



**Site Operations Safety Manual** 

## **HEALTH AND SAFETY MISSION STATEMENT**

The safety and well being of our employees and all personnel working on this project is paramount. MORGAN CONSTRUCTION is committed to implementing and fostering an Injury Free Environment (IFE) throughout our entire organization. Injury Free Environment is a corporate mindset where no injury is acceptable and safety is not optional. At MORGAN CONSTRUCTION, safety has become personal to each of us and is considered a way of life. We value and respect every worker. Performing work in a manner that presents risk of injury is not how we conduct our business. All injuries are preventable when safety becomes an everyday personal value. Committing to an Injury Free Environment is not just the right choice; it's really the only choice.

Walter L. Ford, Jr., C.O.S.S. Vice President - Corporate Safety Director

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## I. SAFETY AND HEALTH MANAGEMENT PROGRAM

The purpose of MORGAN CONSTRUCTION's Safety and Health Management Program (SHMP) is to assist project management, supervision, subcontractors and workers in understanding MORGAN CONSTRUCTION's Injury Free Environment philosophy and the health and safety expectations and requirements for this project.

The MORGAN CONSTRUCTION Project Team is responsible for the implementation and execution of this Safety and Health Management Program.

## INJURY FREE ENVIRONMENT (IFE)

MORGAN CONSTRUCTION is committed to an Injury Free Environment. The Injury Free Environment is the shared corporate and individual belief that safety is a value, not compromised by cost or schedule. Everyone has the right to go home safely at the end of the day.

#### Injury Free Environment holds three basic premises:

- All incidents and injuries are preventable; when construction operations and tasks are carefully planned out and executed.
- Injury Free operations are possible in construction; when a prevailing mindset and conviction exists to do the right thing and what is necessary to achieve that state.
- Elevate safety awareness daily; a journey of continuous improvement to advance safety and achieve a heightened state of awareness where workers choose to be responsible and accountable for their own safety and the safety of their co-workers.

#### **RESPONSIBILITY AND ACCOUNTABILITY**

Everyone associated with this project must understand their responsibilities with regards to health and safety. With the responsibilities defined, project management, supervision, subcontractors and workers will be held accountable for their health and safety performance.

- **Project Management\*** includes the Project Executive/Corporate Safety Director, Project Manager, and Subcontractor Project Management.
- First-line Supervision\*\* includes all Superintendents and all Foremen.

SUBJECT	PROJECT MANAGEMENT*	FIRST-LINE SUPERVISION**	WORKER	MCC SAFETY DIRECTOR
	WILL ENSURE THAT:	ENSURE THAT:	WILL:	WILL:
Safety & Health Management Program:	The SHMP is understood, implemented, and strictly complied with and that  MORGAN CONSTRUCTION, Subcontractors, vendors, or third party individuals working or having business at this project are in conformance with the SHMP.	The SHMP is fully understood and implemented in work planning and communicated to workers.  The project is compliant with the SHMP.	Understand the contents of the SHMP and follow the established rules and procedures.	Advise project management and supervision as to status and conformance with the project SHMP.  Support in administration of the SHMP.
Work Practices:	First-line supervision is communicating safe work practices to workers.	All work tasks are properly communicated to workers and complied with.	Follow all safe work practices as communicated to them by their supervisor.	Assess project compliance with safe work practices and federal, state, local, and company regulations, rules and procedures.
Site-Specific Safety Rules:	The site-specific safety rules and procedures are implemented and enforced.	The site-specific safety rules and procedures are understood and implemented.	Understand and follow the site-specific safety rules and procedures.	Assess project conformance to site-specific safety rules and procedures.
Orientation:	They make available the resources to conduct a proper orientation  They participate in the orientation process	MCC will conduct and the subcontractor supervision will attend the orientation process.	MCC workers will attend orientation prior to beginning work. Understand and follow the sitespecific safety rules and procedures.	Support project management and first line supervision in the development and administration of the orientation

SUBJECT	PROJECT MANAGEMENT*	FIRST-LINE SUPERVISION**	WORKER	MCC SAFETY DIRECTOR
Training:	Resources are available to implement safety and health training.  Training programs are developed and implemented.	They received a project-specific orientation prior to start of work.  All workers under their direction are properly trained in hazard recognition and safe work practices.	Attend required project safety and health training. Understand and follow the work practices and guidelines discussed during the training.	Assess that project management, first-line supervision and workers have received proper health and safety training.  Assist project supervision in training workers on hazard recognition and safe work practices.
Safety Planning:	The safety prequalification system is being properly utilized to assist in contractor selection.  All first-line supervision identifies, evaluate, and control the work site hazards, and resources are available to implement controls.	Institute a daily assessment program to identify, evaluate and correct work site hazards.	Understand the hazards of the work and follow the safe work practices and controls developed for those hazards.	Assist in evaluating hazards and determining methods of eliminating or reducing the hazard.
Incidents:	All incidents are investigated properly and thoroughly.	They conduct a thorough and proper incident investigation and develop solutions to prevent similar occurrences.	Cooperate and participate in the incident investigation and contribute ideas and solutions.	Assist first-line supervision in investigating incidents.

## **SAFETY REGULATIONS**

MORGAN CONSTRUCTION and subcontractors working at MORGAN CONSTRUCTION project sites shall comply with all applicable government regulations, specific client rules and regulations, and this Safety and Health Management Program. If any of these standards, requirements, rules or procedures conflict, the most stringent one will prevail.

# NOTIFICATION OF UNSAFE OR HAZARDOUS CONDITIONS — (SUBCONTRACTOR LEVEL)

Each worker on this project has the right to notify project management or supervision of any unsafe or hazardous condition that may be present without fear of retribution.

Project management or supervision will take immediate action to correct or remove any hazard brought to their attention.

MORGAN CONSTRUCTION incorporates a **Notice of Non-Compliance System, Appendix Q**, which alerts subcontractors for those at-risk behaviors, on-site and off-site, that are deemed unsafe. The at-risk behavior not only has impact to the contractor's own workers but to all individuals that may be put at risk by the at-risk behavior due to the offending contractor's non-compliance. All deviations that are not satisfactorily rectified as described on the remediation section of the deviation ticket will result in a back charge to the offending contractor and will come out of his/her next month's requisition.

## **DISCIPLINARY PROGRAM - (EMPLOYEE LEVEL)**

At-risk behavior on this project that could contribute to an incident or injury will not be tolerated. Each worker has an individual responsibility to work safely, and each first-line supervisor is responsible to correct at-risk behavior of workers under their direction.

At-risk behaviors considered Immediately Dangerous to Life or Health that may result in immediate termination from the project, consist of, but are not limited to:

- Failure to follow the Fall Protection Policy
- Failure to follow the Substance Abuse Policy
- Possession of firearms, explosives or dangerous weapons
- Theft and other criminal activity
- Entering or allowing to enter an unprotected trench or excavation
- Failure to wear proper personal protective equipment (PPE)

- Fighting, horseplay, or practical joking
- Entering or allowing to enter, a confined space without following procedures
- Unsafe and/or reckless operation of motorized vehicles or equipment

For those acts or practices not considered Immediately Dangerous to Life or Health the following will apply:

- First occurrence: Verbal, written warning and/or re-training
- Second occurrence: One day leave of absence without pay
- Third occurrence: Termination from the project and/or termination of employment.

#### **INCIDENT AND NEAR MISS REPORTING AND INVESTIGATION**

Every incident and near miss will be reported immediately to MORGAN CONSTRUCTION and documented using the **Incident Notification & Investigation Form (Appendix C)**. MORGAN CONSTRUCTION'S Project Superintendent will contact the Project Safety Director immediately and use the Incident Notification & Investigation Form provided before the end of the day. Pictures shall be taken by the Project Superintendent of the area, including any hazards associated with the incident. The Project Safety Director will assist the Project Superintendent with the investigation of any incident or near miss and help thoroughly investigate to determine the probable root cause(s). Preventive action will be required to eliminate future occurrences.

**An** <u>incident</u> is defined as any unplanned or undesired event that results in or has the potential to result in a work-related injury/illness, property damage, or disruption of business where the cause was from human errors of omission or commission.

A <u>near miss</u> is any situation that has the potential to result in a work-related injury/illness, property damage, serious environmental impact, or disruption of business.

MORGAN CONSTRUCTION and/or subcontractor first-line supervision will be involved in the investigation of incidents and near misses. The Incident Notification and Investigation form and photos must be completed and submitted to the Safety Director within 24 hours of the occurrence. Injured workers shall be accompanied to the medical facility by a supervisor.

#### **POST INCIDENT REVIEW MEETING**

Upon completion of the incident investigation or observation of a major nonconformance MORGAN CONSTRUCTION may require a post incident review meeting. At this meeting, the MORGAN CONSTRUCTION project management, first line supervision, and involved subcontractor(s) will discuss the nonconformance, root causes, and corrective action plans.

## **WORK SITE SAFETY INSPECTION**

Inspections are the foundation of a good safety and health management program and will be conducted frequently and regularly by First Line Supervisors and Site Safety Representatives.

MORGAN CONSTRUCTION and the Subcontractors should review work site safety daily for their work area and the work of subcontractors under their direction. MORGAN CONSTRUCTION'S Superintendent will perform work site safety inspections weekly. Inspections shall be documented weekly on the **Work Site Safety Inspection Form Appendix M** or an acceptable equivalent and be maintained on-site in a 3-ring binder during the project.

#### **SUBSTANCE ABUSE POLICY**

MORGAN CONSTRUCTION is committed to providing a safe, drug-free work place for all employees. This policy applies to all MORGAN CONSTRUCTION, subcontractor at any tier, vendor and other third party employees, including management working on or visiting this project.

Drug and alcohol abuse on and off the job can contribute both to incidents and to greater risk for all individuals employed on this project, as well as the general public. All work tasks on MORGAN CONSTRUCTION projects will be considered safety-sensitive.

The following are prohibited on MORGAN CONSTRUCTION projects:

Being under the influence of any amount of alcohol or illegal or prescription drugs

• The use, sale, offer to sell, purchase, transfer, distribution or possession of illegal drugs, drug paraphernalia or alcohol products

MORGAN CONSTRUCTION and each subcontractor will promote a Drug Free Workplace with their employees and will communicate what constitutes prohibited activities to their employees.

## Job Applicant Drug Testing:

All new MCC job applicants must undergo testing by their employer for substance abuse as a condition of employment at this site. Applicants will be required to submit voluntarily to a urinalysis test at a laboratory chosen by this company. The employer will bear the responsibility of having their applicant's tested.

#### **Employee Drug Testing:**

When there is reasonable suspicion to believe that an employee is illegally using drugs or alcohol they will be required to submit to a substance abuse test to their employer.

MORGAN CONSTRUCTION reserves the right to conduct random on-site substance abuse testing on select subcontractor employees.

Any worker who suffered or contributed to a work-related injury or illness, which required treatment by a physician or other medical facility or was involved in an incident where damage to property occurred, will be tested for drugs and alcohol within three (3) hours of the incident. At a minimum, drug and alcohol test will follow current National Institute on Drug Abuse (NIDA) five panel guidelines and alcohol test will follow DOT guidelines.

Workers that refuse to test, stall to be tested, are uncooperative with collectors, or attempt to alter a urine specimen will be considered positive and immediately removed from the project.

## **II. SAFETY PLANNING**

## SUBCONTRACTOR PROJECT SPECIFIC SAFETY PLAN

The Subcontractor shall enforce safety guidelines no less stringent than MORGAN CONTRUCTION'S Site Operations Safety Manual or as prescribed by OSHA's 1926 Construction Industry Regulations. MORGAN CONSTRUCTION'S Site Operations Manual shall be used as the minimum standard.

## ORIENTATION, TRAINING AND SAFETY MEETINGS

To promote and ensure an Injury Free Environment, health and safety training is a requirement for all MORGAN CONSTRUCTION and subcontractor workers assigned to this project.

#### **First-Line Supervision Orientation**

All First-Line Supervision on-site for the subcontractor shall attend the Safety Orientation process prior to starting work. MORGAN CONSTRUCTION's Superintendent shall conduct the orientation. All foremen are recommended to mobilize to the site prior to their crew so they can receive specific training and review of the permits, forms, and procedures required by the SHMP as well as project specific information necessary to adequately coordinate their work and prepare their crews.

#### MCC Employees, Temporary Labor and New Hire Orientation

Every MORGAN CONSTRUCTION worker at this site shall attend an environmental, health and safety orientation conducted by MORGAN CONSTRUCTION's Project Superintendent which will provide general health and safety information and project specific work rules and procedures. No MORGAN CONSTRUCTION employee, new hire or temporary labor service employee will be allowed to work on the project site until they complete the orientation process.

#### **Material Delivery Drivers and Delivery Personnel**

All regular material deliveries and non-repetitive deliveries, such as freight lines and courier services shall be unloaded in specific controlled areas under the supervision of a First-Line Supervisor.

#### **Weekly Safety Meetings**

All MORGAN CONSTRUCTION and subcontractor employees assigned to this project will participate in weekly safety meetings conducted by MORGAN CONSTRUCTION. MORGAN CONSTRUCTION reserves the right to remove subcontractor supervision and employee personnel who do not regularly attend weekly safety meetings on the project. A sign in sheet **Appendix D** and topics discussed will be provided and maintained by the Project Superintendent.

Safety meetings should communicate safety concerns, new work activities, new and continuing potential hazards, safety training, any incidents that occurred on the project and the like. References in this SHMP are good resources for information. Safety training is encouraged to take place at the time of these meetings.

#### **Health and Safety Training**

In addition to the site specific health and safety orientation, OSHA requires that workers receive specific task training. To help comply with OSHA minimum worker training requirements and assist in achieving an Injury Free workplace, a training matrix has been included in this Safety & Health Management Program to assist in the identification of applicable training requirements. This is for reference only and shall not be considered all inclusive. MORGAN CONSTRUCTION's Project Superintendent shall provide specific task training to all MORGAN CONSTRUCTION employees, new hires and temporary labor service employees.

Subcontractor's first line supervision or management shall provide specific task training to their employees. MORGAN CONSTRUCTION's Project Superintendent will evaluate training periodically with the subcontractor to verify they are being properly conducted and that the contents adequately cover the standards, policies, rules, and procedures contained in the Safety & Health Management Program and OSHA standards.

All Project management and supervision will communicate the health and safety policies, rules, and procedures to all vendors and third party individuals having business on this project.

