time Issued</th>
<th>Date &amp; Time Expires</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area</th>
<th>Supervisor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Task</th>
<th>Equipment used</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Standby Team</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

Pre-Entry Atmospheric Checks

<table>
<thead>
<tr>
<th>Time (am-pm)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Oxygen</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Explosive (LEL)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Toxic (CO2, H2S)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Testers Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

Pre-Entry Fluid System Isolation

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Pumps/lines blinded, blocked, disconnected

Ventilation Source Established

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Mechanical Forced Air
- Natural Ventilation

Post Ventilation Pre-Entry Atmospheric Checks

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Time (am-pm)</th>
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<tr>
<td></td>
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<thead>
<tr>
<th>Oxygen</th>
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<th>Toxic (CO2, H2S)</th>
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<tbody>
<tr>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Tester Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

Communication Procedures

Rescue Procedures

Training Verification - Have the following persons successfully completed required training and training is current for the space to be entered?

<table>
<thead>
<tr>
<th>Position</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>All persons entering Confined Space</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All persons acting as Supervisor for the Entry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All persons acting as attendants</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Entry & Rescue Equipment on Scene

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Gas Monitor
- Fall Arrest Gear
- Protective Clothing
- Life Line
- Hoisting Equipment
- Powered Comm Equipment

Entry Permit. Written instructions and safety procedures have been received and are understood. Entry cannot be approved if any squares are marked in the "No" column. This permit is not valid unless all appropriate items are completed.

Permit Prepared By: ________________________________

Approved By (Superintendent): ________________________________
Competent Person Assignment

<table>
<thead>
<tr>
<th>Project</th>
<th>Project Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project Supervision</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A Competent Person **MUST** be assigned to cover each area, listed below, where such requirements exist for the operations planned on this project.

**Remember:** OSHA defines Competent Person in 1926.32 (f)…..“Competent Person” means one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

(Please fill-in who the designated “Competent Person” (name, title, employer) will be for the applicable standard below.)

<table>
<thead>
<tr>
<th>Standard</th>
<th>Competent Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>1926.251 Rigging equipment for material handling</td>
<td></td>
</tr>
<tr>
<td>1926.650 Excavations</td>
<td></td>
</tr>
<tr>
<td>1926.450 Scaffolding/Ladders (1926.1053)</td>
<td></td>
</tr>
<tr>
<td>1926.500 Fall Protection</td>
<td></td>
</tr>
<tr>
<td>1926.550 Cranes and Derricks</td>
<td></td>
</tr>
<tr>
<td>1926.404 Electrical</td>
<td></td>
</tr>
<tr>
<td>1926.134 Respiratory Protection</td>
<td></td>
</tr>
<tr>
<td>1926.552 Material Hoists, personnel hoists, and elevators</td>
<td></td>
</tr>
<tr>
<td>1926.101 Hearing Protection</td>
<td></td>
</tr>
<tr>
<td>1926.620 Lead</td>
<td></td>
</tr>
<tr>
<td>1926.354 Welding, cutting and heating of preservative coatings</td>
<td></td>
</tr>
<tr>
<td>1926.705 Lift Slab operations</td>
<td></td>
</tr>
<tr>
<td>1926.702 Bolting, riveting, fitting-up, and plumbing up</td>
<td></td>
</tr>
<tr>
<td>1926.800 Underground construction</td>
<td></td>
</tr>
<tr>
<td>1926.850 Preparatory operations (Demolition)</td>
<td></td>
</tr>
<tr>
<td>1926.1101 Asbestos</td>
<td></td>
</tr>
<tr>
<td>1926._</td>
<td></td>
</tr>
<tr>
<td>1926._</td>
<td></td>
</tr>
</tbody>
</table>
# Ulliman Schutte Construction, LLC

## Project Safety and Health Plan

### General Information

<table>
<thead>
<tr>
<th>Location of Phone with Emergency Numbers and Jobsite Address:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Location and size of First Aid Kits:</td>
<td></td>
</tr>
<tr>
<td>Outside Bulletin Board with OSHA posters, notices, etc.:</td>
<td></td>
</tr>
<tr>
<td>Housekeeping Plan:</td>
<td></td>
</tr>
<tr>
<td>Emergency Plan including type of alarm signal, method of accounting for all personnel, first aid providers, fire extinguisher equipment locations, and evacuation area:</td>
<td></td>
</tr>
</tbody>
</table>

### Demolition

Demolition Procedure developed with input from General Superintendent, Project Manager, Superintendent, Safety Director, Engineer, etc. will be completed and reviewed on the jobsite prior to work on this date __________. Any changes to the plan will be agreed upon by all involved in its development.

