icon HD, IIc.

(established 2009)

Safety Blueprint

Construction Safety Blueprint

In an industry fraught with danger, construction companys' can protect workers and themselves—if they are willing to lead the way and confront the risks head-on. Owners who cannot (or will not) take the reins on safety are courting disaster in both a human and a business sense. Dynamic leadership by individual owners can help reduce injuries, disabilities, and deaths caused by construction accidents.

The Guiding Principles

- 1. No construction- related injury, illness, or damage to property or the environment is acceptable.
- 2. Everyone should work to prevent all such injury, illness, or damage.
- 3. An organization will achieve whatever performance level it is willing to accept.
- 4. "Zero incidents" is the only justifiable goal.

From these principles, owners can begin to establish supporting goals, standards, programs, and behaviors. The principles do not replace the legal or regulatory obligations of each stakeholder. Instead, they foster an environment that supports safe work practices. In this environment, all parties are encouraged to go beyond their legal obligations and take reasonable measures to prevent any injuries or illnesses.

icon HD's Safety Blueprint as a strategic **guideline** for safety performance that everyone will follow.

Our safety blueprint will:

- 1. Set the expectations each employee and subcontractor will be expected to deliver.
- 2. Establish a safety culture that reinforces the Guiding Principles from project inception to closeout.
- 3. Evaluate safety performance and demand achievement of all safety-related objectives in the project life cycle.

Note: While icon HD will advocate and promote as a means to achieve workplace safety, it also recognizes the risks associated with such involvement. Interaction with sub-contractor personnel will have a profound impact on safety performance, but we must take care to influence contractor behavior without interfering with our sub-contractor's legal responsibilities as an employer to implement their company safety plan. Each contractor is ultimately responsible for the safety of their employees. This document is not intended to suggest otherwise.

Setting Expectations

icon HD, will position safety as a project deliverable in our meetings equal to other deliverables such as quality, cost, and schedule. To that end, we will expect the following of **all** stakeholders:

- 1. Safety will be a core value of all parties involved in a project.
- 2. Safety will be integrated into all parties' work processes.
- 3. Operational discipline will be practiced at all levels.
- 4. Stakeholders will understand their our expectations and will routinely meet or exceed them.
- 5. Our company will manage safety as a business deliverable.

Employees who personify and communicate an organization's core values are showing others what the company stands for. Core values give employees and stakeholders a foundation for decision-making that supports the company's way of doing business.

Expectation: Safety Is a Core Value

Companies who include safety among their core values are making a long-term commitment. Managers who personify and communicate an organization's core values are showing others what our company stands for. Core values give employees and subs a foundation for decision-making that supports the company's way of doing business.

Organizations that understand and reflexively practice their core values will then insist on partnering contractors and subcontractors who share those values.

Expectation: Operational Discipline Is Practiced at All Levels

Operational discipline is the routine practice of desired on-the-job behavior. It exists in a workplace where "the right things are done the right way, every time."

Organizations that have operational discipline also exhibit the following characteristics:

Clear standards of behavior

Employee and contractor behavior that consistently reflects the organization's standard operating procedures

An attitude for rigorously managing any variation to the standard

When operational discipline is in place, our employees and contractors, who adopt the desired behaviors will feel valued and rewarded.

Expectation: Expectations Will Be Understood and Met

This expectation carries responsibilities on both sides. Once the standards can be elevated and outlined they can reasonably be understood and achieved, contractors should be expected to:

Know what is in their contract

Initiate communication to gain clarification on safety expectations

Manage subcontractors to the same standards

Take initiative where appropriate to ensure that safety expectations are met

Meet expectations at all times—not just when they are being watched

Expectation: Safety Is a Business Deliverable

To make this expectation a reality, the following must be true in both the contracting organizations:

Safety is a measurement of both individual and organizational performance for all parties.

Safety metrics carry equal weight among all stakeholders and at all levels.

Implications of Ignoring Safety Expectations

Our bottom line is: contractors who minimize costs associated with injuries will be more competitive against our peers and more attractive to enlightened owners. Contractors who do not minimize the costs associated with injuries will be at a competitive disadvantage.

Establishing our Safety Culture

Our safety culture shall be reflected in every project activity:

Crafting the contract

Bidding the work

Preparing for construction

Delivering the construction

Crafting the Contract

To the greatest extent possible, a contract for construction should support the Guiding Principles for Safety and our company's expectations discussed previously. Contract language serves to establish the performance, behavior, and deliverables that will be required of the contractors.