**Safety Training Roster, Appendix D** or equivalent shall be used to document safety training on this project

TOPIC	WHO NEEDS TRAINING	WHAT TRAINING IS NEEDED	
Project Specific Safety Orientation	Subcontractor's first- line, supervision, and MCC workers entering the project	Safety rules and procedures contained in the Safety & Health Management Program (SHMP), site-specific emergency action plan, each worker's responsibilities and disciplinary program.	
Hazard Communication	All workers entering the project	Hazard Communication Basic Training (Refer to Hazard Communication Program in this SHMP)	
Hazardous Chemical or Substance	Workers exposed to a hazardous chemical or substance	Specific Hazard Communication Training (Refer to Hazard Communication Program in this SHMP)	
Respiratory Protection	Workers required to wear respiratory protection, including common dust masks	OSHA 29 CFR 1910.134 or 1926.103	
Fall Protection	Any worker who might be exposed to a fall hazard	<ul> <li>The nature of fall hazards</li> <li>Procedures for erecting, disassembling, maintaining and inspecting fall protection systems</li> <li>Use and operation of: guardrail systems, personal fall arrest systems, safety net systems, warning line systems, safety monitoring systems, controlled access zones and other protection when used</li> <li>Procedures for handling equipment and erection of overhead protection</li> <li>Fall protection standards</li> </ul>	
PPE	Workers using PPE	Refer to section on PPE or regulatory standards	
Forklifts	Operators of powered industrial trucks	<ul> <li>Types of trucks operated</li> <li>Hazards of the workplace</li> <li>Hands-on performance evaluation</li> </ul>	

TOPIC	WHO NEEDS TRAINING	WHAT TRAINING IS NEEDED
Confined Spaces	Any worker Attending to, Supervising, entering or working within a confined space	<ul><li>Hazards of the space</li><li>Duties of entrants</li><li>Air monitoring</li></ul>
Permit-Required Confined Spaces	Any worker Attending to, Supervising, entering or working within a confined space	<ul> <li>Hazards of the space</li> <li>Duties of entrants, attendants, supervisors</li> <li>Measures used to eliminate or control hazards</li> <li>Air monitoring requirements</li> <li>Emergency procedures/rescue equipment</li> <li>Communications</li> <li>Permitting procedure</li> <li>PPE</li> </ul>
Excavations/ Trenches	Workers entering or working within an excavation/trench	<ul> <li>Hazards of the space (slides, cave-ins, water accumulation, etc.)</li> <li>Safe means of access/egress</li> <li>Proper support system procedures (erection, maintenance, disassembly and inspection)</li> </ul>
Ladders	Workers working on or using ladders	<ul> <li>Procedures to be followed</li> <li>The safe use of ladders</li> <li>Hazards related to ladders and stairwell use</li> </ul>
Arc & Gas Welding & Cutting	Workers conducting arc & gas welding and/or cutting	<ul> <li>What to do with unattended machines and electrode holders</li> <li>Operations around water</li> <li>Shielding arc welding</li> <li>The safe use of fuel gas</li> </ul>
Hot Work	Workers conducting hot work activities	<ul> <li>Hazards of the area</li> <li>Permits</li> <li>Duties of Fire Watch</li> <li>How to use a fire extinguisher</li> </ul>
Scaffolding	Workers working from scaffolding	<ul> <li>The nature of any known hazards</li> <li>Proper erection, maintenance and disassembly of fall protection systems</li> <li>Falling object protection</li> <li>Material/equipment handling from scaffold</li> <li>Maximum load-carrying capacity</li> <li>Scaffold tagging system</li> <li>Access and egress</li> </ul>
Electrical	Workers working on or around electrical equipment	<ul> <li>Assured equipment grounding conductor program</li> <li>General electrical work rules</li> </ul>

## III. PROJECT SPECIFIC SAFE WORK REQUIREMENTS

The project specific safe work requirements are the minimum requirements for this project. The purpose of these requirements is to ensure an Injury Free Environment and compliance of regulatory standards and regulations. MORGAN CONSTRUCTION believes by concentrating on four main focus areas, incidents and near misses could be reduced. Those four main areas are personal protective equipment, housekeeping, fall protection and ladders.

NOTE: Project Specific Safe Work Requirement's topics are addressed below alphabetically. See table of contents for specific topic(s) and page number(s)

## **ASBESTOS CONTAINING MATERIAL (ACM)**

The following requirements are the minimum requirements that shall be followed prior to demolition or renovation if Asbestos Containing Materials (ACM's) are found to be present at the project site:

The Project Manager shall notify the State Health and Environmental Department at least ten (10) working days before demolition or renovation activities begin, even if no asbestos is present. Application for each state can be found on-line. The Abatement Contractor shall also give proper notification to the State prior to asbestos abatement activities. (Superintendent must verify this has been completed).

All Asbestos Containing Materials shall be abated by an experienced, insured and licensed abatement contractor qualified to handle and properly dispose of ACM's. Typically this contractor will be hired by the client.

Prior to any Class I asbestos removal work (Class I asbestos work means activities involving the removal of thermal insulation and surfacing or presumed surfacing ACM removal work. This includes but is not limited to insulation on pipes, tanks, ducts, plaster on ceilings, and fireproofing materials). The abatement contractor shall provide an Exposure Assessment to MORGAN CONSTRUCTION and at a minimum address the following:

- Notification to the State
- Physical description of the work area
- A description of the approximate amount of material to be removed
- A schedule for turning off and sealing existing ventilation systems
- A description of PPE to be worn by employees
- A description of work practices to be observed by employees
- A description of the exhaust ventilation systems to be used and how they are to be tested
- An air monitoring plan
- A description of the method to be used to transport waste materials and location of dump site

Prior to any Class I or II asbestos removal work (Class II asbestos work means activities involving the removal of ACM which is not thermal systems insulation or surfacing material. This includes, but is not limited to wallboard, floor tile and sheeting, roofing and siding shingles and construction mastic); the abatement contractor shall:

1. Demarcate each location where a regulated area is required to be established by posting warning signs bearing the following information: "Danger Asbestos Cancer and Lung Disease Hazard Authorized Personnel Only".

- Conduct an "Initial Exposure Assessment" by a competent person to insure employees
  will not be exposed to an airborne concentration of asbestos in excess of 0.1 fibers per
  cubic centimeter of air as an eight hour time-weighted average.
- 3. Provide "Engineering Controls" including:
  - Barriers over openings to the regulated areas
  - Flooring or its backing shall not be sanded
  - Vacuum cleaners equipped with HEPA filters to clean floors, disposable dust bags, and metal floor tool (no brush) shall be used to clean floors
  - Dry sweeping or shoveling is prohibited
  - Wet methods or wetting agents
  - Tiles shall be removed intact, unless the subcontractor can demonstrate that intact removal is not possible
  - Prompt clean-up and disposal of waste
  - Ventilation of regulated areas, respiratory protection and enclosure or isolation of processes producing asbestos dust

#### **BLASTING**

When applicable at this project, the following requirements are the minimum requirements that shall be followed prior to any blasting work activities:

The transporting, handling, storing, and use of explosives, blasting agents and blasting equipment shall be directed and supervised by a licensed contractor. The licensed contractor shall designate a person knowledgeable and with proven experience and ability in blasting operations as their on-site blaster.

All personnel who participate in blasting operations shall receive initial training in basic explosives safety. Individuals shall receive additional training in explosives safety commensurate with their assigned responsibilities.

Prior to the use, storage or handling of explosives, a job-specific blasting plan shall be prepared by a licensed contractor in compliance with OSHA-Subpart U, 1926.900-914 and be submitted to MORGAN CONSTRUCTION'S Project Manager for review approval at least one week in advance of the Pre-Blast Property Owner Notification start date. Homeowner notification letters shall be sent out and inspections or surveys completed prior to blasting. The job-specific Blasting Plan shall be site-specific and shall at minimum address the following:

- Pre-blast notification and inspection procedures
- Designation of a qualified individual as the Blaster who has authority over all actions and operations related to blasting. List the names, qualifications, and detailed responsibilities for all personnel involved with the blasting or who will otherwise be responsible for transporting, handling or storing the explosives. List all incidental personnel and other personnel authorized to be within the danger zone during blasting operations
- Dates and location of blasting
- Means to control fly rock including depth of overburden
- Type and quantity of explosives and detonating or initiating devices to be used at the site. A inventory of explosives and blasting agents stored at the site shall be maintained

- Means of transporting explosives and provisions for storing and securing explosives on site
- Obtaining all applicable permits and licenses
- Hazard and Risk Assessment for this blasting site to help define blasting hazards and environmental impacts. Incorporate all reasonable measures into the blasting plan to eliminate negative impacts on people, property and the environment
- Procedures for the Pre-blast Survey including property inspections, seismographs and outline of pre-blast check list
- Minimum acceptable weather and static conditions and considerations for stray radio frequency energy and electrical currents where electrical initiation will be used
- Standard procedures for transporting, handling, setting, wiring and firing explosive charges including drill pattern
- List of required PPE
- Minimum standoff distances/means for clearing/controlling access to blast danger areas
- Procedures for handling misfires and other unusual occurrences
- Means of annunciation and timing for pre-blast notification and "all clear" after blast

In addition to the Blasting Plan, the licensed contractor will develop an "Emergency Action Plan", which shall include:

- Phone numbers of local emergency response organizations (rescue, ambulance, fire department, police)
- Location and phone number of nearest medical services facility
- Actions to be taken when a person is injured
- A copy of a material safety data sheet (MSDS) for each explosive or other hazardous material expected to be used
- Personnel not listed on the blasting plan shall not be allowed on site without approval of the blast officer.
- All personnel shall receive a safety briefing by the Lead Blaster prior to entering the blast site. A roster shall be maintained by the blasting contractor of all personnel within the blast area
- A copy of the blasting plan shall be maintained at the blasting site(s) and office locations

#### **CONCRETE CONSTRUCTION**

All vertical and horizontal rebar, form stakes, metal and/or plastic conduit, and/or small pipe stub-ups will be protected with approved caps or other industry accepted alternatives to protect against impalement and injury.

Workers that will operate vibrators pump nozzles, and concrete buckets will wear appropriate eye and foot protection. Refer to eye protection in the Personal Protective Equipment (PPE) section. It is highly recommended that long sleeve shirts be worn to protect against exposure of concrete to the bare skin and the possibility of concrete burn and contact dermatitis.

Workers engaged in vertical rebar assembly shall comply with the six-foot fall protection standard. Positioning devices alone are not approved fall protection but can be used in conjunction with personal fall protection equipment.

Walkways along form walls will be constructed in accordance with OSHA scaffold and fall protection standards.

Pre-fabricated forms and form making material will be stacked neatly at all times. When stripping concrete forms, all material will be immediately removed and stacked in an orderly manner. Forming material or debris will not block walkways and aisles. Subcontractor will remove rebar, tie-wire and other debris from the work area daily.

No employee is permitted to ride a concrete bucket.

Refer to the Silica section prior to saw cutting operations

Ensure that reinforcing steel and forms for walls, piers, columns, stairs and similar vertical structures are adequately supported to prevent overturning and collapse and are designed and installed under the supervision of a qualified person.

Ensure that uncoiled wire mesh is adequately secured to prevent recoiling.

Equipment buckets are to have a discharge device that an employee can operate without being exposed to the load and buckets with safety devices to prevent premature or accidental dumping, and ensure that the release is self-closing.

Follow safe rigging practices when handling concrete buckets.

When using bull floats, inspect the area to ensure there is no energized equipment or power lines nearby that the handles could touch.

Concrete buggy handles must not extend beyond the wheels on either side of the buggy.

Rotating-type, powered concrete trowels shall be equipped with dead-man controls that automatically shut down the equipment when the operator's hands are removed from the controls.

Finishers shall wear kneepads and impervious gloves when finishing concrete by hand.

#### **CONFINED SPACE**

Workers may be required to work in an area that is defined as a confined space. A confined space is any space large enough and so configured that a person can bodily enter and perform work; has limited openings for entry and exit; and was not designed for continuous human occupancy. This may also be referred to as a Non Permit Required Confined Space. A Permit Required Confined Space meets this criterion and has a potentially uncontrollable hazard.

Permit required confined spaces may include, but are not limited to:

- Storage tanks
- Excavations > 4' in depth
- Ventilation and exhaust ducts
- Sewers & Manholes

- Underground vaults and utility tunnels
- Pipelines
- Pits, tubs & vaults > 4' in depth

All spaces shall be considered Permit required unless the contractor can prove otherwise. Contact the Project Superintendent prior to any confined space entry work. No contractor will allow a worker to enter or work in any space that meets the definition of a confined space without developing a detailed **Confined Space Entry Permit - Appendix I** and written entry plan. Refer to OSHA 29 CFR 1910.146 for further direction. This Permit shall be filled out for all entries and will provide the documentation necessary to reclassify the space as Non Permit Required where possible. Prior to working in any confined space, a competent person will determine what hazards exist. If the confined space contains or, respect to atmospheric hazards, has the potential to contain any hazards capable of causing death or serious physical harm, the employer shall have the atmosphere tested for oxygen deficiency, toxic gases or

vapors, and combustible or flammable gases or vapors. The Confined Space Entry Plan and initial testing results will be submitted to MORGAN CONSTRUCTION's Project Superintendent for review and issuance of a Confined Space Entry Permit.

Prior to any worker entering a confined space, the employee will be trained by the employer in the:

- Contents of the Confined Space Entry Plan
- Known hazards in the confined space
- Emergency procedures in case of an emergency
- Correct use of personal protective equipment when required
- Hot Work Permit if required
- Atmosphere testing requirements
- Fall protection if required

## **CRANES AND CRIBBING**

#### **Mobile Cranes**

No crane will be brought onto the project without a current annual inspection by a qualified person or third party and applicable load charts. A copy of the current annual inspection will remain in the crane at all times. MORGAN CONSTRUCTION's Project Superintendent shall verify applicable load charts are available and the annual inspection is current

Crane operators will perform daily, monthly and annual inspections in accordance with the manufacturer's requirements and make them available upon request.

Beginning on November 14, 2014, crane operators on this project will be certified by a nationally recognized crane operator certification organization. Otherwise, employer must ensure that the employee has been properly trained and evaluated and is competent to operate the equipment safely.

All cranes will be equipped with anti-two block devices on both the load and whip lines.

All cranes shall be equipped with adequate swing radius protection.

Use of crane baskets will not be allowed on this project.

Subcontractor supervision will review the safe operations of the crane with each operator. The crane operator shall be responsible to inspect and familiarize himself with the location(s) of materials to be loaded on existing structures.

