



EXHIBIT D

SAFETY MANAGEMENT AND ILLNESS PREVENTION REQUIREMENTS

The attached Exhibit D includes by reference:

[Exhibit D.1 - Sundt SMS Safety System Manual - Safety Management & Illness Prevention \(Version 2\)](#)

[Exhibit D.2 - Sundt Crane and Rigging System Manual \(Version 3\)](#)

[Exhibit D.3 – Sample Code of Safe Practices \(Version 2\)](#)

[Exhibit D.4 – Sample Contractor Project Safety Management Plan \(Version 2\)](#)

Version: 2.5

Date Revised: 5/16/2022

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1. Overview

- 1.1. This Exhibit D is a summary of requirements from the [Sundt SMS Safety System Manual - Safety Management & Illness Prevention](#), [Sundt Crane and Rigging System Manual](#), [the Contractor Project Safety Management Plan](#), and [the Contractor Code of Safe Practices](#) which may exceed the requirements of regulatory agencies.
- 1.2. Subcontractors will estimate, plan, manage, and provide the tools and equipment for the execution of their work in a manner that protects the health and safety of their employees and subcontractors, all project stakeholders, and the public, in accordance with the most stringent of the following requirements as applicable to their respective scope of work:
 - 1.2.1. All applicable Federal, State, and local safety requirements
 - 1.2.2. All material and equipment manufacturer requirements
 - 1.2.3. Safety requirements defined in the Prime Contract between Contractor and Owner
 - 1.2.4. This Exhibit D and the safety documents included by reference.

2. Safety-Personnel Requirements*

- 2.1. Subcontractor, including its tiered subcontractors, shall have a full-time, dedicated safety professional with no other duties assigned while Subcontract work is being performed if:
 - 2.1.1. Subcontractor’s Experience Modification Rate (EMR) is greater than 1.2,
 - 2.1.2. Required by the Subcontract (refer the Subcontract Scope of Work),
 - 2.1.3. In accordance with the personnel count matrix below (paragraph 1.1.4) subcontractor, including all of its tiered subcontractors, have over 25 working personnel on site
 - 2.1.4. Full-time, dedicated safety personnel shall be provided by Subcontractor as follows:

Working personnel count (including sub-tiers)	Site safety manager - (Experience: 5yrs+ in safety management, plus OSHA 510 or CHST)* Site safety coordinator – (Experience: 3yrs+ of safety focused duties, plus OSHA 30 or STS-C)*
Less than 25	Dedicated full-time safety personnel not required, unless required by other criteria above
25 - 75	One (1) Safety Coordinator or Safety Manager
75 - 150	One (1) Safety Manager and One (1) Safety Coordinator
151 - 225	One (1) Safety Manager and Two (2) Safety Coordinators
226 - 300	One (1) Safety Manager and Three (3) Safety Coordinators
301 - 400	One (1) Safety Manager and Four (4) Safety Coordinators
401 - 500	One (1) Safety Manager and Five (5) Safety Coordinators
More than 500	One (1) additional safety coordinator for each additional 150 personnel

* Proposed safety personnel resume(s) shall be submitted to Contractor’s project management personnel for approval. Contractor may require an interview with Subcontractor’s proposed safety personnel. Contractor may, at Contractor’s sole discretion, accept alternate experience levels or qualifications in lieu of certifications noted above.