Fall Protection systems to be used during demolition process: __________

EPA Permit filed or will be on the following date: __________

Lead based paint inspection completed on date __________ using the following sampling material __________ by __________

Lead exposure protection program will consist of the following: __________

Underground utilities marked on date __________. Overhead utilities where minimum approach distances cannot be maintained will be de-energized on date __________
TRAFFIC CONTROL
Physical barriers to protect (concrete barriers, wood barriers, barrels) will be located at the following areas: 
___________________________________________________________________________________________
___________________________________________________________________________________________
___________________________________________________________________________________________

Traffic control zones set up by: 
Person responsible for maintenance: 
Trained Flaggers needed? 
Equipment needs: 
Employee parking areas will be located: 

PILE DRIVING OPERATIONS
Cofferdam drawings including handrail and other fall protection items are completed and will be on-site by date 
______________. Ladder access provided by the use or installation of 
___________________________________________________________________________________________

Will air monitoring be necessary? Why or why not 
If required, the following equipment will be used 
Person responsible for conducting the monitoring 
A sign will be posted at the entrance to the cofferdam to limit access. An emergency signal to evacuate the 
cofferdam is needed. The signal will be 
Fall protection system for working on leads 
Fall protection system for installation sheet piling 
___________________________________________________________________________________________

Confined space training necessary? Scheduled for date 
Fall protection training necessary? Scheduled for date 
Fall protection equipment needs 
___________________________________________________________________________________________

ABUTMENTS and PIERS
Form drawings completed including details on fall protection system will be on-site by date ________________.
Equipment needs for fall protection system 
___________________________________________________________________________________________

Excavation plan 
___________________________________________________________________________________________

Type of barricade around form area to keep unnecessary personnel clear in case of form failure 
Protruding rebar protection plan 
Rigging equipment needs 
Rigging training needed 
___________________________________________________________________________________________
**BEAM ERECTION**
Lifting plan, including size of cranes, location of cranes, rigging and pick points, location of staging of beams and other structural members

__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________

Fall protection system to be used

__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________

Fall protection equipment needs

__________________________________________________________________________________________
__________________________________________________________________________________________

Training needs

__________________________________________________________________________________________
__________________________________________________________________________________________

---

**DECKING, REINFORCING ROD, DECK POUPS**

Fall protection system for installation of decking

__________________________________________________________________________________________

Personal protective equipment: chain saw chaps, face shields, safety glasses on site

Fall protection while installing overhang brackets

__________________________________________________________________________________________
__________________________________________________________________________________________

Guardrail stands in good condition and installed to meet 200 lb. requirement

Fall protection maintained while installing guardrail

Overhead lines where minimum approach distances cannot be maintained will be de-energized by date _______. Verified on date

---

**OTHER**

__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________
AUTHORIZATION

This plan is to be used as a tool to assist in the prevention of loss incidents (accidents) on the job site. It is expected to be modified and expanded as the job progresses. The following have reviewed and have been a part of the planning process for this project.