The crane manufacturer's operating manual, instructions and load charts for the specific crane configuration will be used to determine the safe operation of that crane. The manufacturer develops load charts under ideal conditions not accounting for things like wind loading, snow or ice, out of level conditions, inadequate soil compaction, age of equipment etc.

Therefore, the following guidelines should be adhered to:

- 1. The ground where the crane will be setup must be solid and able to support the weight of the loaded crane. Determine if underground utilities exist near where the crane will be set up.
- 2. Ensure the crane is level 360° and maintained during operation.
- 3. Extend outriggers fully or set per the manufacturer's recommendation for a particular lift configuration. Weight must be off the tires.

- 4. Before a lift, determine the load weight, radius and load capacity. Crane capacity charts are the ideal gross capacity of the crane at certain boom lengths, boom angles and load radius from the crane center pin.
  - a. Deductions to the net capacity should be made per manufacturer's load chart or operating manual for attachments such as jibs (stowed or attached), headache balls, wind, less than ideal setups, etc. to determine the load that can be safely lifted.
  - b. Additional deductions to the net capacity are the weight of the crane's load block, rigging and amount of load line required to make the lift. Some manufacturers include the load line in their load charts but others like Manitowoc do not.
- 5. A qualified person designated by the subcontractor will determine the load weight. Refer to the shipping weight or have the equipment or machinery assembly weighed. Calculate all structural loads and determine the center of gravity.
- 6. Determine the radius from the center pin of the crane to the load using a steel ruler.
- 7. Determine the boom length, counterweight and crane configuration to determine the correct load chart required.
- 8. Position the hook over the "Center of Gravity" of the load before starting the lift.
- Distance from overhead electrical will be a minimum of ten feet. The higher the kV level the greater the distance. Refer to OSHA 29 CFR 1926 Subpart CC Table A for minimum clearance distances. When working near electrical sources (overhead lines or lighting), the crane should be grounded and a safety spotter required.

## **Outriggers - Blocking**

Cribbing or mats under outrigger pads should be of sufficient size and properly placed to ensure adequate soil bearing as required by the manufacturer and the following guidelines:

## **Outriggers—Blocking**

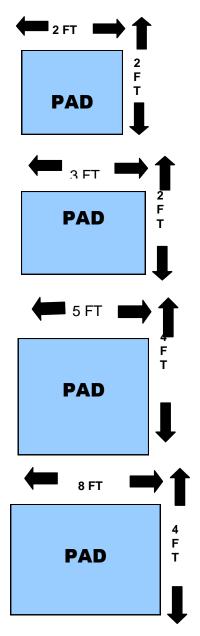
## **OUTRIGGER BLOCKING**

#### **RULE OF THUMB**

AREA = CRANE CAPACITY

5

**EXAMPLES:** 



#### DEMOLITION

♣ The Project Manager shall notify the State Health and Environmental Department at least ten (10) working days before demolition or renovation activities begin, even if no asbestos is present. Application for each state can be found on-line. The Abatement Contractor shall also give proper notification to the State prior to asbestos abatement activities. (Superintendent must verify this has been completed).

Prior to start of any demolition work, the contractor must ensure a competent person has performed a pre-demolition survey of the building or area to be demolished to determine the condition and location of utilities, whether hazardous materials exist, means and methods of performing the work, sequencing, etc. No work will commence until a written survey has been completed and submitted to MORGAN CONSTRUCTION.

Debris and material shall not be dropped through walls, floor holes, windows or other elevated work areas without the area below being barricaded and properly signed. Under no circumstances shall materials be dropped more than 20 feet without using a chute.

Debris chutes shall have a substantial gate at all elevated openings.

See Mandatory **Pre-Demolition Survey Appendix P** for pre-demolition guidelines.

## DRIVER AT WORK POLICY

Every employer owes a duty to its employees to ensure, so far as reasonably practicable, the safety health and welfare of its employees at work. This duty is expanded to include work undertaken "off-site".

Work undertaken "off-site" includes On-The-Road Activities such as pick up and delivery of materials as well as other driving for work activities. The risks associated with those activities shall be effectively managed by each employer. Many incidents happen due to inattention and distraction as well as failure to observe the traffic safety laws. Each employer must ensure that their employees use the road as safely as possible.

No person or employee is allowed to drive a vehicle from the project for an errand or other company business either in his/her vehicle or in a company owned vehicle prior to having received approval from our insurance agency, J. Smith Lanier. To receive approval, fax a copy of the person's driver's license to J. Smith Lanier (fax number: 423/267-8065). This process will require 2-3 working days.

#### **Driver Safety Rules:**

- a. All drivers must adhere to all vehicle safety guidelines and rules set forth by state and federal authorities.
- b. Motor Vehicle Record checks will be completed on all new drivers and all existing drivers on an annual basis.
- c. The driver and all occupants should wear seat belts. The driver is responsible for seeing that occupants adhere to this policy.
- d. Company owned vehicles are not to be used for personal purposes at any time.
- e. All drivers must obey posted speed limits and driver safety laws.
- f. The driver will be responsible for properly securing all cargo with tie down straps, rope, chains, etc.
- g. All vehicles should be locked when out of sight of driver.

- Vehicle security is a priority. It should be parked in prudent locations where it is well-lit and locked.
- i. Vehicles should not be left running while unattended.
- j. Carrying firearms in company vehicles are prohibited.
- k. Radar detectors in vehicles are prohibited.
- I. No duplicate keys should ever be made.
- m. Never fuel a vehicle with the motor running.
- n. Operation of a company vehicle while under the influence of intoxicating beverages or drugs is prohibited.
- o. All accidents involving a company vehicle, regardless of severity, should be reported to the operator's supervisor immediately.
- p. Cell phone usage is prohibited during operation of company vehicles.

Morgan Construction Company maintains non-owned and hired insurance. This coverage covers the company for liability brought about by the actions of an approved driver driving on Company business. This coverage <u>does not</u> cover the vehicle or the owner or driver. No vehicle is to be utilized for company business that is not properly insured. Below is suggested limits of liability:

Combined Single Limits (CSL) - \$300,000.00

or

Split Limits:

Bodily Injury/Occurrence: \$250,000.00

Bodily Injury/Policy Year \$500,000.00

Property Damage \$100,000.00

#### **ELECTRICAL**

All work performed on any energized electrical circuit, buss-bars, equipment, or panels shall be in accordance with electrical safety work practices as described in Chapter 1 of NFPA 70E.

Prior to "Permanent Power" being energized on the building, all electrical rooms and areas containing electrical equipment shall be made lockable. Access by employees shall be controlled by the Electrical Subcontractor's Superintendent and MORGAN CONSTRUCTION's Supervisors. Areas around the "energized equipment" will be barricaded with Red Danger Tape, by the Electrical Contractor, prior to electrical equipment covers being removed by the subcontractor's qualified person.

#### **Ground Fault Protection**

All 120-volt, single phase, 15 and 20 ampere receptacle outlets, which are not part of the permanent wiring of the building or structure shall have approved ground fault circuit interrupters (GFCI) for personnel protection.

All temporary cords will be the three wire type.

#### **Ground Fault Circuit Interrupters (GFCI)**

All cord sets and cord-plug electrical equipment, tools or appliances that are 120 volts will be connected to a ground fault circuit interrupter (GFCI). No cord set or cord-plug electrical

equipment, tool or appliance will be plugged directly into any permanent building or structural electrical system not equipped with a GFCI.

When the source of electricity is from a two-wire, single-phase portable or vehicle mounted generator rated not more than 5KW, a GFCI is not required, as long as the generator is insulated from the frame and all other grounded surfaces.

Each worker, after plugging in their tool and /or extension cord, shall test and reset the GFCI device being used to ensure it is working properly with each use. If the GFCI device is not functioning properly the worker will repeat the process until a properly working GFCI device is found. The worker will report any defective GFCI device to his supervisor.

#### Illumination

All general construction areas, indoors, corridors, exit ways, concrete placement, active storage areas shall be illuminates to not less than 5 Foot-Candles.

All lamps for general illumination, including light stringers and halogen lights, shall be protected from accidental breakage with guards or other means and shall be hung per manufacturer's specifications. 030Metal-case sockets shall be grounded.

#### **Inspection Program**

#### Before Each Use:

Each cord set, attachment cap, plug, and receptacle of cord sets, portable electrical equipment, tools or appliances connected by a cord and plug, will be visually inspected daily by workers for external damage, such as deformed or missing ground pins, insulation damage, frayed wires or indications of possible internal damage. Exceptions include cord sets and receptacles that are fixed to the permanent electrical system and are not exposed or damaged.

Any electrical equipment, tool, appliance or cord set that is damaged or defective will be immediately removed from service and tagged out as defective equipment for repair. A qualified electrician will repair tagged electrical items.

#### **General Electrical Rules**

All cord sets will be elevated above the work surface when practical.

Wire, nails or other conductive material will not be used to hang or attach cord sets or welding leads.

Cord sets that cross roadways will be protected from damage by vehicle and equipment traffic.

UL approved covers are required on all panels, load centers, pull boxes, etc... prior to energizing. Necessary steps will be taken to prevent unauthorized or unqualified workers access to energized electrical parts or equipment.

#### **EQUIPMENT AND VEHICLES**

All earthmoving equipment: scrapers, loaders, tractors, bulldozers, off-site trucks, graders and similar equipment shall be equipped with seat belts (except for equipment which does not have roll-over protection), an operating reverse signal alarm and an operating horn.

All rubber-tired, self propelled scrapers, rubber-tired front end loaders, rubber-tired dozers and motor graders will be equipped with rollover protective structures (ROPS).

Only company and/or delivery vehicles used for the sole purpose of conducting work tasks on-site are permitted in construction areas. The driver and all passengers of any vehicle will wear seat belts.

No equipment or vehicle will be used to transport personnel unless it is specifically designed to do so. This includes beds of pick up trucks.

Equipment operators are responsible to check their equipment daily to verify it is working properly.

As a minimum, each operator will check:

- Brakes
- Lights
- Backup alarm and Horn
- Hydraulic systems
- Steering mechanism

- Operating controls
- Mirrors
- Fire extinguisher
- Limit switches
- Leaks

Equipment operators will possess the required training, certification and licenses as required by law for the equipment that they are required to operate.

#### **EXCAVATION AND TRENCHING**

Prior to any disruption of ground, excavation or trenching on this project, the following will be performed:

- MORGAN CONSTRUCTION shall request locations for existing underground private utilities from the owner.
- Applicable Subcontractors shall notify public utility locating authorities and supply MORGAN CONSTRUCTION's project superintendent or safety manager with locate numbers and expiration dates.
- The sub-contractor will identify the competent person and submit qualifications for review and approval by MORGAN CONSTRUCTION.
- The competent person will analyze the soil of the work area to determine the condition and type of soil to ascertain proper sloping or shoring requirements.

During excavation or trenching operations on this project, the following requirements will be followed:

- All Excavations and trenches four feet or greater in depth where oxygen deficiencies (less than 19.5% oxygen) or hazardous atmosphere (contaminated soils) could reasonably exist, will be tested and evaluated for atmospheric hazards by a qualified person or testing firm chosen and paid for by the subcontractor. See confined space section for requirements. Trenches and excavations will be barricaded and signage posted at the work area.
- Trenches or excavations that are suspect of cave-in, as determined by a competent person or that are 5 feet or greater in depth will be protected by an adequate protective system such as sloping, benching or supporting systems (i.e. shoring, piling, trench boxes, etc.).
- Spoil piles and all other material will be placed a minimum of two (2) feet from the edges of all trenches or excavations.
- When excavation operations approach the estimated location of underground utilities, the exact location shall be determined by safe means.

- Adequate access, such as stairway, ladder or ramp shall be located in trench excavations that are 4 feet or more in depth so as to require no more than 25 feet of lateral travel for employees.
- The subcontractor's designated competent person will inspect excavations and trenches at the beginning of each day before work begins and when conditions change.
- A registered professional engineer must design all excavation over 20-feet in depth.

## FALL PREVENTION PROTECTION

MORGAN CONSTRUCTION, subcontractors, vendors, or other third party individuals will take all practical measures to eliminate, prevent, and control fall hazards. All work will be planned with the intent to eliminate identified fall hazards. Each employee on a walking/working surface (horizontal and vertical surfaces) with an unprotected side or edge which is 6 feet or more above a lower level shall be protected from falling. When a fall hazard has been identified and cannot be eliminated, then effective means of fall protection will be implemented.

Acceptable fall protection systems include the following:

- Guardrail systems
- Safety Netting
- Covers for Floor, Roof and Wall Openings
- Positioning Device Systems
- Protection from Falling Objects
- Personal Fall Arrest Systems

Workers exposed to fall hazards that cannot be eliminated will be <u>equipped</u>, "<u>trained</u>" in the <u>procedures to be followed</u> per OSHA 1926.503(a) (2) and <u>given periodic refresher training</u> in fall protection to minimize the adverse effects of accidental falls. <u>Fall protection training records shall</u> be maintained on the project for MCC employees and subcontractors.

Fall protection is mandatory for all trades, including but not limited to:

- Structural steel erection\*
- Decking Operations\*
- Re-bar assembly
- Concrete forming
- Pre-cast erection

- Masonry
- Carpentry
- Roofing
- Scaffold erection/disassembly (where feasible and doesn't create a greater hazard as determined by a competent person)

Workers may work from portable ladders without personal fall protection when the following criteria are met with no exception:

- Work can be performed without reaching (worker's belt buckle remains inside the area between the vertical side rails)
- Work does not involve working above or near an open side, leading edge, or shaft, even if the edge has a proper guardrail.

<sup>\*</sup>Refer to the steel erection section of this safety and health management program (SHMP) for the specific fall protection guidelines required when employees are in engaged in steel erection and decking operations.

Personal Fall Arrest Systems will consist of a full-body harness meeting ANSI requirements, double lanyard with shock absorbing device or retractable lifeline, locking snap hook and anchorage points meeting 29CFR 1926 OSHA regulations.

Workers will not tie off to a guardrail system, perimeter cable or wire rope handrail unless engineered for such use.

If Guardrail Systems are used they are to be constructed in accordance with OSHA 1926.502(b). Guardrail systems shall be capable of withstanding, without failing, a force of at least 200 lbs applied within 2" of the top edge, in any outward or downward direction, at any point along the top edge.

When wire rope is used to construct guardrail systems, at least 3/8" diameter cable shall be used with cable clamps as required by wire rope manufacturers and the top rail must be flagged every 6 feet with high-visibility material.