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3. General Requirements

- 3.1. Subcontractor to submit monthly workhour totals to Contractor's Project Management Team.
- 3.2. Subcontractor foremen shall have current OSHA 10-hour certification, as a minimum. Superintendents shall have current OSHA 30-hour certification or STSC, as a minimum. Exceptions must be approved by the Sundt District/Group HSE Manager.
- 3.3. Subcontractor personnel assigned to work on the project site must attend a mandatory Project Safety Orientation class and acknowledge by signature the Contractors Code of Safe Practices. To facilitate the process, the Project Safety Orientation will be provided by Contractor at the project site on a regular schedule. Subcontractor personnel will not be permitted to work on the project site until Contractor has issued evidence of completing the Project Safety Orientation.
- 3.4. All persons on project site will wear required proper Personal Protective Equipment (PPE) for their work exposures with the following minimum requirements for all: hardhat, safety glasses, proper footwear, full-fingered gloves, and high visibility vest, shirt or coat.
- 3.5. The Project will participate in National Construction Safety Week each year to emphasize the importance of continuously improving our industry's safety culture and sending each employee home safe every day. Subcontractor will participate in Construction Safety Week activities at the Project site including but not limited to training, lunch / awards events, and initiatives to improve safety.
- 3.6. Sundt Voices in Safety (SVIS) is a project-based health and safety committee designed to maximize craftworker involvement and feedback, and is structured to encourage respect, collaboration, integrity, and innovation in support of Contractor's Safety by Choice program. Trade contractors with more than five people on site during the given week/month may be required to:
 - 3.6.1. have at least one representative participate in the formal monthly meeting (i.e., superintendent, foremen, craft worker, safety rep); and
 - 3.6.2. allow for their craft workers to participate in the weekly inspections as scheduled by Contractor.

4. Trade Planning

- 4.1. Detailed project safety planning will be progressively developed by the Subcontractor in coordination with the development of the work packages.
- 4.2. A safety management plan will be developed by the Subcontractor for each subdivision of the work and will be managed by Subcontractor's competent person.
- 4.3. The Subcontractor safety management plan will be site specific; minimum contents shall include:
 - 4.3.1. If applicable as required by Contractor's project management team, Job hazard analysis (JHA) shall be submitted for review and acceptance. NOTE: JHA is in addition to the daily THA defining the hazards and safe means and methods to perform a task.
 - 4.3.2. A Task Hazard Analysis (THA) shall be completed for each required task.
 - 4.3.3. Required engineering documents applicable to Subcontractor's scope of work.
 - 4.3.4. Copies of valid and current safety credentials of the Subcontractor's project assigned key personnel, including but not limited to First Aid, CPR, OSHA-10, OSHA-30, Competent Person documentation (Excavation, Trenching, Rigging, etc.)
 - 4.3.5. Safety Data Sheets (SDS) provided shall be specific to the site, not generic for all products used by the Subcontractor's organization.
 - 4.3.6. Other documents, as requested by Contractor, to demonstrate that Subcontractor has adequately addressed all potentially hazardous conditions.

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- 4.4. Subcontractor shall participate in a project Health, Safety & Environmental (HS&E) planning meeting prior to start of work. This meeting requires Subcontractor management and field supervision representation.

5. Housekeeping

- 5.1. Project shall maintain industry-leading cleanliness and organization at all times to the point of “Relentless Housekeeping”. Work areas shall be continuously maintained by Subcontractor in an organized manner including electrical cord / hose management, tool management, material storage, and containment of trash and debris. Trash containers shall be removed daily by Subcontractor to on site dumpsters. Subcontractor shall leave the floors of the work area broom clean at the end of each shift. If the project is separating waste for landfill diversion at the site each Subcontractor or trade shall properly separate waste and place each waste type in the appropriate dumpster.
- 5.2. At all times:
- 5.2.1. Egress pathways shall be free of materials, debris, tools, hoses, or cords.
 - 5.2.2. Construction power and lighting distribution wires shall be suspended a minimum of 7’ above the floor, and every practical effort shall be made to also suspend electrical extension cords, leads, and hoses a minimum of 7’ above the floor.
 - 5.2.3. Waste shall be placed into trash receptacles immediately. No trash shall be left on the ground.
 - 5.2.4. Food and drink (except for water and electrolyte beverages) consumption is prohibited outside of Contractor designated break areas.
- 5.3. At the end of each workday, or otherwise specified by Contractor’s project management team:
- 5.3.1. Extension cords, welding leads, hoses, etc. shall be coiled and stored unless they are properly suspended above the floor.
 - 5.3.2. Tools shall be properly stored and secured.
 - 5.3.3. Work areas shall be broom swept using controls to prevent the creation of airborne dust.
- 5.4. Coordination between Contractor personnel and each crew’s foreman/superintendent must occur for all movement of materials from staging to working areas. Stored materials must:
- 5.4.1. Not clutter work areas.
 - 5.4.2. Not block other trades’ access to their work.
 - 5.4.3. Material located indoors shall be organized and be kept on rolling carts or pallets.
 - 5.4.3.1. Objects on wheels shall have brakes or be chocked and be tethered if they have the potential to fall to lower levels.
 - 5.4.3.2. Pallets shall be marked with the contractor’s company name (or follow site-specific requirements for labeling/color coding).
 - 5.4.4. Material stored outside shall be organized, shall be stored on pallets or dunnage, and be appropriately protected from damage.