The contract language must define the relationships between us and our sub-contractor and must clearly establish the owner in the role of leader. The project contract documents must also address the resources, procedures, and expectations for the project.

Note: Some state laws prohibit certain companies from dictating contractors' means and methods. For the most part, these owners can define contractor requirements only in terms of results.

Balancing the Requirements

icon HD may and will need to find balance for establishing both standard and discretionary safety requirements, a successful philosophical approach may contain a mix of strategic deliveries.

Standard or basic requirements establish baseline expectations and remind sub-contractors of their legal obligations. Such requirements include clauses stating that the contractors are in control of their work and have responsibility for the safety of their employees; that they

must adhere to all federal, state, and local requirements; and that they must hold all their subcontractors to the requirements of the prime general contract.

Beyond this basic knowledge, we can further deliver information and guidance where identified to remind all of our and their goals for the project.

Safety requirements for special situations should be discussed —for example, working around dangerous processes, coordinating work with owner operations, or performing hot work, critical lifts, etc.—may need to be included. The best location for these types of requirements is in the contracts itself, the general conditions, or the specifications.

Possible Mix of Contract Language Types for Safety Requirements	
How	What
Reporting labor hours and safety performance metrics	Completing job with no injuries
Reporting job site incidents Performing "hot" work according to certain guidelines	Ensuring a drug-free workforce Staffing a job to deliver results safely

Other requirements we need to evaluate during contracting include partnering, subcontractor selection/management and Owner approval, incident investigation, visitor protocol, emergency response, and public protection.

As the contract takes shape, the project's staffing requirements become clearer, and we can begin to form the project team.

Of course, contract terms differ greatly. Owners and project documents have various ways of conveying expectations based on state laws, country laws, customs, project size, and the relationship between the parties.

Leading the Project

A capable team can play a significant role in maintaining a safety culture.

The safety culture includes the following:

Work with bidders and contribute to the award decision

Steer the project once construction begins

Define and practice safety requirements

Deliver a consistent message throughout the project

Ensure consistent adherence to safety requirements by a large, diverse, and ever-changing cast of characters

Continuity affects quality, so if the owner's requirements, resources and project documents permit it, the team should include at least some employees who can be dedicated from bidding through construction and beyond.

In some cases, the owner may decide to contract for these services directly.

icon HD will develop preferences and gravitate to sub-contractors who perform their work at our standards and bring out the best of all of us where able depending on trade availability and project constraints.

The contractual safety requirements will likely be communicated to prospective contractors as part of the bid package. With staffing in place, the owner's team can turn its attention to the bidding phase.

Bidding the Work

The owner's safety focus should understood at the following points in the bidding process:

Preparing bid instructions and documents Conducting the pre-construction meeting Evaluating the contracts & bids

Owners who can legally do so may choose to prequalify us or our sub-contractors based on past safety performance. Prequalification data should be updated and provided as necessary.

Preparing Bid Instructions and Document Evaluation

In the plans and specifications, the owner should provide information about unique safety issues that might not be apparent in a routine site visit (for example, hazardous materials on site, process chemical or other potential exposure, or known subsurface conditions). This information enables us and our sub-contractors to submit more knowledgeable and accurate bids.

Conducting the Pre-Construction Meeting

The pre-construction meeting with each sub-contractor gets us and our prospective sub together for questions and discussion about the project and bid documents; a site visit may also be scheduled. Here we can again demonstrate our and the projects commitment to safety.

In conducting the meeting, the project team manager should set a tone that encourages an open exchange of information.

At a minimum, the meeting should address the following:

Any information related to known risks contractors will face in performing the work

Permitting—what permits need to be secured for the project (including any permits required for particular work activities), and how to obtain them

Applicable facility or site rules

Applicable safety procedures and contract requirements

Contractor orientation requirements

 $Warning\, and\, emergency\, response\, information\, and\ procedures$

Project expectations for:

- Format/organization of bid responses
- Safety supervision by contractors
- Qualifications of contractor supervisory staff

Evaluating Contractors

The evaluation process should evaluate each sub-contractor and their history with our company and safety history / philosophy. This approach ensures that safety will be treated as an objective measure in our contract award process.

Proposals should explain the contractor's strategy for performing the work. The contractor should address what it perceives as critical challenges and known major risks in the project, and should affirm its commitment to preventing accidents and other negative events.