Subcontractors will submit all engineered documentation on horizontal lifelines to MORGAN CONSTRUCTION's Project Superintendent for review and approval. All horizontal lifelines will be designed, installed and used under the direct supervision of a qualified person, as part of a complete personal fall arrest system, which maintains a safety factor of at least two.

The use of personal fall arrest systems requires each employer to provide prompt rescue of employees in the event of a fall or shall assure that employees are able to rescue themselves.

Lanyards will not be tied back to themselves unless the lanyard is specifically manufactured to tie back to itself.

Floor openings 2-inches or greater and all wall openings will be guarded or covered with an appropriate cover or guardrail. Floor covers will be secured to the floor to prevent easy removal. The floor or wall cover will be properly marked with a Danger sign stating, "COVER-DO NOT REMOVE".

<u>Protection from falling objects</u>: elevated work such as masonry and roofing, will address protection from falling objects if work is permitted below. Materials should not be stored within 4 feet of a working edge or roof edge, except for masonry and mortar.

### FIRE PROTECTION AND PREVENTION PROGRAM

#### **Fire Protection**

Temporary fire protection measures such as fire extinguishers, temporary hose lines, and temporary or permanent water supply are required during construction.

Fire extinguishers, rated not less than 2A, will be:

- Conspicuously located for each 3,000 sq. ft. of the building, travel distance shall not exceed 100 feet and should be located on each floor
- Inspected periodically
- Placed within the immediate area of any welding/cutting operation or flammable liquid storage area (see flammable liquid storage and dispensing section below)
- A 10B rated extinguisher shall be provided within 50 feet of wherever more than 5 gallons of flammable or combustible liquids or 1 gallon of flammable gas are being used.

If a fire extinguisher is discharged for any purpose, it should be reported to MORGAN CONSTRUCTION's Project Superintendent.

Access to fire hydrants and extinguishers will be maintained at all times. Clear access to buildings and other structures will be maintained at all times.

#### **Fire Prevention**

Plastic tarps or covers (visqueen) used for any purpose inside where welding, cutting, or open flame is present will be made of fire retardant material.

Combustible refuse from construction operations will not be burned or dumped anywhere on the construction site. Such refuse will be removed at frequent intervals, as needed. Storage of large quantities of construction debris will be placed in metal dumpsters.

Storage of compressed gases will include:

- Valves, regulators and hoses removed with valve caps securely on.
- Secured upright at all times, including when transported in vehicles.
- Fuel and oxygen cylinders separated by a minimum of 20 feet.
- Empty cylinders stored separate from full cylinders; no cylinders in use.

Oily rags and waste are to be stored separately in metal containers fitted with self-closing lids. Trash and refuse must be placed in trash containers provided for this purpose.

#### Fire and Flammable Liquid Storage and Dispensing

## Flammable and Combustible Liquids will be stored, dispensed and used in accordance with OSHA and NFPA Requirements.

- When stored outside then they cannot be within 20 feet of any structure.
- Approved safety cans or DOT approved containers shall be used for handling flammable liquids in quantities of 5 gallons or less, except this shall not apply flammable liquid materials that are highly viscid (extremely hard to pour), which may be used and handled in original shipping containers.
- Stored in approved portable containers marked as to contents and ownership.
- Posted with "NO SMOKING" signs.
- Outside storage areas kept free of weeds and other combustible material.
- Storage of flammables will be in an enclosure away from open flame, heat, direct sun or other sources of ignition.

All storage tanks/drums will be placed in a berm or other secondary containment. Berms will be lined with minimum 6-mil plastic sheeting that is fuel resistant. PVC linings are not allowed.

Fuel and flammable liquid tanks, drums, or barrels will have the proper DOT placard and be labeled as to content.

All fuel storage tanks and compressed gas cylinders will be protected from vehicle traffic.

All fuel storage tank dispensing points shall be located away from storm drains and wetlands. The following is required:

- Portable 20 lb ABC fire extinguisher no closer than 25 feet or further than 75 feet from the fueling point
- No Smoking signs posted.
- Self-locking fuel nozzle prohibited
- Spill kit stored nearby
- Tanks will be grounded and when dispensing flammable liquids, the containers will be bonded

## **HAND AND POWER TOOLS**

All hand and power tools will be kept in good condition with regular maintenance. Hand and power tools are to be operated according to manufacturers' instructions and guidelines and the personal protective equipment (PPE) appropriate for the hand or power tool will be worn. See personal protective equipment (PPE) section.

Any tool found not in proper working order, without a guard or that develops a defect shall be removed from service and not used until properly repaired.

#### **Hand Tools**

- Impact tools such as chisels, wedges, etc. are not to have mushroomed heads
- Wooden handles will not be splintered or cracked
- Pocket knives will not be used for stripping wire

#### **Electric Tools**

- Never lift or carry a power tool by its cord
- Guards and safety switches will not be removed or made inoperative
- Electric tools must have a three-wire grounded cord unless it is double insulated

#### **Portable Abrasive Wheel Tools**

- Must be equipped with safety guards. Guards will not be removed
- Grinding disks and wheels will be checked to verify they are the correct one for the grinder and rpm.
- Grinding disc larger than 4" should be ring-tested before mounting to insure they are free of cracks and defects. Strike with the handle of a screw driver the sound of a non-damaged disc emits a tone, whereas a cracked wheel produces a dead sound.

#### **Pneumatic Tools**

- Air hoses ½ inch in diameter or greater will have a safety excess valve installed at the source of air
- Clips, whips or retainers are required at each air hose coupling and to prevent attachments from being ejected from the tool.
- Only the pneumatic nail guns requiring the muzzle to be pressed against the work surface to fire are allowed.
- Pneumatic nail guns shall be disconnected from the air supply when unattended.

#### **Powder Actuated Tools**

- Workers will be trained to operate a powder actuated tool and required to carry their training card at all times.
- The powder-actuated tool must not be able to fire until it is placed against the surface with a force of approximately 5lbs. or greater.
- Tools shall not be loaded until just prior to use. Loaded tools shall never be left unattended.

#### **HOT WORK**

Hot work activities include burning, welding, cutting, grinding or other operations that produce a flame or sparks.

The following precautionary measures will be taken when conducting Hot Work.

- Grating, openings, etc. will be completely covered in such a way to prevent sparks and slag from falling to a level below.
- Suitable fire extinguisher shall be maintained in the immediate area of work.
- No flammable or combustible material stored within 35 feet in any direction.
- Combustible/flammable materials that cannot be moved must be covered with fire blankets or other suitable material.
- When work is being performed on walls, floors or ceilings where heat transfer may induce a fire hazard the same precautions shall be taken on the other side.
- Additional worker(s) shall be designated for continuous fire watch and will be identified, trained, equipped, and remain for a minimum of one-half hour after hot work has ended.

Hot Work activities that are to be conducted in the vicinity of "Highly Hazardous Chemicals" Workers will be trained prior to performing any hot work in the following, as a minimum.

- A review of the work to be performed
- Precautions to be taken

- Emergency procedure in case of fire
- How to use the fire extinguisher correctly

#### **HOUSEKEEPING**

The MORGAN CONSTRUCTION policy on housekeeping is that all equipment, tools, or materials will be stored, stacked, located, placed, temporarily spotted or set up to prevent an incident or injury which could occur in the work area. The area will give the direct and obvious impression of a clean and orderly work place.

Project management, supervision, workers, vendors and third party persons will maintain all work locations in an orderly and clean manner at all times.

Mud and dirt tracked onto public streets or alleyways will be removed continuously during the workday.

When working next to an adjacent occupied space prevent airborne dust and odors from dispersing into atmosphere by means of dust control and temporary partitions. Seal doors with tape and block off and seal air vents. Provide tack mat or dust mat at entrance and exit as necessary.

The following are the minimum housekeeping requirements for this project:

- Access walkways, roadways, and fire lanes will not be blocked with material, tools, ladders, or scaffolds.
- Shackles, slings, chokers, ladders, and safety equipment will be removed from the work area when not needed and properly stored.
- Trash containers will be placed at appropriate locations.
- All nails will be removed from scrap and form lumber and swept up daily.
- Rubbish, trash, and debris will be removed from the work area daily.

At all locations where drinking water is dispensed, an adequate trash container will be located for disposal of used drinking cups.

#### LADDERS AND STAIRWAYS

## Fall protection while working from a ladder is addressed in the previous section on fall protection.

Any stairways having four or more risers or that rise more than 30 inches, shall be equipped with a stair rail system 36 inches high on each unprotected side.

Except during their construction, metal pan stairs shall not be used until the pans are filled with concrete or fitted with wood to prevent a tripping hazard.

Ladders, stairs or ramps will be provided where there is a change in elevation of 19 inches or greater.

Workers will be "trained" on the safe use of ladders, as necessary. The training shall enable each employee to recognize hazards related to ladders and train the employee in the procedures to be followed to minimize these hazards.

Employees shall use two hands to grasp the ladder when progressing up or down the ladder. An employee shall not carry any object or load that could cause the employee to lose balance or fall.

Ladders will extend past the bearing point no less than 36 inches.

Ladder landings shall remain clear of all obstacles and obstructions to allow easy access on and off the ladder.

Ladders placed in doorways, passageway or driveways, shall be secured to prevent accidental displacement, or a barricade shall be used to keep activities or traffic away from the ladder.

Each contractor is required to inspect ladders daily prior to use. Ladders with broken or bent rungs, steps or side rails will be immediately destroyed and removed from the project.

When ladders are used to access upper levels, they must be secured to prevent displacement.

All ladders will be heavy-duty type with a minimum capacity rating of 250 lbs.

#### **Stepladders**

Stepladders will not be used as straight ladders.

Stepladders will only be used with the spreaders fully extended and spreader bar locked in place.

Workers will not stand on the top or top step of a stepladder.

Workers will not straddle the top of a stepladder or stand on the back of a stepladder unless designed for this use.

#### Straight/Extension Ladders

Ladders will be set up so the horizontal distance at the bottom is not less than ¼ of the vertical distance to the bearing point.

Workers will not stand on the top three rungs of a ladder. No worker will work when his/her knees are above the top of the ladder.

All straight ladders will have non-skid feet at the base.

#### **Job Made Ladders**

Job-made ladders shall be constructed for intended use. If a ladder is to provide the only means of access or exit from a working area for 25 or more employees, or simultaneous two-way traffic is expected, a double cleat ladder shall be installed.

Job-made ladders will be constructed in accordance with OSHA and ANSI standards.

#### **LASERS**

Precautions will be taken to ensure all workers that will use a laser are trained in proper use and the hazards associated with lasers.

No laser equipment will be used that does not contain a label, indicating make, maximum output, and beam spread. Workers using lasers with exposure to direct or reflected laser light greater than 0.005 watts (5milliwatts) exists, shall be provided with appropriate eye protection.

Whenever a laser is not in use, shutters or caps will be will be used and the laser turned off.

When performing internal alignment, lasers will only be guided by mechanical or electronic means.

No laser beam will be directed at any worker.

When environmental conditions exist such as rain, fog, snow or extremely dusty conditions, use of lasers shall be prohibited where practicable; in any event, employees shall be kept out of the range of area of source and target during such weather events.

## LEAD BASED PAINT (LBP)

When applicable to the Project Site, the following requirements are the minimum requirements that shall be followed prior to any demolition or renovation activities.

When welding, cutting, burning, grinding, chipping, abrasive blasting or rivet busting on painted or coated surfaces, a pre-assessment will be required to determine if the surface(s) contain lead-based paint. If sampling results for lead-based paint are positive for 0.02% lead by weight, OSHA Standard 29 CFR 1926.62 will be followed.

An initial hazard assessment is required by "any employer" who has operations associated with the demolition, removal, encapsulation or cutting of ACM's as covered by OSHA 29CFR 1926.62 and will be performed to determine worker exposure levels. The assessment will involve personal sampling of a representative group of workers performing different tasks unless historical data is available. During the initial exposure assessment, workers will wear protective clothing and the proper respiratory protection until the results of the assessment are known.

Copies of sampling results will be made available to MORGAN CONSTRUCTION. Area sampling of a work area will not to be used for determining worker exposure levels.

If sampling results indicate the exposure limits are above 30  $\mu$ g/m³ (micrograms per cubic feet of air) but below 50  $\mu$ g/m³, the following are required:

- Written compliance plan
- Personal monitoring
- Hazard communication training for lead

If sampling results are above 50 µg/m<sup>3</sup>, the following are required:

- Written compliance plan
- Engineering controls
- Respiratory protection
- Protective clothing
- Medical surveillance

- Clean change rooms and showers
- Clean lunchrooms
- Warning signs
- Training

Each worker is to be notified in writing of their blood and/or personal monitoring results within five working days after the results are known.

Barricades, enclosures, track mats and/or ventilation protocols shall be provided to ensure the protection of the other workers, members of the public or building occupants.

## LOCKOUT/TAGOUT

When applicable, MORGAN CONSTRUCTION's Superintendent and the electrical subcontractor superintendent will establish a lockout/tag-out procedure to ensure that workers are not exposed to the hazards from moving machinery or equipment and those hazards posed by an energized source (pneumatic, steam, hydraulic, chemical, etc.). Refer to **Lockout/Tag-Out List Appendix O.** 

Safety locks and tags will be applied to all circuits, switches, valves, isolating devices and any other energy sources to ensure equipment, machinery, or processes that have been considered functioning, charged or could otherwise be operable have been rendered non-operational or de-energized.

No person will remove another worker's safety lock or attempt to energize any piece of equipment, machinery or process that has been locked out and tagged.

#### **De-Energizing Equipment and Processes**

A MORGAN CONSTRUCTION representative will coordinate with the operating facility representative (if applicable) and electrical supervisor when any energized equipment or process must be de-energized.

The MORGAN CONSTRUCTION representative, operating facility representative and electrical supervisor will identify all circuits and sources of energy that require locking and tagging to make the equipment or process inoperable. The MORGAN CONSTRUCTION representative, operating facility representative and electrical superintendent will notify their personnel and other subcontractor personnel that may be affected by the de-energizing. The first-line supervisor overseeing the work will provide safety locks to lockout the piece of equipment or process.

The following procedures shall be followed:

- 1. The operating facility representative and/or electrical supervisor and first-line supervisor(s) will make certain the operating controls to the equipment, machinery or process are in the "off" or "neutral" position.
- 2. Once the operating controls are in the "off" or "neutral" position, the first line supervisor overseeing the work will place a safety lock and tag on the energy isolating device(s).
- 3. The first-line supervisor will apply their safety lock to each of the isolating devices that provides power or other energy to the machinery, equipment or process. The first-line supervisor will also apply a visible warning tag. The tag will contain the name of the first-line supervisor, company, date and phone number.