6. Cranes

- 6.1. Comply with all requirements of the [Sundt Crane and Rigging System Manual](#).
- 6.2. Cranes shall be operated by certified operators who are qualified by their employer (also applies to mini/spider cranes).
- 6.3. All cranes must have a third-party safety inspection, completed at the site, and documented prior to project work unless an exception from the Sundt Crane and Rigging System Manual is met.
- 6.4. Project-specific certification is not required for a mobile crane that has had a documented annual certification within the past 30 days.
- 6.5. All crane lifts exceeding 75% of the crane's capacity must have a documented Critical Lift Plan.
- 6.6. All crane lifts of 90% or more of the crane's capacity must have a third-party engineering review.

7. Ground Disturbance / Excavations

- 7.1. All ground disturbance activities (excavations) shall have a Contractor approved Ground Disturbance (Excavation) Permit, and all permits must be closed by completion of the activities or by early termination.
- 7.2. Ground Disturbance (Excavation) Checklists must be completed each day for each active ground disturbance.
- 7.3. Existing utility locations within the project scope shall be verified prior to ground disturbance (excavation). This includes the use of third party locate companies where public utility location is not available or the work has potential to be immediately dangerous to life or health if exposed or contacted.
- 7.4. Ground disturbance (excavation) within two feet of previously identified conflicting underground facilities must be excavated by hand digging or vacuum method.

8. Fall Protection

- 8.1. If Subcontractor's scope of work will involve fall exposures greater than 6 feet Subcontractor will submit "Site Specific Fall Protection and Rescue" program to Sundt for review and comment prior to starting work on the project. The program must be developed and approved by an authorized competent person.
- 8.2. Subcontractor shall implement fall protection controls when any potential exposure to an adjacent level exceeds 6 vertical feet, including excavations greater than 6' in depth that are sloped steeper than a 1:1 ratio.

9. Hot Work

- 9.1. A Hot Work Permit is required for all hot work activities and must be closed after verification that hazardous conditions no longer exist.
- 9.2. Hot work includes but is not limited to welding, cutting, brazing, spark-producing activities.
- 9.3. Subcontractors shall submit a hot work plan to Contractor's project management personnel for review and approval. Depending upon the specific operations the Hot Work plan may require the following:
 - 9.3.1. Fire watch personnel.
 - 9.3.2. Shut down of all hot work operations 30 minutes prior to the end of the work shift.

10. Control of Hazardous Energy (lock-out/tag-out)

- 10.1. All work involving stored energy shall have project specific and condition specific lock-out/tag-out procedures.
- 10.2. A Lock Out/Tag Out Permit must be completed and approved by Contractor before any work will be permitted that requires control of hazardous energy, and all permits must be closed by completion of the activities or by early termination.
- 10.3. Stored energy activities include but are not limited to:
 - 10.3.1. Hydraulic, pneumatic, hydronic, and chemical lines and equipment under pressure.
 - 10.3.2. Electrical equipment which is or may become energized
 - 10.3.3. Mechanically stored energy (i.e., wire rope under tension)

11. Scaffolding

- 11.1. All scaffolding shall be tagged to communicate the status of accessibility. Tag shall include the name of the entity responsible for erection and maintenance, and the contact name(s) and 24-hour phone number(s) of the responsible competent person(s).