_____________________________________                             _______________________________________
_____________________________________                             _______________________________________
_____________________________________                             _______________________________________
_____________________________________                             _______________________________________
_____________________________________                             _______________________________________
_____________________________________                             _______________________________________

This plan is to be posted on the bulletin board at the job site. All employees will be made aware of it and its location.
ULLIMAN SCHUTTE CONSTRUCTION, LLC

EMPLOYEE ORIENTATION FORM

PART I

Initial Topic:

- Company Safety Policy
- The employee will be made aware of the high rate of injuries to new employees.
- The employee will sign a form that acknowledges the orientation
- Personal Protective Equipment
- Tool Box Safety Talks
- First Aid
- Accident Reporting
- Hazard – Communication Program
- Fall Protection
- Fire Protection
- Trenching & Excavation
- Electrical Safety
- Confined Spaces
- Lead Standard
- Safe Work Practices around Crane
- Drug Policy
- Fleet Policy
- Lock Out / Tag Out
- EEO/ non- harassment
- Silica Dust
- View Safety Video and Receive Copy

PART II

1. Think about your job from a safety standpoint
   A. Look for hazards and take precautions to prevent accidents from happening.
   B. Be sure you have all necessary safety equipment with you when you start to work.
   C. If you are in doubt about a hazard or the need for protective clothing or safety equipment, consult your foreman.

2. Wearing your hard hat while on the work site is not an option - IT IS A JOB REQUIREMENT.

3. Practical jokes, horseplay, scuffling or any other conduct which would subject any employee to risk is prohibited.

4. Report injuries and accidents, no matter how minor, to your supervisor as soon as possible.
5. Practice good housekeeping in your daily activities.

6. Obey and respect warning signs such as "No Smoking", "Authorized Personnel Only", and "Do Not Use" tags.

7. Do not operate equipment that is not in a safe condition.

8. Wear eye protection when grinding, chipping, welding, hammering, or during any operation which could cause an eye injury.

9. Defective tools or equipment are not to be used. Utilize "Do Not Use" tags.

10. Hand tools must not be used for any purpose other than intended, and all damaged or worn parts must be promptly repaired or replaced.

11. Riding on equipment is prohibited. No person may ride on any hook, hoist or other material handling equipment which is used strictly for handling material and not specifically designed to carry riders.

12. Always wear clothing that will provide good protection for your body, including shirts with sleeves, long pants, and work boots.

13. Use or possession of alcoholic beverages or non-prescription drugs on the jobsite is forbidden.

14. Do not leave floor openings uncovered when not attended.

15. Personal fall protection is required where other means of fall protection are not provided.

16. Take time to read labels on containers or ask for information about any materials and/or chemicals you use. Follow the instructions on the MSDS.

17. When lifting, use an approved lifting technique, bend your knees, get a firm grip and lift slowly, keeping your back as straight as possible, and the load close to your body. Use material carts whenever possible.

18. All personnel working inside manbaskets, including crane baskets and manlifts, must use personal fall protection.

19. Powder-actuated tools may only be operated by authorized personnel who have been instructed and trained for their safe use.

20. Firearms or any other weapon are not permitted on any jobsite or company property.

21. Scaffolds are not to be loaded beyond their capacity.

22. Do not approach any operating machinery from the blind side; approach in a way that the operator can see you.

23. Lifejackets must be worn at all times when working around the water.

24. Ladders in use for access to other levels must be secured from tipping.

25. Always remain in view of the operator when acting as a spotter.

26. Never remove any guard or other safety device.

SAFETY IS EVERYONE’S RESPONSIBILITY

I have read these safety rules and I agree. "Safety is Everyone's Responsibility." Therefore, I will do my best to comply with these safety rules and with the safety standards of this job.

Employee Name: ___________________________ Date: ____________

Employee Signature: ___________________________

Supervisor Signature: ___________________________
ULLIMAN SCHUTTE CONSTRUCTION, LLC

LOCKOUT PROCEDURES

1. Train authorized lockout personnel, and train affected employees to identify the locks being used.

2. Assign the job.

3. Define the work area.

4. Identify an energy source by the equipment's components.

5. Notify the affected employees.

6. Is a lockout needed to secure the job area?

7. Find all system components in the work area.

8. Check to see if the energy source can be turned off.

9. Get qualified personnel to make the decision.

10. Do system stop: turn off, lockout, test source.

11. The system should be discharged or disconnected by qualified personnel.


13. Look for action or movement.


15. Look for action or movement again.

16. Check for any other energy sources.

17. Do the indicated work.

18. Notify the affected employees.

19. Remove the lockout devices from the disconnects.

20. Restart the equipment, if possible.

21. The job is finished.
## Material Safety Data Sheet

May be used to comply with OSHA’s Hazard Communication Standard, 29 CFR 1910 1200. Standard must be consulted for specific requirements.