4. Prior to any work being performed on the piece of equipment, machinery, or process, the operating facility representative and first-line supervisor will verify that it is inoperable. The operating facility representative/first-line supervisor will attempt to operate the piece of equipment machinery, or process. After verifying it is inoperable, the switch will be returned to the "off" or "neutral" position.

Stored or residual energy will be dissipated by whatever means are necessary. Capacitors will be discharged and high capacitance elements short-circuited and grounded by a qualified electrician.

#### **Re-Energizing Equipment and Processes**

When the required work is completed and the machinery, equipment or process can be returned to service, the first-line supervisor will contact the operating facility representative to notify of completed work operations.

The first-line supervisor will make a visual inspection of the equipment, machinery, or process to insure all workers have completed their work and equipment, tools and other material is removed from the area.

After confirming all workers, materials, tools and other equipment are out of the area, the operating controls are still in the "off" or "neutral" position, the first-line supervisor will remove their safety lock and tag from each of the isolating devices.

The management representative will notify the operating facility representative and on-site personnel that the equipment, machinery or process is clear to be energized.

## **De-Energizing Fluid Processes**

Any vessel, pipe, hose or process that contains a hazardous liquid or gas will be purged with nitrogen or flushed before work begins as described in the pre task plan for the activity.

A management representative will coordinate with operating facility representative when any fluid process requires de-energizing.

The management representative, operating facility representative and first-line supervisor will identify all valves or gates and where blanks are required to be installed to isolate the work area. The operating facility representative and first-line supervisor will notify their personnel that may be affected by the de-energizing.

The first-line supervisor overseeing the work will provide sufficient safety locks and tags to completely isolate the system.

The operating facility representative and first-line supervisor will verify that each valve or gate is in the "off", "neutral" or closed position.

Once the valve or gate is in the "off", "neutral" or closed position, the first-line supervisor will place a safety lock on each valve or gate first. The first-line supervisor will also apply a visible warning tag. The tag will contain the name of the first-line supervisor, company, date and phone number.

Prior to commencing work, the operating facility representative and first-line supervisor will verify the system and all piping, hoses, valves and processes are de-energized and that any stored energy is dissipated or restrained.

Welded valve connections should have the valve handles removed and the stem tagged "DO NOT OPERATE". All other valves and isolating devices must be physically prohibited from being operated.

Hydraulic and pneumatic equipment or machinery will be blocked to prevent movement.

#### **Re-Energizing Fluid Processes**

When the required work is completed and the system can be returned to service, the first-line supervisor will contact the operating facility representative to notify of completed work operations.

The first-line supervisor will make a visual inspection of the area to ensure all workers; equipment, tools and materials are removed from the area.

After confirming all workers, equipment, tools and materials are removed from the area, the valves and gates are in the "off", "neutral" or "closed" position, and each worker has removed their safety lock and tag, the first-line supervisor will remove their safety lock and tag from each of the isolating devices.

The management representative will notify the operating facility representative and on-site personnel that the system is ready to be energized.

#### **MAINTENANCE AND PROTECTION OF TRAFFIC**

There will be no temporary blocking or occupying of any street or driveway without prior approval of MORGAN CONSTRUCTION and local authorities.

When it becomes necessary to temporarily close a public or private street or alley, a traffic control plan is required showing how the closure will occur and submitted to MORGAN CONSTRUCTION for review unless already provided in the project's plans. Refer to the Manual of Uniform Traffic Control Devices (MUTCD) Part VI when developing a traffic control plan.

At a minimum, the written Traffic Control Plan will contain:

- Time the street(s) will be required to be closed.
- Detail drawing showing temporary signage, tapers, etc.
- Detail plan illustrating detour routes for traffic impacted by the closed streets.

All workers and supervision will wear high- visibility attire in accordance with the ANSI reflective requirements.

Workers assigned as flagmen will be trained as recommended in the Manual of Uniform Traffic Control Devices and state DOT. Trained flagmen are required to direct all construction traffic entering and leaving the project site.

Work that fails to follow the traffic control plan or occupies a city street or sidewalk without authorization by MORGAN CONSTRUCTION and/or local authorities will have the work stopped.

#### **MASONRY CONSTRUCTION**

A Limited Access Zone is required to be in place on the un-scaffold side of the wall prior to the construction of any masonry wall.

The limited access zone shall be equal to the height of the wall plus 4', restricted to entry by employees actively engaged in constructing the wall (no other employees are permitted) and remain in place until wall is supported from overturning.

Masonry walls over eight feet (8') in height shall be adequately braced to prevent collapse and remain in place until permanent support is in place.

#### **MOLD CONTROL**

Necessary steps will be taken to prevent the formation of mold from occurring in the work and storage areas. Mold will occur when there is water and a source of nutrient (i.e. wall board, wood and/or other building material).

Work will be planned to:

#### Prevent moisture accumulation

Double check points where moisture may enter:

- Doors
- Windows
- Flashings and caulking
- Waterproof membranes (proper lapping at joints and corners
- Roofing systems and penetrations

#### **Properly store material**

- Dry location
- Off the ground
- Loose tarps or sheets to allow air flow

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

All MORGAN CONSTRUCTION employees, visitors, subcontractors, vendors, and third party individuals will at a minimum wear the following personal protective equipment without exception while on this project (except in office and lunch areas): Head protection, work boots, long trousers and shirts with sleeves shall be worn by all workers. High heels or open toe shoes are not allowed on site – feet must be concealed at all times.

#### **Head Protection**

Hard hats will be worn at all times on this project; in addition the following rules apply:

- Hard hats will be worn in accordance with manufacturer requirements.
- Hardhats that have a manufacturer date of five years or greater will not be used on this
  project
- Meets ANSI Z89.1 requirements

#### **Eye and Face Protection**

Eye and Face Protection Safety Glasses with side-shields that meet ANSI Z87 criteria are to be worn when drilling, chipping or sawing. Workers with prescription glasses must meet ANSI Z87 requirements or will be required to wear over the glasses (OTG) safety eyewear. Dark tinted safety glasses cannot be worn inside of any building on the project site.

The following eye/face protective equipment must be used when performing the following work activities:

Activity	Safety Equipment
Welding	Welding Hood or Welding Goggles
Burning	Burning or Welding Goggles
Grinding	Safety Glasses. Face Shield for severe exposure
Drilling	Goggles or Safety Glasses
Reaming	Face Shield and safety glasses
Chemical Handling	Goggles and Face Shield
Chipping	Goggles or Safety Glasses
Sawing	Goggles and Safety Glasses
Concrete Pouring	Safety Glasses

#### **Foot Protection**

Sturdy work boots that are in good condition must be worn (heal and sole will not show excessive wear). Tennis shoes, sandals, or other street-type shoes are not allowed, even if they have steel toes. Safety toe foot protection is encouraged to be worn.

### **High Visibility Attire**

Every MORGAN CONSTRUCTION employee will wear high-visibility attire at all times. ANSI reflectivity requirements must be complied with when working in traffic and/or at night. Subcontractor employees are encouraged to wear high-visibility attire.

#### **Work Attire**

Shirts will have a minimum sleeve length of four (4) inches. Tank tops and cut-off shirts are not permitted.

Long trousers are required that fit properly around the waist and ankles. Trousers that are worn low on the hips or thigh are not allowed. The length of the trouser will be such as to not present a tripping hazard. Trousers shall be in good condition. Shorts are not permitted,

#### **Respiratory Protection**

A competent person will determine if a hazard does exist, requiring respiratory protection prior to start of work. Written documentation supporting this hazard assessment will be made available to MORGAN CONSTRUCTION upon request.

Whenever respiratory protection is deemed required by breathing air contaminated with harmful dusts, fogs, fumes, mists, gasses, smokes, sprays or vapors or requested by a worker on this project, the requirements outlined in OSHA 29 CFR 1926.103 will be followed.

#### **Hearing Protection**

Approved hearing protection will be worn while working with or around high-noise level producing machines, tools, or equipment. Employees shall be equipped with hearing protection by their employers and shall carry them at all times. When employees are subject to sound levels exceeding those in Table D-2 below, ear protective devices shall be used to reduce

sound levels within the table below. A good rule to follow is: When you must raise your voice to be heard, you need hearing protection.

Table D-2

Duration per day, hours	Sound Level dba Slow Response
8	90
6	92
4	95
3	97
2	100
1 ½	102
1	105
1/2	110
1/4 or less	115

Impulsive Or Impact Noise						
Equipment or tools	Sound Level Created					
Pneumatic chip hammer	103-113					
Jack hammer	102-111					
Concrete joint cutter	99-102					
Chop saw	88-102					
Stud welder	101					
Bulldozer	93-95					
Crane	90-96					
Hammer	87-95					
Backhoe	84-93					
Above hearing exposure based on an 8 hour exposure						

Exposure to impulsive or impact noise should not exceed 140dB noise level.

#### **Hand Protection**

Workers are encouraged to wear gloves at all times when handling materials to prevent hand and finger injuries. Each employer's competent person shall assist in recommending the correct glove for the task.

#### **Additional Protections**

MORGAN CONSTRUCTION may require workers to wear additional personal protective equipment to reduce the likelihood of a work related injury or illness.

#### **PRECAST CONCRETE**

When applicable to this site, the following requirements are the minimum requirements that shall be followed prior to any Precast Concrete work activities:

A site specific safety plan shall be submitted for approval to MORGAN CONSTRUCTION's Project Safety Director prior to the start of work. This shall include a fall protection plan specific to precast concrete erection of hollow core slabs. If the plan includes alternative measures of protection to the conventional use of guardrail systems, safety net systems or personal fall arrest systems it shall meet all OSHA 1926.502(k) standards including but not limited to the following criteria:

- Be prepared by a qualified person & developed specifically for this site
- Implementation of the plan shall be under the supervision of a competent person
- Include a written discussion of the alternate fall protection measures

- Identify each location where conventional fall protection cannot be used. These locations shall than be classified as "controlled access zones" and the contractor shall follow criteria in OSHA 1926.502(g)
- Include a safety monitoring system in conformance with OSHA 1926.502(h) that
  designates a competent person to monitor the safety of other employees. That person
  shall have no other responsibilities which would take the monitor's attention from the
  monitoring function
- Include a statement which supplies the name or other method of identification for each employee who is designated to work in the controlled access zone. No other employees may enter the controlled access zone
- A copy of the fall protection plan shall be maintained on site

A competent person is required who will be responsible for the inspection of all rigging and hardware and the supervision of the rigging of precast concrete members.

All precast deliveries will be coordinated with the MORGAN CONSTRUCTION project team to ensure maintenance of traffic in and around the project is maintained.

### **Unloading of Precast Concrete Members**

Prior to precast concrete members being unloaded, the following will occur:

- Inspect all rigging and hardware
- Ensure load is stable before releasing binders
- Ensure precast member is properly rigged

#### **Placement of Precast Concrete Members**

Precast members are not to be moved over other workers

Worker(s) involved in the setting or connecting of precast members will strictly adhere to the fall protection policy with no exception

No worker(s) will use their hands to reach under a precast member to adjust a shim or bearing pad

### RAMMED AGGREGATE PIERS (GEOPIERS)

When applicable to this site, the following requirements are the minimum requirements that shall be followed prior to any Rammed Aggregate Pier work activities:

No Rammed Aggregate Pier work will occur until verification that no underground utilities exists in those areas where piles will be driven. Fall protection will be required when personnel climb leads over six feet.

Equipment will meet the standards defined in the equipment chapter of this program and all applicable OSHA Construction standards.

Pits or excavations that aggregate are being rammed into shall be properly protected with barricades at the work area. Refer to temporary barricades section for specific guidelines.

### **RIGGING**

Riggers must be properly trained and qualified to rig material or equipment lifted by a crane.

Hooks will be equipped with safety latches. Safety latches on hooks that are disabled and/or shakeout ("pelican") hooks will not be used unless in compliance with Subpart R 29CFR1926.

All rigging equipment and spreader bars shall have legible identification markings identifying the safe working load. Rigging equipment and spreader bars not tagged or marked will be immediately removed from the project.

All rigging will be inspected daily before each shift by the qualified rigger.

#### **SCAFFOLDING**

All scaffolding used on this project will meet the requirements established in Subpart L of OSHA 29 CFR 1926.

Each sub-contractor using scaffolds must designate a scaffolding competent person to direct and supervise the erection and dismantling of all scaffolding on this project.

Scaffolding will be inspected daily by the competent person prior to use.

Workers required to work from scaffolding will receive "training" on the following:

- Nature of any known hazards, such as electrical, fall or falling objects.
- Correct method of erecting, maintaining, and disassembling fall protection systems.
- Falling object protection system.
- Proper handling of equipment or material on the scaffold.
- Maximum load-carrying capacity of the scaffold.
- Any other pertinent requirements about the scaffold.

During erection and dismantling of scaffolding, employees are required to wear fall protection where the installation and use of such protection is feasible and doesn't create a greater hazard.

If deviation from the fall protection procedure is required, the Site Superintendent and Project Manager will be required to approve.

Prior to erection, all scaffolding components shall be inspected for defects and any damaged components will not be used.

Scaffolding will be erected on a firm foundation/footing. Scaffold poles, legs, posts, frames and uprights will bear on metal base plates, and mud sills

Scaffold legs, poles, posts, frames and uprights will be pinned or locked to prevent uplift.

No scaffold will be enclosed unless a qualified engineer designs and approves the attachment to the adjacent structure

Scaffold platforms will be constructed with no space between the platform components. The space between the platform components and the scaffold uprights will not exceed one inch.

Because of special circumstances such as building a scaffold around a pipe, the space opening between the scaffold and the object/structure cannot exceed 9½ inches.

Scaffold planks shall extend past the horizontal support a minimum of six inches and not more than 12 inches unless cleated or restrained by hooks.

Scaffold plank will not be overlapped unless:

- Overlap occurs at a horizontal support
- The minimum planking overlap is 12 inches

Scaffold plank will be only scaffolding-grade planking.

Ladders or stairs must be used to access any scaffold platform that is more than two feet above or below the point of access. End frames of tubular welded scaffold can be used as a ladder if the following criteria are used:

- Specifically designed and constructed as ladder rungs
- Rung length of at least eight inches
- Spacing between rungs not to exceed 16 ¾ inches
- A walk through frame or gate is provided for access at each landing

No worker will climb up or down a scaffold using the cross bracing.

Workers working below scaffolding will also be protected from falling objects. Scaffold will be equipped with toe plates, screening, debris netting, catch platforms, or a canopy structure.

