



Toyota Construction Safety Requirements

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Subject: Toyota Construction Safety Requirements v2.0 Drug Screen (Section 3.6 – Page 25)

In an effort to continuously improve construction safety, Toyota recently released the Toyota Construction Safety Requirements (TCSR) v2.0 for inclusion in the construction project bid process. This document is founded on best practices from Toyota Motor Engineering & Manufacturing North America, Inc. (TEMA) and our North America Manufacturing Companies (NAMCs), as well as from leading global organizations in the construction industry. Our goal is to minimize risk by sharing and implementing these best practices across all our construction projects in North America.

One of the best practices Toyota adopted to minimize risk is to maintain a drug free workplace. Section 3.6 of the new TCSR states:

“Toyota is a drug free workplace and insists that its contractors maintain the same. Drug screening shall be required for all workers on Toyota properties (except in Canada). **Proof of current 10 panel drug screening, or greater, within the previous 30 days of hiring shall be provided prior to being issued, or reactivating a badge.** Workers shall be required to provide proof of negative test results at the time of orientation, unless otherwise specified by the local NAMC. Toyota shall not be liable for any delays caused throughout the drug screen process prior to the reception of the negative test results. A break of more than 180 days from any Toyota site shall require submission of a new drug screen prior to badge reactivation. The contractor shall also submit and implement an effective substance abuse control program that shall include a “post-incident,” random (where allowed by law) and “for cause” testing, while under contract at Toyota.”

To allow time for each NAMC and affected contractors to develop the appropriate systems to facilitate this requirement, **until further notice, Toyota will suspend the “previous 30 days” requirement for all new TEMA construction projects.** Toyota has a goal to ensure a smooth roll out, and at this time, we cannot guarantee that all the systems are in place to prevent undue burden on our NAMCs and contractors. Please note: **This will not affect contracts currently in place or any existing Project Labor Agreements (PLAs)**, but will only apply to new work currently sourced by TEMA. Toyota encourages contractors to continue this requirement voluntarily as the requirement for a drug free workplace is beneficial to promote and maintain safety on our jobsites. No other provisions of the Section 3.6 will be waived at this time.

It is our ultimate goal to provide a safe and healthy jobsite for all workers, regardless of their activities, and the new TCSR v2.0 is that commitment in writing and in practice. We thank each of you for your support of safety on all Toyota construction projects.

Sincerely,



Bill Horsford
General Manager – TEMA PE-Safety

Toyota Construction Safety Requirements

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Safety Engineering



Revisions:

Mar-2005, May-2006, Mar-2007, Oct-2009, v1.2 April-2009, April-2010, v1.3 July-2011, May-2013, v2.0 Sept-2015, v2.01 Jan-2016

Details of the revisions are located in the Appendix – Revision History on page 95.

References:

The requirements in this handbook are based on the listed references. Information for further clarification for each section or standard can be obtained from the following:

Canada

The Occupational Health and Safety Act (OHSA):

Regulation 213/91 for Construction Projects.

Regulation 851/90 for Industrial Establishments.

Regulation 632/05 for Confined Spaces.

Regulation 860/90 for Workplace Hazardous Materials Information System (WHMIS).

Fire Protection and Prevention Act:

Regulation 213/07 for the Ontario Fire Code.

Building Code Act:

Regulation 350/06 for the Ontario Building Code.

Mexico

Mexican Federal Labor Law (“Ley Federal del Trabajo”)

Mexican Federal Security, Hygiene and Environmental Regulation

(“Reglamento Federal de Seguridad, Higiene y Medio Ambiente de Trabajo”)

United States

ANSI American National Standards Institute

OSHA 29 CFR 1910: OSHA Standards for General Industry

OSHA 29 CFR 1926: OSHA Standards for the Construction Industry

MSHA: Mine Safety and Health Administration

NFPA: National Fire Protection Administration

NIOSH: National Institute of Occupational Safety and Health

Introduction

Welcome to Toyota Motor Engineering and Manufacturing North America, Inc. (“TEMA”). Our ultimate goal is for everyone to leave work each day as healthy (or healthier) than they were when they arrived for work. It is Toyota’s expectation to utilize shared knowledge, experiences and lessons learned to implement a Safety First culture at all Toyota facilities. Toyota deeply values all workers onsite as members of the Toyota Family, and is committed to using industry best policies and practices to provide the best opportunities for achieving zero injuries.