### U.S. Department of Labor

Occupational Safety and Health Administration

(Non-Mandatory Form)

Form Approved

OMB No. 1218-0072

### IDENTIFY (as Used on Label and List)

Note: Blank spaces are not permitted. If any item is not applicable or no information is available, the space must be marked to indicate that.

<table>
<thead>
<tr>
<th>Section I</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer’s name</td>
<td>Emergency Telephone Number</td>
</tr>
<tr>
<td>Address (Number, Street, City, State and ZIP Code)</td>
<td>Telephone Number for Information</td>
</tr>
<tr>
<td>Date Prepared</td>
<td>Signature of Preparer (optional)</td>
</tr>
</tbody>
</table>

### Section II—Hazardous Ingredients/Identity Information

<table>
<thead>
<tr>
<th>Hazardous Components (Specific Chemical Identity, Common Name(s))</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>Other Limits Recommended</th>
<th>% (optional)</th>
</tr>
</thead>
</table>

### Section III—Physical/Chemical Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Specific Gravity (H2O = 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point</td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure (mm Hg)</td>
<td>Melting Point</td>
</tr>
<tr>
<td>Vapor Density (AIR = 1)</td>
<td>Evaporation Rate (Butyl Acetate = 1)</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td></td>
</tr>
<tr>
<td>Appearance and Odor</td>
<td></td>
</tr>
</tbody>
</table>

### Section IV—Fire and Explosion Hazard Data

<table>
<thead>
<tr>
<th>Flash Point (Method Used)</th>
<th>Flammable Limits</th>
<th>LEL</th>
<th>UEL</th>
</tr>
</thead>
</table>

Extinguishing Media

Special Fire Fighting Procedures

Unusual Fire and Explosion Hazards

(Reproduce locally)
### Section V—Reactivity Data

<table>
<thead>
<tr>
<th>Stability</th>
<th>Unstable</th>
<th>Conditions to Avoid</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stable</td>
<td></td>
</tr>
</tbody>
</table>

#### Incompatibility (Materials to Avoid)

<table>
<thead>
<tr>
<th>Hazardous Polymerization</th>
<th>May Occur</th>
<th>Conditions to Avoid</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Will Not Occur</td>
<td></td>
</tr>
</tbody>
</table>

### Section VI—Health Hazard Data

<table>
<thead>
<tr>
<th>Route(s) of Entry</th>
<th>Inhalation?</th>
<th>Skin?</th>
<th>Ingestion?</th>
</tr>
</thead>
</table>

#### Health Hazards (Acute and Chronic)

<table>
<thead>
<tr>
<th>Carcinogenicity</th>
<th>NTP?</th>
<th>IARC Monographs?</th>
<th>OSHA Regulated?</th>
</tr>
</thead>
</table>

### Section VII—Precautions for Safe Handling and Use

#### Steps to Be Taken in Case Material Is Released or Spilled

#### Waste Disposal Method

#### Precautions to Be Taken in Handling and Storing

#### Other Precautions

### Section VII—Control Measures

#### Respiratory Protection (Specify Type)

<table>
<thead>
<tr>
<th>Ventilation</th>
<th>Local Exhaust</th>
<th>Special</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mechanical (General)</td>
<td>Other</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Protective Gloves</th>
<th>Eye Protection</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Other Protective Clothing or Equipment</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Work/Hygienic Practices</th>
</tr>
</thead>
</table>
WHAT RESPONSIBILITY DO YOU HAVE TO MANAGE SUBCONTRACTORS?

IF YOU THINK:

- "They are subs' employees – I can't tell them what to do"
- "I can't stop their work even if what they are doing is entirely unsafe and life threatening"
- "My responsibility is only to my own workers"

THEN YOU ARE MISINFORMED!

If you are in charge of a project and your company has hired a subcontractor to perform a portion of the work then you need to remember the following:

- You have ultimate responsibility for the production quality and safety on your project
- You must manage subcontractors as well as your own workers.
- You must require that all subcontractor employees conform to the company safety policies and project standards.