#### **Aerial Lifts**

The gates of aerial lifts will be properly engaged whenever the lift is in use.

Travel in aerial lifts is prohibited while platform is elevated

Aerial lifts shall not be used as material hoists unless the load is contained within the basket and meets the lift's rated capacity. The lift shall not be modified for hoisting material unless the manufacturer approves it in writing.

Each worker in an aerial lift shall be protected by a personal fall arrest system.

### **Suspended Scaffolds**

A competent person will evaluate suspended scaffolding and anchorages and suspension lines before each use.

Workers working from suspended scaffolding will wear a full body harness attached to an independent vertical lifeline.

When welding is required from swing stage scaffolding, the scaffold will be grounded and suspension ropes protected.

#### **Mobile Scaffolds**

All interior <u>or</u> dry wall scaffolding (Perry or Baker type scaffolding) shall be stabilized with outriggers or other means to prevent tipping during movement. All other built-up scaffolding will follow the four to one rule (height to base width ratio of more than 4:1 shall be restrained from tipping by guying, or tying or bracing).

Wheels on mobile scaffolding will be locked in place when workers are working from it (self propelling is prohibited).

### **SILICA**

Workers that perform any of the following work tasks must be protected from exposure to silica dust unless historical data or real time monitoring indicates it isn't necessary:

- Abrasive blasting using silica sand as a blasting medium or abrasive blasting of concrete regardless of the type of medium
- Sawing, hammering, drilling, grinding, or chipping of concrete, concrete products or masonry unit products
- Demolition of concrete or masonry structures
- Sanding of silica based drywall compounds
- Dry sweeping or compressed air blowing of concrete, masonry, rock or sand dust

Workers performing any of the above tasks who could be exposed to silica dust shall receive training from their employer regarding health hazards associated with silica.

Acceptable "Engineering Controls" will be used when exposure to silica is likely. Examples of acceptable engineering controls are:

- Substitute blasting medium for less hazardous material with less than 1% silica
- Maintain an effective dust control program
- Use internal blast-cleaning machines
- Wet saw
- Use water through the drill stem

When acceptable engineering controls cannot be used, workers will wear respiratory protection, protective coveralls and gloves. Respirators equipped with a NIOSH approval for the exposure level. Respirators must have at least a N95, R95, or P95 filter, per NIOSH recommendations

Note: The common dust mask is not permitted for silica protection.

Workers will also comply with these hygiene requirements when exposed to silica:

- No eating, drinking or using tobacco products in areas where silica dust is present.
- Always wash hands and face before eating, drinking or using tobacco products after working around silica dust.

### **STEEL ERECTION**

No steel erection will begin without a written **Notice to Commence Steel Erection - Appendix K** from MORGAN CONSTRUCTION's Project Manager or Superintendent.

Employees engaged in steel erection activity who are on a walking/working surface with an unprotected side or edge more than 15 feet above a lower level shall be protected from a fall hazards by use of guardrail system, personal fall arrest system, positioning device system or fall restraint systems, except as provided by paragraphs A & B below.

- A. <u>Connectors</u> shall be "protected" as described above from fall hazards of more than two stories or 30 feet above a lower level, whichever is less;
  - 1. Have completed connector training in accordance with OSHA Sec.1926.761; and
  - Be "provided", at heights over 15 and up to 30 feet above a lower level, with personal fall arrest system or fall restraint system and wear the equipment necessary to be able to be tied off.

- B. <u>Controlled Decking Zone (CDZ)</u> may be established in that area of the structure over 15 and up to 30 feet above a lower level where metal decking is initially being installed and forms the leading edge work area. In each CDZ the following shall apply;
  - 1. Each employee working at the leading edge in a CDZ shall be protected from fall hazards of more than two stories or 30 feet, whichever is less.
  - 2. Access to a CDZ shall be limited to only employees engaged in leading edge work.
  - 3. Boundaries of a CDZ shall be designated and clearly marked with "control lines" and not be more than 90 feet wide and 90 feet deep from any leading edge.
  - 4. Each employee working in a CDZ shall have completed CDZ training in accordance with OSHA Sec. 1929.761.
  - 5. Unsecured decking in a CDZ shall not exceed 3,000 square feet.
  - 6. Control lines for a CDZ shall be erected not less than 6 feet nor more than 90 feet from the leading edge and supported in such a way that the lowest point is not less than 39 inches and the highest point is not more than 45 inches above the walking/working surface. The control line shall have a minimum breaking strength of 200 pounds.
  - 7. Safety deck attachments shall be performed in the CDZ from the leading edge and to the control line and shall have at least two deck attachments for each metal decking panel.
  - 8. Final deck attachments and installation of shear connectors (steel studs or bars) shall not be performed in the CDZ. Proper fall protection is required during final deck attachment.

Perimeter safety cable installed by steel erector on multi-story structures will remain in place unless otherwise instructed by MORGAN CONSTRUCTION.

Training records indicating workers have received required steel erection training will be maintained by the steel erector and made available for review by MORGAN CONSTRUCTION's Project Superintendent or Project Manager.

All steel deliveries will be coordinated with the MORGAN CONSTRUCTION Project Team to ensure maintenance of traffic around the project is maintained. No deliveries shall be unbound until inspected and deemed secure by a qualified person.

Design criteria for any multi-lift device that may be used on this project will be available on the project for review by the MORGAN CONSTRUCTION's Safety Director.

Work will be planned that no load will be swung over the public, other workers or occupied structures. Exceptions must be reviewed and approved MORGAN CONSTRUCTION's Project Superintendent.

During bolt-up activities all steps will be taken to protect workers below from falling objects.

### **TEMPORARY BARRICADES**

Temporary barricades will be erected to warn or protect workers whenever hazards or processes such as those listed below are encountered on this project. This list includes, but is not limited to the following:

- Floor or wall openings
- Working above other workers
- Open excavations/trenches
- Unquarded equipment

- Exposure to vehicular traffic
- Low light work areas
- Startup operations and testing of equipment/systems

Overhead loads

Limited access zones.

Closed stairwells

When barricading is required, the following guidelines should be followed:

- **Yellow "Caution" tape** is used to limit the passage of workers through the barricaded area. This barricading should only be used to protect workers from hazards that are not severe or the potential for severe injury or death is unlikely.
- **Red "Danger" tape** is used to prohibit the passage of unauthorized workers through the barricaded area. This barricading should be used to protect workers from hazards that have the potential to cause serious injury or death. Danger tape is not to be used if the hazards cannot be eliminated or removed during in a single work shift.
- Rigid barricades are used when protection is required beyond a work shift or longer. It
  will be used to protect the public from entering work zones. Rigid barricading may
  consist of standard guardrail, temporary chain link fencing, and tube and coupler scaffold
  members with temporary plastic construction fencing attached and concrete barriers.

When using "Caution" or "Danger" tape barricading:

- Install at least six feet from excavations, trenches, holes, leading edges and floor or wall openings.
- Install a standard "Caution" or "Danger" sign that identifies the hazard at regular intervals around the barricaded area
- Do not impede stairs, walkways, driveways or aisles without notifying MORGAN CONSTRUCTION and identifying alternative passageways

When using rigid barricading:

- Support construction fencing to prevent tipping or sagging.
- Provide adequate access to the work area

When work is complete and the hazard is eliminated, remove the barricading immediately.

Workers who enter a "Danger" barricaded work area without authorization will be subject to disciplinary action up to and including termination.

#### **WELDING AND CUTTING**

When burning or welding using compressed gases, flame arrestors will be installed on both the torch side and regulator side of the oxygen and gas hoses.

### **Arc Welding and Cutting**

Welding current return circuits or grounds must carry their current without hot or sparking contacts and without passage of current through equipment or structures. Specifically, welding current must not be allowed to pass through any of the following materials:

- Acetylene, fuel gas, oxygen or other compressed gas cylinders.
- Tanks or containers used for gasoline, oil or other flammable or combustible material.
- Pipes carrying compressed air, steam, gases or flammable or combustible liquids.
- Conduits carrying electrical conductors.
- Chains, wire ropes, metal hand railings or ladders, machines or shafts.

Whenever practical, all arc welding and cutting operations shall be shielded by non-combustible or flame-proof screens.

The ground for the welding circuit shall be mechanically strong and electrically adequate for the service required and should be attached directly to the work piece.

When possible, electrode and ground cables shall be supported to prevent obstructions interfering with the safe passage of workers.

Cables with worn insulation may not be used.

### Gas Welding, Cutting and Soldering

A suitable cylinder cart, chain or other secure non-flammable fastening shall be used to keep cylinders from being knocked over while in use.

Cylinders of oxygen shall not be stored next to cylinder of acetylene or other fuel gas. They shall be separated by 20 feet or by a non-combustible barrier, with a 1/2 hour fire rating.

Oxygen cylinders, cylinder valves, couplings, regulators, hose and apparatus shall be kept free of and away from oil and grease. Oil or grease in the presence of oxygen under pressure may ignite violently.

Empty cylinders shall have their valves closed. Valve protection caps shall always be in place except when cylinders are in use or connected for use.

Valve protection caps shall not be used for lifting cylinders from one vertical position to another.

When moving cylinders by a crane, a cradle, boat or suitable platform shall be used. Slings, hooks or electric magnets shall not be used. Valve protection caps shall always be in place.

Compressed gas cylinders, empty or full, shall be secured in an upright position at all times except, if necessary, for short periods of time while cylinders are actually being moved. Empty cylinders should be marked EMPTY or MT for identification.

Regulators and hoses shall be frequently inspected for leaks, worn places and loose connections. Regulators shall also be checked for operable gauges.

Approved flash arresters shall be provided in both oxygen and acetylene hoses at the regulator connection.

### IV. QUALITY OF LIFE REQUIREMENTS

### **SMOKING POLICY**

MORGAN CONSTRUCTION encourages a Smoke-Free Workplace. No worker will smoke any tobacco product within any building or structure on this project designated as Smoke-Free. In Smoke-Free workplaces, smoking is only authorized in designated areas outside. Workers that violate this rule will be subject to immediate termination.

### **SANITATION**

#### **Toilet Facilities**

Adequate chemical toilets will be available on the jobsite for the use of workers per OSHA 29CFR 1926.51(c).

Chemical toilets shall be serviced often enough to prevent overflowing, creation of an unsanitary condition, a health hazard or nuisance, and shall be maintained in good repair so as to prevent leakage of the contents to the surrounding ground or onto the floor or other portions of the structure.

### **Drinking Water**

MORGAN CONSTRUCTION and Subcontractors will provide daily, fresh clean drinking water to their employees. Drinking water will be dispensed in containers with a tight sealing lid and labeled as Drinking Water. Drinking water containers are to be cleaned daily.

Adequate cups will be made available at each drinking water container. Cups will be stored in a durable clean dispenser. A trash can or other type receptacle will be provided to collect used cups. Contractors are responsible for cleaning up around the water container area.

The dipping of cups into the container, storing soda cans and bottles, drinking directly from the spout, placing of hands or material into drinking water is prohibited.

### **MEDICAL EMERGENCY**

During the safety orientation, workers will be given information on how to summon medical assistance in case of a medical emergency. Workers should know the following information:

**Emergency Phone Number: 911** 

**Project Address:** 

City:

Emergency Medical Services are dispatched by calling the 911 Emergency Phone Number. When reporting a medical emergency, the worker will state their name, the nature of the emergency, the severity of the emergency and where assistance is needed. A worker may be required to meet medical personnel and guide them to where the emergency is located.

PLEASE REMEMBER NOT TO MOVE AN INJURED WORKER BEFORE MEDICAL ASSISTANCE ARRIVES UNLESS FURTHER INJURY IS POSSIBLE.

### **FIRE**

In case of a fire, workers will evacuate their work area immediately and report to the predetermined assembly area.

After reporting the fire, workers will evacuate the work area and report to the pre-determined assembly area that was stated during the safety orientation.

### **SEVERE WEATHER**

Should weather conditions such as severe thunderstorms or tornadoes develop around or near this project, workers will follow the direction of MORGAN CONSTRUCTION's Project Superintendent or their immediate supervisor.

### V. PROJECT HAZARD COMMUNICATION PROGRAM

All workers on this project are entitled to know the properties and potential safety and health hazards of chemicals or substances that they may come in contact with on this project.

Each subcontractor will submit to MORGAN CONSTRUCTION their Chemical and Substance Inventory List (Appendix G) and a copy of the Material Safety Data Sheet (MSDS) of all known hazardous chemicals that are in their work area. Prime subcontractors will be responsible for obtaining all sub-tier subcontractors Master Chemical and Substance Inventory Lists/MSDS and forwarding to MORGAN CONSTRUCTION.

The Master Chemical and Substance Inventory List (**Appendix G**) will be maintained, even if they do not have or will not use any hazardous chemicals or substances. *This is an OSHA requirement.* 

Subcontractors will maintain a project specific MSDS on location for each hazardous chemical or substance listed on the Master Chemical and Substance Inventory List. Prime subcontractors will be responsible to ensure all sub-tier subcontractors have their project specific MSDS sheets at the project.

It will be the responsibility of each worker's supervision or project manager to assure Material Safety Data Sheets are received prior to, or at the time of delivery of, a hazardous chemical.

Project management and first-line supervision will ensure all hazardous chemicals are properly labeled in accordance with the MSDS. Containers that hazardous chemicals have been transferred into for use during a single work shift will be labeled as to contents.

Every worker on this project shall receive instruction from their employer on their Hazard Communication Program, the location of the Master Hazardous Chemical and Substance Inventory list, the location of the Material Safety Data Sheets, labeling requirements and specific safety or health instructions about the hazardous chemical or substance.

Recommended minimum Hazard Communication Training will consist of:

- 1. The contents of the program
- 2. Prior to use of or the potential exposure to any hazardous chemical or substance, workers are to be instructed in:
  - Physical and health hazards
  - Procedures to protect against the hazards
  - Engineering and administrative controls
- Personal protective equipment
- Emergency procedures in case of exposure or accidental spill

- 3. Labeling requirements
- 4. Whenever a new chemical or substance is introduced into the workplace, workers will be briefed of its hazards

The client, vendors and subcontractors that may have business in or near a work area will be notified that hazardous chemicals are being used and the hazards they may encounter.

If a worker believes they have encountered a hazardous chemical or substance unfamiliar to them, they will immediately notify their supervisor. Project management or supervision will attempt to identify the hazardous chemical or substance and initiate all precautions to handle and dispose of this material, if required, and to properly protect workers.