The sub-company should meet with its staff and reiterate the contract requirements and highlight their own functioning health and safety management system as well as icon HD's and the projects over-riding requirements.

Getting Acquainted: The Post-Award Meeting

In this meeting, superintendents are introduced to the site management leadership team and workers. While introductions may already have taken place during the bidding phase, the post-award meeting gives all an opportunity to reevaluate the level of involvement by all and reiterate the importance of safety.

A key goal of this meeting should be to review safety requirements with the people who will actually do the work. Although the sub-contractor should already be aware of safety expectations by way of the bidding process and our reputation, we should make certain that all staff who will be on site have a complete understanding of those expectations.

The Sub's Presentation

The contractor's team should present its approach to safe project execution and its basis for decisions made up to this point. Other aspects of the contractor's preparation, including which team members they bring to meetings, who leads their site work, and what they say, also give the us insight into how the company organization will respond to job requirements and perform the work.

Evidence that the contractor is prepared to work safely includes:

Specific proposals for all major requirements, including submittals, processes, and high-risk or hazard areas

Plans for project administration

Mechanisms for avoiding foreseeable events

Plans for responding to events they cannot foresee

Strategy for overseeing and coordinating their and subcontractor work

Grasp of how staffing, roles, hazard preparation, and other plans affect safety performance

Ensuring Safe Work: Validating Worker Training and Qualifications

The safety culture demands that workers possess the skills and training they need to deliver maximum safety performance. They must present that its own representatives have completed the appropriate safety training, understand the contractual requirements, and know how to evaluate contractor performance (especially on safety goals).

They should provide equipment operator certifications, and other specialty certifications they may have for cranes, welding, scaffolding, equipment operating, etc.

Overseeing Construction

Our role during project construction is to maintain, through its leadership, the integrity of the safety culture established in the preceding phases. Some actions we take to preserve that culture are listed below.

See and Be Seen

Our active presence on site is essential. Routine project visits, including walk-throughs of construction areas, remind project workers that we value safety.

Set a Good Example

Our personnel on site must model their own expectations for proper attire and personal protective equipment. See personal safety requirement list for each project.

Stay Current on Project Issues

To prevent safety goals from becoming lost amid a project's many daily demands, we must know the challenges facing the project. From this informed position, we can be ready to give advice, provide oversight, and make decisions as necessary.

Anticipate and Plan

Safety-conscious workplaces develop plans of action for both routine and unexpected events, including the following.

Incident Reporting and Mitigation System

This system involves developing protocols for:

Reporting, documenting, and mitigating job site hazards

Reporting safety incidents, including near misses

Investigating incidents, performing root-cause analyses, taking corrective action, and communicating results

Hosting visits by OSHA and insurers

Reinforce, Reinforce, Reinforce

Many different types of job site programs can be developed and expanded to support our safety goals. Our commitment to such programs will demonstrate to all that safety is a crucial goal and a measure of success. Some examples of programs that keep our safety message prominent:

Our site management system for construction safety shall include:

- A contractor processing system
 - possible elements include
 - access management
 - substance-abuse testing
 - site-specific orientation or credential review (dependent on Owner's project requirements)
- Site/property requirements—easy-to-read information on site requirements and restrictions
- Shutdown coordination and lockout/tagout procedures
- Periodic "toolbox talks" to review any unsafe incidents or other safety concerns
- Continuous improvement programs, where lessons learned are recorded and fed back to the contractor organization
- Recognition programs, in which companies and individuals who "live" the owner's safety philosophy receive meaningful rewards
- Safety program, with audits directed at all levels of the project, reminding all parties of the importance of safety standards. Weekly focus at all construction meetings and minutes.

Monitoring Safety Performance

Once established, the safety culture needs periodic checks to keep it functioning properly.

Elevating Safety Over Other Project Demands

During construction, we must "walk the talk" on safety. Pressure to complete the project can cause us and sub-contractor personnel alike to focus excessively on cost and schedule issues, potentially neglecting safety. It's up to everyone to ensure that safety remains a major project goal and is not subordinated to other demands.

Ensuring Contract Compliance

Like any other requirement, the safety performance delivered by the subcontractors must meet the standards specified in their contract.