WHY?

UNSAFE SUBS CAN COST THE COMPANY MONEY AND IMPACT THE PROFITABILITY OF YOUR PROJECTS

- Subcontractor accidents can result in delays in the job which can impact the whole project schedule.
- Sub employees can sue your company due to injuries sustained on your jobsite through third party suits.
- Unsafe acts and conditions by subs can increase chances for OSHA fines for all contractors on the project.
- Subcontractor accidents can result in Indirect Costs to your company including:
  - Unhappy Clients
  - Lost production by distracted workers
  - Lost production by your supervisor or foreman when assisting the injured
  - Clean up time
  - Legal fees
  - Damaged equipment and property
SUBCONTRACTOR'S ORIENTATION

- The single most important thing that a jobsite manager can do for anyone coming on the project is to ensure that the person is well oriented.
- Construction sites are filled with potential hazards. No two projects are alike and each project is constantly changing.
- Keeping the project safe depends on keeping everyone informed and aware. You cannot take for granted that new workers or subcontractors automatically know what to do on the job. Even if they are skilled and well trained, they can not know the particular hazards and problems of a construction project new to them.

BE SPECIFIC AND FIRM

SUBCONTRACTOR ORIENTATION NEEDS TO BE SPECIFIC TO BE EFFECTIVE

For example

"On this job, you must tie off"  verses  "On this job, we want you to work safely"

- A general statement such as this second one permits and encourages subcontractors to use their own definition of what it means to work safely.
- Whether the Sub will be on-site for one day or for the duration of the project, site orientation should be done with all Subcontractor workers.

ORIENTATION STEPS

- When a new subcontractor crew starts, meet with them immediately before work begins. Make it known that they will be included in formal safety inspections and will be evaluated on production, quality and safety when their work is completed.
- Make it clear to the crew that you require everyone to work safely and productively at all times. Inform them that informal inspections will be done on a daily basis.
- Describe job rules and safety standards specific to the project and their work.
- Conduct a site tour.
- Invite the subs to attend project toolbox meetings.
- Encourage a good working relationship among all crews. Emphasize the importance of cooperation when using the same spaces and assisting in maintaining good housekeeping.
- Check back with crew and make yourself available to answer questions.

EVALUATING THE SUBCONTRACTOR

Attached is an evaluation form which is to be used to help evaluate the subcontractors overall performance while on the project.
## JOBSITE SAFETY CHECKLIST

### General Information
- OSHA Poster Displayed
- Weekly Safety Meeting Records Up to Date
- Emergency Numbers Posted
- Safety Manual On-site
- MSDS Book On-site and Maintained
- First Aid Kit On-Site and Stocked

### Housekeeping
- Walkways Clear of Debris
- Work Platforms Clear of Debris
- Weekly Trash Pickup
- Combustible Waste Removed
- Oily Rags Stored Properly

### Personal Protective Equipment
- All Employees Wearing Hardhats
- All Employees Wearing Safety Glasses
- Face Shields in Use where Required
- Respirators in Use where Required
- Hearing Protection in Use where Required
- Chemical Protective Clothes Used where Required

### Electrical Safety
- Electrical Panels/Wiring/Controls Covered
- Electrical Cords Not Damaged
- All Electrical Cords Grounded (3 Prong)
- GFCI Protection Used 100%
- Lockout/Tagout Protection in Place
- Electrical Panels Marked for Service/Voltage

### Trip/Slip/Fall Hazards
- Grates/Covers in Good Condition and Secure
- Employee Walkways Clear
- Adequate Lighting in All Areas
- All Holes Covered and Marked
- Workers Exploded over 6' 100% Tied-off
- Guardrails Utilized and in Good Condition
- All Workers Tied-off to Proper Anchor
- Fall Protection Pre-planning

### Fire Protection
- Fire Extinguishers Charged and Inspected
- EXIT/NO EXIT Signs Posted
- Fuel/Hazmat Storage Tanks Properly Labeled
- No Smoking Signs Posted at Fuel Areas
- Oxy Cylinders Stored 20' from Fuel Gases
- Gas Cylinders Stored Upright and Secured