### VI. HAZARD COMMUNICATION PLAN

THIS PLAN WILL BE REVIEWED BY ALL EMPLOYEES AND POSTED IN A PROMINENT LOCATION ACCESSIBLE BY ALL WORKERS. THIS PLAN IS A SUPPLEMENT TO THE PROJECT-SPECIFIC HEALTH AND SAFETY PROGRAM.

PROJECT NUMBER: PROJECT NAME:

#### PROJECT LOCATION:

This is a project specific Hazard Communication Plan ensuring that information on hazardous chemicals and substances is communicated to workers in accordance with OSHA 29 CFR 1926.59 and the MORGAN CONSTRUCTION Hazard Communication Safety Program.

- 1. An inventory of known hazardous chemicals and substances used on this project has been conducted and listed on the Master Chemical and Substance Inventory which is located and can be reviewed at: MORGAN CONSTRUCTION's Field Office.
- 2. A copy of the Material Safety Data Sheets (MSDS) for known hazardous chemicals and substances used on this project are located and can be reviewed at: MORGAN CONSTRUCTION's Filed Office.
- 3. If a copy of a MSDS cannot be located, contact your Project Manager, Superintendent, Foreman or MORGAN CONSTRUCTION's Project Superintendent.
- 4. The Project Superintendent and first line supervision are responsible for obtaining MSDS and ensuring they are received prior to, or at the time of delivery of, a hazardous chemical.
- Hazardous chemicals will be properly labeled in accordance with the MSDS. Containers that hazardous chemicals have been transferred into for use during a single work shift require secondary labeling.
- 6. Workers who work with, or may be potentially exposed to, a hazardous chemical or substance will be informed of the physical and health hazards and procedures to protect against those hazards. Included in the procedures are engineering and administrative controls, personal protective equipment, and emergency instructions for accidental exposure, emergency evacuations, or spill containment of the hazardous chemical or substance.
- 7. When new hazardous chemicals or substances are introduced into the work environment, workers will be informed of the physical and health hazards.
- 8. Employers, who may be working in a MORGAN CONSTRUCTION work area where workers could be exposed to a hazardous chemical or substance, will be informed of where that hazardous chemical or substance is in use.
- 9. Workers performing non-routine tasks will be informed of chemical hazards associated with the work activity and the appropriate protection measures.

### VII. SUBCONTRACTOR REQUIREMENTS

### **DESIGNATED SUBCONTRACTOR SAFETY REPRESENTATIVE**

Each subcontractor on-site will designate a safety representative prior to mobilization. This on site safety representative will be a competent worker who has safety awareness training and who may have other on site duties.

Subcontractors will submit the names of their proposed safety representative to MORGAN CONSTRUCTION prior to mobilization. This person will have the authority and responsibility to ensure the proper implementation of this Safety & Health Management Program.

Subcontractor safety representatives will have the full authority to implement safety corrections and recommendations. Subcontractor representatives will have authority to stop any work they deem unsafe.

The minimum duties of designated safety representative will be:

- Investigate any incident or near miss and report the findings to MORGAN CONSTRUCTION.
- Attend safety meetings as required by MORGAN CONSTRUCTION.
- Conduct regular safety meetings with workers to instruct them on specific task related safety practices and requirements.
- Conduct daily work site safety inspections of their work activities
- Take direction from MORGAN CONSTRUCTION related to timely abatement and control of hazards.
- Provide Safety Training for their employees.

#### SUBCONTRACTOR SAFETY ORIENTATION

Prior to starting work on site, all first line supervisors of each subcontractor will attend MORGAN CONSTRUCTION's project orientation to ensure they understand the project safety requirements. The orientation will be held on-site by MORGAN CONSTRUCTION's Project Superintendent.

### SUBCONTRACTOR SAFETY SUBMITTALS

Prior to beginning work, each subcontractor shall submit to MORGAN CONSTRUCTION's Project Superintendent or Project Manager the following:

- Name(s) of designated safety representatives or competent person.
- Project specific Master Chemical and Substance Inventory Sheet and Material Safety Data Sheets for all hazardous chemicals and materials to be used or stored on the project.

#### **On-Going Submittals**

Each subcontractor will be required to submit various on going safety documents to MORGAN CONSTRUCTION as required by the scope of work. These submittals may include the following:

 Incident Notification and Investigation Report (Appendix C) (Within 24-hours of any incident or near miss).

### Maintain While Working on the Project

Throughout the course of the project, each subcontractor will maintain the following records or documents on site and make available for inspection by MORGAN CONSTRUCTION. MORGAN CONSTRUCTION permits or forms, or their approved equivalent shall be used:

- Subcontractor Work Site Safety Inspection
- Scaffold, Trench, Crane, and Forklift Inspections

### Permits or Safety Plans as Required

Subcontractors will submit to MORGAN CONSTRUCTION work permits or plans for review by MORGAN CONSTRUCTION prior to start of work or task as required. Work permits or plans that are required include:

- Confined Space Entry
- Fall Protection Plan when erecting pre-case concrete members
- Other work plans as deemed necessary

### **VIII. FORMS APPENDIX**

APPENDIX A: RESERVED FOR FUTURE USE

APPENDIX B GENERAL SAFE WORK PRACTICES POSTER

APPENDIX C: INCIDENT NOTIFICATION & INVESTIGATION FORM
APPENDIX D: WEEKLY SAFETY MEETING AND TRAINING ROSTER

APPENDIX E: RESERVED FOR FUTURE USE APPENDIX F: RESERVED FOR FUTURE USE

APPENDIX G: MASTER CHEMICAL & SUBSTANCE INVENTORY LIST

APPENDIX H: RESERVED FOR FUTURE USE

APPENDIX I: CONFINED SPACE ENTRY PERMIT

APPENDIX J: RESERVED FOR FUTURE USE

APPENDIX K: NOTICE TO COMMENCE STEEL ERECTION

APPENDIX L: RESERVED FOR FUTURE USE

APPENDIX M: WORK SITE SAFETY INSPECTION

APPENDIX N: RESERVED FOR FUTURE USE

APPENDIX O: LOCKOUT/TAG-OUT CHECKLIST

APPENDIX P: PRE-DEMOLITION SURVEY

APPENDIX Q: SAFETY NON-COMPLIANCE TICKET



## **APPENDIX A**

# RESERVED FOR FUTURE USE



### **APPENDIX B**

### **GENERAL SAFE WORK PRACTICES POSTER**

Clean and safe working conditions are absolutely essential for achieving an Injury Free Environment, as well as for the promotion of construction efficiency and progress. Each worker on this project is valued not only for what they do, but for who they are. Everyone must maintain a strong personal desire to think and act safely, in an effort to create an Injury Free Environment. The following general safe work rules are a partial list of the general rules that apply to each worker on this project. There will be no tolerance for any worker who carelessly or callously disregards these rules or other applicable health and safety rules.

- 1. It is the responsibility of each worker to perform his/her assigned duties so as to provide:
  - a. Safety for themselves and their fellow worker
  - b. Protection of the general public and all other workers
  - c. Protection of equipment, materials and tools
- Report all unsafe acts and conditions to supervision.
- 3. Report work related injuries or illnesses immediately to supervision.
- 4. Work only in conditions that appear to be safe.
- 5. Use proper fall protection when working six (6') feet or greater above the surface.
- Wear the minimum personal protective equipment at all times including hardhat, reflective vest, shirt, trousers and work boots.
- Use tools and equipment properly. Remove damaged or defective tools and equipment from service.
- 8. Lock out and tag equipment, machinery, and/or systems prior to working on them.
- 9. Maintain clean and orderly work areas.
- 10. Operate tools and equipment with proper guards and safety devices in place.
- 11. Request instruction from supervision when unsure as to the safe performance or procedures.
- 12. Obtain authorization and training prior to entering a confined space.
- 13. Operate equipment, machinery or any specialty tool (e.g. powder-actuated tools) only with proper training and authorization.
- 14. Wear proper eye and face protection when cutting, welding, grinding, chipping, or performing other tasks where the danger of flying debris exists.
- 15. Use safe lifting techniques when required to lift material or other loads.
- 16. Wear respiratory protection when the task or work area requires it.
- 17. Ride vehicles only in the cab with proper restraining devices.
- 18. No worker will be under the influence of drugs/alcohol or engage in any horseplay, fighting or gambling of any form.
- 19. Observe and comply with covered, barricaded, taped, or flagged areas. Do not remove, cross, or enter without proper authorization and protection.
- 20. No worker will intentionally discharge or remove fire-fighting equipment.
- 21. Radios and other audio distractions are not allowed in any work area.
- 22. Personal Cell Phone use is not allowed in any work area.



## **APPENDIX C**

INCIDENT NOTIFICATION & INVESTIGATION FORM								
Date of Incident:	Date Incident was Reported:							
Employer Type: (Circle)	MORGAI ONSTRUC		bcontractor	ontractor Vendor / Supp		General Public		
Description of Incident:								
How could the incident have	been prev	rented?						
Project Name:			Project Nu	mber:				
Subcontractor Foreman:			Project Sup	erintendent:				
Subcontractor Safety Representative:			Project Man	ager:				
First Name:		Last Name:			Middle	lnitial.		
First name:		Last Name:			Middle	initiai:		
Home Phone:	Date of B	irth:	Primary Language:		Marital Status (circle)			
					Married Divorced	Single		
						Widowed		
Other Phone:	Craft / Po	sition :	·		Separated			
Time:	Title:							
Company Name:			Phone Num	ber:				
Address:			City:	Sta	te:	Zip:		
Supervisor Name:			Supervisor Phone:					
OSHA Recordable: yes / n	0		Body Part Injured:					
Side of Body Injured:			Prescriptions	Prescriptions Given: yes / no				
Work Restrictions: yes / no			Restricted Da	ays Lost: yes / no				
	w many d	ays?	Physician / H	lospital Name, Ad	dress & Pho	ne Number:		
Investigator Contact Inform  Name:	ation:							
Phone:								



## **APPENDIX D**

# **WEEKLY SAFETY MEETING AND TRAINING ROSTER**

Projec	ct Name:		Project Location:	
	ct or Course:			
Date:			Presented by:	
	This is to certify that I, the undersign	ned, have attended this Safety Train	ning course and understand t	he contents presented during the program.
	Name	Company	Name	Company
1			2	
3			4	
5			6	
7			8	
9			.0	
11			.2	
13			.4	
15			.6	
17			.8	
19			20	
21			22	
23			.4	
25			26	
27			18	
29			80	
31			32	
33			14	



## **APPENDIX E**

# RESERVED FOR FUTURE USE



## **APPENDIX F**

# RESERVED FOR FUTURE USE



### **APPENDIX G**

## **MASTER CHEMICAL AND SUBSTANCE INVENTORY LIST**

### **CONTRACTOR AND/OR SUB:**

### DATE OF UPDATE:

DATE	BRAND NAME	MANUFACTURER	CHEMICAL NAME



Permit # Date

## **APPENDIX H**

## RESERVED FOR FUTURE USE



## **APPENDIX I**

## **CONFINED SPACE ENTRY PERMIT**

	DESCRIPTION	1 – REQUIR	ED FOR ALL	ENTRIES			
Permit #:		Subc	ontractor:				
Supervisor:		Loca	tion:				
Type: Non-Permit	Permit		Time of Entr	rv: /	/	AM/P	M
Location of Confined Space	<del></del>	=	• • • • • • • • • • • • • • • • • • • •	. , .	•		•••
•				-	и П	Ott m.	
Type of Confined Space:					ıult 📙	Other:	
Work Description/Purpose	of Entry:						
Hazards:							
	VERIFICATION	IS – REQUIF	ED FOR AL	L ENTRIES			
	<u> </u>			Date	Entry S	Supervisor's	Initials
Ventilated							
Purged (if hazardous), Cle	aned and Drained				-		
Employee Training							
REQUIRED F	FOR ALL ENTRIES		ADDITIO	NAL PERMI	LREQUIE	RED CONT	ROLS
INEQUINED.		erified	ДВИТ			Required	Verified
Safety Department Notified	X		Authorized Ent	try Log at Acces			
Adequate Access	X		Fire Extinguish	ner Available			
Adequate Lighting (low voltage	ge) X		Attendant				
Air Monitoring	X		Narning Signs	Posted at Acce	ess		
Training	X		Respirators Re	equired? If requ	uired,		
Ventilation Adequacy	X		what type?			Ш	
				hing Required			
		(	describe)			$\sqcup$	
		ı	Rescue Equipm	ment/Service Av	vailable		
		(	Tri-pod/winch	or emergency			
		ŀ	Hot Work Perm	nit Required			
Attendant(s) Name(s):	Fratront/o) None	(-\.					
	Entrant(s) Nam	ie(s):					
* Attach a separate loc	g if more entrants are invo	olved in permit	required confi	ined space acti	vitv than al	lowed for on	this form.
/ Model of Capatians	AIR MONITORIN				vicy and	101100 101 2	1110 10
Make:	Model:	IC INEGO	NED FOR	ID#			
-	INIUGEI.		Calibrated Du				
Field Calibration Date:			Calibrated By	/: 			
Atmosphere Checked By:							
Contaminants	Permissible Levels	1st Check	* Time	2 <sup>nd</sup> Check*	Time	3rd Check	* Time
% Oxygen (O2)	19.5% to 23.5%						
LEL	Less than 10%						
Carbon Monoxide (CO)	Less than 35 ppm	<u> </u>				<u> </u>	
Hydrogen Sulfide (H2S)	Less than 10 ppm	<u> </u>	+			<u> </u>	
Other:	* 4ST CUECK	(TO DE COMPL	TER PRIOR TO	T.ITDV		<u> </u>	
	" To Check	( TO BE COMPL	ETED PRIOR TO	ENTRY			
IN CASE OF EMERGENC	CAII.			OR			
IN CASE OF LINEROLING	, I, UALL			_			
		AUTHORIZ	'ATION				
		AOTHOR	Allon-	Date			
Entry Supervisor:				:			



## **APPENDIX J**

# RESERVED FOR FUTURE USE



### **APPENDIX K**

### **NOTICE TO COMMENCE STEEL ERECTION**

### PROJECT NAME: Steel Erector Subcontractor: Contact Name: Address: MORGAN CONSTRUCTION is hereby authorizing you to commence steel erection activities with the following notifications: Concrete in footings, piers, and walls, and mortar in masonry piers and walls has attained, based on the Name of testing agency: appropriate ASTM standard test for field cured samples either 75% of the intended minimum compressive Reports are available for review at MORGAN strength or sufficient strength to support the loads CONSTRUCTION's office upon request. imposed during steel erection. Repairs or modifications were made to anchor rods/bolts: Approval by: (Structural Engineer of Record): ☐ Yes ☐ No Approval in writing? ☐ Yes ☐ No (attach) Date approved: Locations of repairs/modifications: As built drawings available? ☐ Yes ☐ No You are notified of your responsibility to: (Initial each) Initials: Indicate to MORGAN CONSTRUCTION what material lay down areas are needed, and intended routes of transferring materials. Only those designated lay down areas will be utilized, and MORGAN CONSTRUCTION responsibility to maintain lay down areas will be limited to those that are designated. Preplan all overhead hoisting operations to prevent traveling loads over other contractor personnel, and to coordinate hoisting activities with MORGAN CONSTRUCTION and other contractors to minimize impacts on other operations. Provide a written site specific erection plan if any part of your operations will deviate from the published OSHA Standard 29 CFR 1926.752(e). Conduct documented daily inspections of all cranes, forklifts, and other hoisting equipment utilized in steel erection activities. Designate a qualified trained rigger(s) to inspect all rigging equipment Name of qualified rigger: Ensure proper training for all employees engaged in connecting, bolt-up, multiple lift rigging procedures, exposure to falls, equipment operation, and as required by OSHA Standard 29 CFR 1926.761 Assure that all columns are properly anchored by a minimum of 4 anchor bolts. Maintain and require the use of fall protection equipment for all employees exposed to fall elevations per OSHA Standard 29 CFR 1926,760 Proper personnel protective equipment (PPE) will be worn during steel erection activities for the specific tasks workers are engaged in as required by OSHA Standard 29 CFR 1926.95 and 1926.501 Maintain required fire protection/prevention equipment appropriate to the type of work operation and hazards involved. Meet all other requirements of the MORGAN CONSTRUCTION Incident Prevention Program, Published OSHA Standards, and the requirements of local regulations.