Evaluating Job-Site Safety

Active site visits do more than send a message about the importance of safety—they also give a first-hand look at safety performance in the field. Representatives regularly read reports from the contractor and attend meetings to gauge work performance, but these activities do not substitute for seeing the work as it gets done. Our site supers need to be on site and "in the trenches", to allow for and compare observed work practices with written and verbal reports of progress.

Providing Feedback

Feedback should come in multiple forms throughout the project. It should result from ongoing communication between everyone on site the site.

Recognition

When a contractor meets or exceeds the owner's expectations on safety, we should work to recognize the accomplishment. Recognition shows workers that we value the job they are doing, and know what is happening on the project, understand the challenges workers faced in delivering safety requirements, and appreciate worker efforts.

Discipline

Negative feedback becomes necessary when safety standards are not being met. Actions taken should be consistent with the remedies provided in the contract. They may range from issuing instructions that will correct the shortcomings to removing one or more failing performers (at any level of their organization).

Final Critique

Contract completion brings an opportunity to evaluate safety performance yet again. Before any contractor departs from the site, they should receive feedback from our company.

Auditing to Enforce Safety Standards

icon HD will provide auditing a system of formal, routine safety audits that reinforce safe work practices. By subjecting subs and workers and vital work processes to systematic scrutiny, audits may reveal areas for potential improvement. Throughout, sub-contractors must be made aware that our audits do not substitute for their own safety management and audits.

A thorough auditing program should evaluate:

"Artifacts of activity" such as other inspections, plans, records of safety meetings, and any other activities related to safety performance

Physical areas throughout the site, to confirm that work practices reflect standards and match reporting done to date

Policy and Leadership: The blueprint system will provide for communicating policies and demonstrating management's commitment to a health and safety culture that drives toward zero accidents and incidents. This requirement would apply internally and externally as appropriate to all associated with icon HD.

Examples of our effective policy and leadership include (and this list will expand):

Project Manager is committed to health and safety and demonstrates it

Company will provide funds to promote project safety

Company participates in conducting project safety orientations

Company participates in safety recognition programs

Senior management reviews safety compliance and performance reports

Company will pay for company and individual participation and registration in safety organizations and meetings. (NOSHA, Builders & Traders, safety lunches, etc.)

Ongoing improvements...

Risk Management: Documented processes or procedures should be implemented and maintained to identify, assess, and manage existing and/or potential areas of health and safety the construction project.

The scope of assessment(s) should include activities, operations, project, and products from the inception of the design and front-end planning through project execution, handover, commissioning, and start-up. The assessment should consider normal, abnormal, and emergency operating conditions. A process should be in place to periodically review and, if necessary, update risk assessments.

Duties we will perform showing effective risk management include:

Pre-task Job Safety Analysis (JSA) occurs before work begins (supervisor)

Job Safety Analysis is performed during task

Facility is established for temporary PMT/contractor offices/buildings

Key inherent risks associated with the various tasks conducted during the project phases are understood (risk list by phase)

Chemical Material Safety Data Sheets (MSDSs) and handling and storing procedures have been reviewed

Security procedures are established

Legal Requirements and Standards of Operation: A documented process should be in place to identify, interpret, implement, and document all regulatory requirements and standards of operation applicable to the construction project. These requirements shall be implemented within the contract or purchase order issuance.

Investigation and Corrective Action: The system should include processes that address investigation of non- conformance items, near misses, and incidents. Investigations should focus on determining root causes, with the objective of correcting latent deficiencies, preventing recurrence, and broadly sharing lessons learned in a timely manner.

Including:

Safety rules are enforced from the very beginning of the project

ALL incidents are reported without reprimand

Investigations include appropriate members of contractor's PMT personnel

Root-cause analysis is implemented in investigations

Sanctions are issued for contractor and subcontractor noncompliance with safety standards **Communications**: Our project will require processes or procedures to facilitate effective internal communication of health and safety-related issues, including awareness of the importance of compliance with regulations and policies and achieving health and safety goals and objectives, as well as the consequences of deviating from policies and established site construction procedures.

Examples of effective communications include:

Weekly safety meetings take place

Toolbox meetings take place

Project and safety management meeting reviews take place

Supers and Foremanare involved in planning meetings

Project-wide contact lists is in place for all contractors on the project site

Summary

We will make a difference in project safety and in peoples' lives. The outcome should be "because of" and not "in spite of" icon HD's projects. Adopting the principles, strategies, and tactics in this Safety Blueprint will benefit all, especially those people who will be spared injury, illness, or death as a result.