### Ladder Safety
- All Ladders Secured/Tied-off
- All Ladders Extend 3' above Landing
- Stepladders fully Opened (Engaged)

### Tool Safety
- Electric Tools Double Insulated
- All Tool Guards In place and Properly Adjusted
- Tool Cords Not Frayed or Damaged
- Tools Properly Stored

### Cranes/Hoists/Rigging
- Crane Rear Swing Protection Utilized
- Crane Inspection Logs Complete
- Slings/Cables/Chains in Good Condition
- Crane Outriggers Fully Extended
- Tag Line used on Every Pick

### Confined Space Entry
- Permit Posted for Permitted Confined Spaces
- Air Monitor Used for Confined Spaces
- Attendant in Placed Outside Confined Space
- Confined Space Attendant Trained
- Retrieval Unit Staged at Confined Space
- Confined Space Entry Supervisor Active
- Confined Space Fall Hazard Protection

### Trenching and Excavation Safety
- Excavated Materials 2' Back from Edge
- Excavation Egress within 25' of Employees
- Vehicular Traffic Protection at Excavations
- Falling Load Protection at Excavations
- Hazardous Air Precautions at Excavations
- Water Accumulation Precautions at Excavations
- Excavation Support System/Sloping per Design
- Fall Hazard Protection in Place at Excavations
- Adjacent Structures Supported

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**Comments:**

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Ulliman Schutte Construction, LLC  
**Prescription Eyeglass Limited Reimbursement Policy**

Ulliman Schutte Construction (USC) will reimburse the first $150.00 of the cost of prescription safety eyeglasses for its employees.

To qualify for reimbursement:

1) The employee requiring prescription lenses must have been continuously employed by Ulliman Schutte Construction for 90 days. Although a qualifying purchase can occur at any time during employment, reimbursement will not occur until the 90 day requirement has been fulfilled.

2) The prescription glasses purchased by employee must meet ANSI 787.1-2003 requirements. The receipt for the glasses must indicate the ANSI rating.

3) The employee must not have received previous eyeglass reimbursement from USC for the past 2 years.

To receive reimbursement, the employee must provide a copy of the receipt for the glasses to his/her Superintendent along with a completed Request for Reimbursement form.

Reimbursement will be paid for qualifying purchases within two weeks from receipt of all required information. Reimbursement will be made in the amount of the total cost of a single pair of glasses, up to a maximum of $150.00.
Ulliman Schutte Construction, LLC
Prescription Safety Eyeglass Program
Request for Reimbursement

I request reimbursement under the USC Prescription safety eyeglass program.

Receipt for prescription safety eyeglasses $ ______________________________

Reimbursement amount is $ ______________________________(lesser of above or $150)

Receipt attached, stating glasses rating   Y___ N___

___________________________________  __________________________
Signature       Date

____________________________________ __________________________
Print Name      Project Location

____________________________________
Date of Hire

For Home Office use:

90 day Y ___N___  2 yr     Y___N___  Approved ______________
Eligible ________   Eligible _________  Date    ______________
STANDARD CRANE HAND SIGNALS

EXTEND BOOM

DOG EVERYTHING

TRAVEL

RETRACT BOOM

EVERYTHING

EXTEND BOOM

RETRACT BOOM

HOIST

LOWER

USE MAIN HOIST

USE WHIP LINE

RAISE BOOM

LOWER BOOM

MOVE SLOWLY

RAISE THE ROOM

LOWER THE BOOM

SWING

& LOWER THE LOAD

& RAISE THE LOAD

STOP

EMERGENCY STOP
ULLIMAN SCHUTTE CONSTRUCTION, LLC

SAFETY CONTACTS

Brian Danik, Corporate Safety Director  
Office: (301) 545-0750  
Cell: (202) 486-1889

Matthew S. Ulliman, President  
Office: (937) 910-9900

Matt Schutte, Vice President  
Office: (937) 910-9900

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Office: (937) 910-9900  
Cell: (937) 671-1449