January 2013 63

Steel Erector Subcontractor

MORGAN CONST.: Project Manager/Superintendent



## **APPENDIX L**

# RESERVED FOR FUTURE USE



### **APPENDIX M**

D 8 41		
PIVIS	initials	

# **WORK SITE SAFETY INSPECTION FORM**

JUF	ERINT	FNDE	ENT'S NAME:								
SPE	CIFIC	AREA	(S) INSPECTED:								
INST	RUCTI	ONS:	Performed by superintend	lent/fo	reman	of wor	k area responsible for. Wor	k Site	Safet	y Inspe	ections will be maintained
at pro	oject lo	cation a	and available for inspection				ruction Company's Project N				
Y=Ye		No, NA	=Not applicable								
Y		NA					Y N NA				
$\dot{\Box}$			re-demolition survey complete	e?				_	eeklv s	afetv m	eeting being conducted?
		□ N	lotice to commence steel erec	tion co				W	orker tı	aining b	peing conducted?
			irst Aid kit available on-site?			r better'					leted for work to be performed?
Pers			ISDS Sheets obtained and av	allable	<u> </u>			IVI	aster ci	nemicai	list updated?
Y	N	NA	ro Equipment	Υ	N	NA		Υ	N	NA	
			Hardhats				Safety glasses with side				Leatherwork Boot
							shields				
$\frac{\Box}{\Box}$		<del>                                     </del>	Face shields Gloves		R	<del>                                     </del>	Burning goggles Hearing Protection		-	<del>                                     </del>	Welding hood and gloves Reflective Vests
			% Fall Protection Required at si	1			Healing Protection				Reliective vests
Υ	N	NA		Υ	N	NA		Υ	N	NA	
			Guardrail system checked				Harness and lanyards checked				Horizontal lifeline checked
			Floor Openings covered				Roof Opening guarded				Wall openings guarded
l add	ore an	d Seaf	folding				Floor Openings checked				
Y	N	NA	loiding	Υ	N	NA		Υ	N	NA	
Ġ			Ladder tied off	Ė			Ladder extended three feet	Ė	H		Stepladders in open position
			Scaffold inspected and				Sections properly pinned				Components not damaged
			tagged				Handadi in alaas				Diaghianasanad
Hous	ekeeni	ng and	Ladder access d Fire Protection				Handrail in place				Planking secured
			# 1 110 1 10t00t1011								
Υ	N	NA		Υ	Ν	NA		Υ	N	NA	
Ī	N D	NA □	Material stacked orderly	Y	N	NA □	Trash cans in work area	Y	N	NA	Debris removed
			Fire extinguishers in				Trash cans in work area Access maintained				Flammable liquids properly
			Fire extinguishers in place								
			Fire extinguishers in								Flammable liquids properly
□ □ Hois	□ □ ting an	□ □ d Rigg	Fire extinguishers in place ing Equipment  Daily crane inspection				Access maintained One-eye per hook				Flammable liquids properly stored  Sling/chokers stored
□ □ Hois Y	□ □ ting an	□ □ d Rigg NA	Fire extinguishers in place ing Equipment			□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	Access maintained  One-eye per hook Safety latch on hook			□ □ NA	Flammable liquids properly stored
Hois Y	□ □ ting an N	d Rigg	Fire extinguishers in place ing Equipment  Daily crane inspection  Qualified rigger named			NA	Access maintained  One-eye per hook Safety latch on hook checked			NA	Flammable liquids properly stored  Sling/chokers stored Cranes flagged off
Hois Y	□ □ ting an N	d Rigg NA	Fire extinguishers in place ing Equipment  Daily crane inspection Qualified rigger named  Slings/chokers inspected			NA	Access maintained  One-eye per hook Safety latch on hook			NA	Flammable liquids properly stored  Sling/chokers stored
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Hois Y Mob Y Exca Y Tem Y	ting an N Le Equi N Vations N Corrary N Corrary N Corrary	d Rigg NA pment NA S NA Barrica NA	Fire extinguishers in place ing Equipment  Daily crane inspection Qualified rigger named  Slings/chokers inspected  Seatbelts used Backup alarms working  Competent person named Proper access/egress ades  Proper tape used (Red-	Y Y C	N	NA	One-eye per hook Safety latch on hook checked Knowledge of crane signals  Workers trained Spotters used when needed  Shore/slope/bench proper Spoil pile 2' from edge  All sides of work area	Y			Flammable liquids properly stored  Sling/chokers stored Cranes flagged off  Lift zone designated  Equipment inspected  Excavation checked daily  Workers trained  Barricade removed or
Hois Y Mobi Y Exca Y Tem Y	ing an N Ie Equi N Vations N Oorary N	d Rigg NA Dipment NA S NA Barrice	Fire extinguishers in place ing Equipment  Daily crane inspection Qualified rigger named  Slings/chokers inspected  Seatbelts used Backup alarms working  Competent person named Proper access/egress ades  Proper tape used (Red-	Y	N N N N N N N N N N N N N N N N N N N	NA NA NA NA NA	One-eye per hook Safety latch on hook checked Knowledge of crane signals  Workers trained Spotters used when needed  Shore/slope/bench proper Spoil pile 2' from edge  All sides of work area barricaded	Y	N	NA NA NA NA NA NA	Flammable liquids properly stored  Sling/chokers stored Cranes flagged off  Lift zone designated  Equipment inspected  Excavation checked daily  Workers trained  Barricade removed or
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# WORK SITE SAFETY INSPECTION FORM - CONTINUED

Comments		
INSPECTION PERFORMED BY:	TITLE:	DATE
THO ESTIGIT EN SKINED DT.		



## **APPENDIX N**

# RESERVED FOR FUTURE USE



## **APPENDIX O**

# LOCKOUT / TAG OUT CHECKLIST

•						
Name of Contractor(s):		Scope of Work:				
		<ul><li>Temporary Electrical Ser</li><li>Permanent Electrical Ser</li></ul>	VICE			
		<ul><li>Permanent Electrical Ser</li><li>Mechanical Work</li></ul>	vice			
		☐ Other				
Name of Contractor's On Si	te Supervisor :					
Electrical hazards and ma	any forms of stored energy ar	e unique in that there are very	few properties that warn of			
		mize the circumstances whe azards associated with store				
Thi		dentify and/or review the follow	ving:			
		k that requires LO/TO,	ma' account he avelded and			
		ectrical hot work or other 'hot ta hat will be followed in the even				
.ac p. coo ac	moo ama canoty procautions t	proceed.	and the most of a most tap most			
The contents of this Ch	ecklist shall be reviewed with	all affected contractor employe	ees and MCC personnel.			
			-			
Date of Coordination Meetir	od.	Date(s) LO/TO Will Be In Affe	oct.			
Date of Coordination Weetin	ıy.	Date(s) LO/TO Will be in Aire	<del>50</del> 1.			
Name of Meeting Attendees	);	Title/Responsibility:				
4 Hannama taali a	ofativalan basa davalanad					
	afety plan been developed (s) doing the work?		YES NO			
•						
		pe worked on and/or need to be	e isolated and locked out			
(Check all that a	рріу)					
Type of System	LO/TO Required? (Chec	k One)				
<u> </u>	YES	NO	N/A			
Electrical     Alectrical						
<ul> <li>High volt (≥ 480 v)</li> <li>Low volt (&lt; 480 v)</li> </ul>						
■ Mechanical						
Hydraulic/Steam						
Pneumatic						
Chemical						
<ul><li>Other</li></ul>						
4. Are other contract	ctors or entities affected by the	nis lock out?	YES NO			
T. AIG UNIGI CUINIA	otors or entities affected by the	iio iook out:	123 140			
If yes, please identify:						



### **APPENDIX O**

### **LOCKOUT / TAG OUT CHECKLIST - CONTINUED**

5.	Identify the companies and individuals who will responsible for leading the Lockout-Tag-out program for the	ir
	employer. These individuals must be on site for the duration of the lockout-tag-out in most circumstances.	

Name of Contractor	Name of Individual

□ Check here if MORGAN CONSTRUCTION will be participating in locking out the affected system(s).

### Safety Equipment and Procedures Checklist

A.	Will other trades be working in the immediate vicinity of live circuits of	or		
	otherwise be affected or exposed to the hazards of the activity?	YES	NO	
	If yes, describe safety precautions that must be taken to protect affect	cted worke	rs:	

C. Check the safety equipment or procedures that will be followed to protect the safety of the workers conducting live work (hot taps, working on energized circuits, etc):

	Safety glasses with side		Electrical blankets		Gloves (electrical, hot
shields and/or face shield				work, c	or chemical resistant?)
	Hard hat (regular or high volt?)		Blankets for hot work		Insulating mats
	Leathers or heat resistant		Chemical resistant		Barricades around the
clo	thing	clothing		work a	rea
	Insulating tools		Air monitor		Retrieval equipment
	Low volt lighting		Harness and lanyard		Locks and Tags
	· ·		Harness and lanyard		

Comments:			

D. **To be completed by the employer(s) completing the work:** If work is to proceed on live, energized, charged, or otherwise operating systems, describe why work CANNOT proceed in a locked-out or deenergized state:



### **APPENDIX P**

## **PRE-DEMOLITION SURVEY**

The Project Manager shall notify the State Health and Environmental Department at least ten (10) working days before demolition or renovation activities begin, even if no asbestos is present. Application for each sate can be found on-line. The Abatement Contractor shall also give proper notification to the State prior to asbestos abatement activities. (Superintendent must verify this has been completed).

### **Pre-Demolition Survey**

Please Print Clearly							
Project Name:				P	Project No:		
Location:				s	Survey Date:		
				^	lame:		
Major Cross Streets:				Т	ītle:		
			Struct	ure Info	ormation		
Structure Type:							
Basement:	Yes	No	Type:	Block	Concrete	Other:	
Building Height:			No: of Stor	ries:		_	
Shoring Required:	Yes	No					
If Yes complete the following:							
Type of Shoring			Describe:	-			
Location of Shoring			Describe:				
Adjacent Properties:	Yes	No	Describe:				
If Yes complete the following:							
Protection Required:	Yes	No	Describe:				
Underground Tanks	Yes	No	Describe:				
Location of Tanks			Describe:				
Previous Use:			Describe:				
Tanks Drained	Yes	No	Date:				
Tanks Purged	Yes	No	Date:				



[ ] Copy-Main Office Safety File via Safety Director

## **APPENDIX P**

# PRE-DEMOLITION SURVEY - CONTINUED

Tested:	Yes	No	Performed By:	
Public Prot. Required:	Yes	No	Describe:	
If Yes complete the following:				
Signage:	Yes	No	Describe:	
Barricades:	Yes	No	Describe:	
Fencing:	Yes	No	Describe:	
Demo Methods:				
			Disconne	ects
			Reference No:	
Utility Disconn	ect		Disconnect Date	Utility Contact Name & Phone
Electric	Yes	No		
Gas	Yes	No		
Water	Yes	No		
Sewer	Yes	No		
Phone	Yes	No		
Security	Yes	No		
PC Network	Yes	No		
Location of Energized Power	er / Comm	unicat	ion Lines / Gas:	
L10distral Operations dust				Signature
[ ] Original –Superintendent [ ] Copy-General Superintendent				Oignature
[ ] Copy-General Superintendent				



## **APPENDIX Q**

S P	KELY NON-COMI	PLIANCE FICKET						
SUBCONTRACTOR: JOB SITE:		DATE OBSERVED:PROJECT #:						
TYPE OF DEVIATION:	☐ Safety/Health ☐ Environmental	Housekeeping						
Location:								
Description of Deviation:								
Remedial Work Required:								
THE SUBCONTRACTOR IS HEREBY DIRECTED TO PERFORM THE NOTED REMEDIAL WORK BY NO LATER THAN UNTIL THE REMEDIAL WORK IS COMPLETED BY THE SUBCONTRACTOR AND ACKNOWLEDGED BY MORGAN CONSTRUCTION, \$ MAY BE WITHHELD FROM ANY PAYMENT DUE TO THE SUBCONTRACTOR PRIOR TO THE SPECIFIED DATE, THIS DOCUMENT WILL SERVE AS WRITTEN NOTICE THAT MORGAN CONSTRUCTION, AT IT'S SOLE DISCRETION AND WITHOUT ANY FURTHER NOTICE, MAY ELECT TO PERFORM THE REMEDIAL WORK AND ALL ASSOCIATED COSTS WILL BE DEDUCTED FROM THE SUBCONTRACTOR'S PRICE.  MORGAN CONSTRUCTION. Initiator								
REMEDIAL WORK ACKNOWLEDGEMENT								
Remedial Work Perfo	ormed by:	Back charge:						
Remedial Work Obse	erved by:	Date:						