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- 11.2. Prior to use a daily inspection must be completed and documented by a competent person of the entity responsible for erection and maintenance of the scaffolding.
- 11.3. Engineering shall be completed and submitted to Contractor's project management personnel for scaffold systems intended for structural or vertical support.
- 11.4. Southern California Building Group Projects ONLY: Access to scaffolding above one level shall be by means of stair towers or internal drop-down ladders.

12. Utility Installations

- 12.1. Utilities installed above ground shall be protected against damage from equipment and vehicles.
- 12.2. Temporary utilities that are buried-in-place shall be protected to withstand 2 times the intended load.
- 12.3. Temporary utilities that are buried-in-place and not encased for protection as stated above shall be clearly identified by above-ground, visible, durable, indicators along the utility's course. Subcontractor responsible for such installations shall maintain the markings until completion of their contract scope or until removal is approved by the Contractor's Project Superintendent, whichever occurs first.

13. Elevated Work Procedures / Dropped Object Prevention

- 13.1. At all times, elevated work activities greater than 6' from the lowest exposed surface require that the drop zone below the activity be adequately protected.
- 13.2. Drop zones must be clearly established to prevent unauthorized personnel from entering. A dedicated safety watch may be needed.
- 13.3. Mitigation processes and procedures that may be employed on the project include:
 - 13.3.1. All materials shall be secured to prevent them falling to a lower level.
 - 13.3.2. Tools shall be secured using lanyards, tethers, or other approved means to prevent them falling to a lower level.
 - 13.3.3. If it is not possible to barricade the area or tether and secure tools and equipment, then debris netting, or a canopy shall be erected at the proper heights and dimensions to ensure falling objects cannot contact persons below.
 - 13.3.4. If establishing a walkway or a standing work area under other elevated work, a protective structure made of scaffold components, plywood, and planking can be utilized, providing the potential falling objects would not be so heavy as to fall through or otherwise collapse the protective structure (i.e., a structural beam).
 - 13.3.5. Staged materials shall be secured with wire rope or an acceptable alternative to prevent inadvertent dislodging. Single strand tie wire is not acceptable.
 - 13.3.6. If there is the potential for material, tools, or debris to fall between the toe board and mid-rail onto personnel working or walking below, elevated scaffolding, spider baskets, swing stage platforms, aerial lifts, etc. shall have perimeter netting installed between the top rail and toe board.
 - 13.3.7. All elevated edges shall have toe-boards in place to prevent items from being kicked or pushed off.

14. Vertical Structural Elements

- 14.1. Vertical elements over 10 feet in height and those of lesser height as regulatorily/contractually required and bracing shall be designed by a professional engineer.
 - 14.1.1. Drawings must be stamped by a professional engineer registered in the state where the project is located.
 - 14.1.2. The engineer's stamped drawings must be submitted to the Contractor's project management personnel for review.
 - 14.1.3. Elements must free stand or be self-supporting by means of internal bracing until permanently supported.
 - 14.1.4. If vertical elements cannot be internally braced because of height or structural design (i.e., masonry walls, concrete tilt panels, formwork, etc.), then a feasibility study and alternate bracing plan should be included in work plans, if applicable, for review and acceptance by Contractor's project management personnel.
- 14.2. Contractors performing structural vertical work shall submit a work plan and visual field inspection process for installation purposes.
- 14.3. Plans shall be submitted to Contractor's project management personnel for review and acknowledgment prior to release of work package.

15. Head Protection

- 15.1. Head protection complying with ANSI Z89.1 is required for all personnel and visitors.
 - 15.1.1. Contractor employees are required to wear head protection with a secured four-point chin strap.
 - 15.1.2. Beginning October 1, 2022, visitors and subcontractor personnel of all tiers must wear ANSI-approved Type I head protection with secured four-point chin straps.
 - 15.1.3. Personnel exposed to electrical voltages of 600V or greater shall wear head protection that meet the requirements of ANSI Z89.2.
 - 15.1.4. Cowboy, aluminum, and bump-cap hard hats are not permitted.