This document has been created as a reference to assist Toyota team members and Contractor companies in creating a workplace free of hazards and potential injury while working at our Toyota North American Manufacturing Company (“NAMC”) facilities. It is intended to help identify the safety standards that shall be observed by Toyota team members and Contractor companies and their workers while working on Toyota projects. It contains both mandatory requirements and recommended practices. NAMC led construction activities shall be subject to the same rules and requirements contained herein.

This document shall be applied to the following activities* :

- **Construction, remodeling, or modification of equipment, infrastructure, buildings and facilities;**
- **Installation, modification, enhancement or relocation of machinery and equipment, and;**
- **Decommissioning and demolition of machinery, equipment, infrastructure, buildings and facilities.**

*Examples of Construction and Maintenance activities are listed in the Appendix - Toyota Construction vs. Maintenance Definition on page 93.

This includes Toyota Team Members, Prime or General Contractors, Subcontractors, and any company providing workers for purposes stated above. (Note: depending upon the type of work done this may include machine vendors, installers, and companies that decommission, reclaim, and/or remove equipment.)

Unless specifically stated, this document is not intended for companies solely providing administrative or maintenance services such as: janitorial or cleaning services, secretarial services, inspection services, contract engineering, forklift repair, machine/equipment preventive maintenance, and other similar services.

This document describes only the minimum Toyota safety standards along with references to applicable law or governing authority. Additionally, in Mexico and Canada, the contractor shall be in compliance to the applicable law or governing authority of that jurisdiction. Therefore, the information contained in this document shall in no way be considered a complete listing of all necessary safety standards to be observed by the Contractor. The Contractor shall be aware of all applicable standards and ensure they have been met in all aspects of their work. **The most stringent standard shall be enforced where a conflict arises.** The contractor shall assume full responsibility and liability for the actions of their workers, Subcontractors, Subcontractor workers, agents, material suppliers, visitors, etc., with no limitations.

The publication of this document shall in no way be interpreted as the assumption of responsibility or liability by Toyota Motor Engineering and Manufacturing of North America, Inc. If a conflict exists between this document and any applicable law, code or standard, it is the Contractor’s responsibility to bring this conflict to the attention of Toyota Safety, or the designated Toyota contact in charge of the project for resolution.

Table of Contents



Section A.....	13
1.0 Purpose and Scope	13
1.1 Toyota Safety Rules	13
1.2 Contractor's Responsibility.....	13
1.3 Toyota Acting as General Contractor/Contractor	13
1.4 Monitoring of Construction Site (CSMS 6.5, 6.6, 6.7).....	13
1.5 Safety Training and Education (CSMS 3.20, 4.2)	14
1.6 Safety Representation	14
1.7 Required Documentation	15
Section B	16
2.0 Glossary of Terms used/Interpretations	16
Section C	24
3.0 General Safety Requirements.....	24
3.1 Safety and Health Program (CSMS 3.10)	24
3.2 Safety Policy, Procedure, and Organization Charts	24
3.3 Environmental Policy	24
3.4 Hazard Communication/WHMIS (CSMS 3.11).....	24
3.5 Emergency Action Procedures.....	24
3.6 Substance Abuse Control Program	25
3.7 Site Specific Safety Plan	25
3.8 Job Safety Analysis (JSA) (CSMS 3.24, 3.26, 3.27, 6.1, 6.3).....	25
3.9 CPR and First Aid Trained Resource Requirement	25
3.10 Proof of Insurance (CSMS 2.1).....	25
3.11 Project Coordination/Notification of Work (CSMS 6.2)	26
3.11.1 Contractor Use of Toyota Equipment.....	26
3.12 Toyota Safety Orientation (CSMS 3.28).....	26
3.13 Coordination Meetings.....	26
3.14 Contractors Tool Box Talks	27

3.15 Site Visual Control (CSMS 4.3)	27
3.16 Means of Egress.....	27
3.17 Emergencies: Evacuation/Severe Weather/Spills/Fires	27
3.18 Incident Reporting Procedures.....	27
3.19 Housekeeping/5S.....	28
3.20 Commissioning	28
3.21 Safety Violations (CSMS 9.1, 9.2).....	28
3.22 Smoking and Tobacco Products Policy	30
3.23 Recording Devices	30
3.24 General Security Rules.....	30
Section D.....	30
4.0 Environment/Site Conditions	30
4.1 First Aid.....	30
4.2 Sanitation.....	30
4.3 Noise Exposure	31
4.4 Illumination.....	31
4.5 Ventilation	31
4.6 Dust Control.....	31
4.7 Radiation.....	31
Section E	31
5.0 Personal Protective Equipment.....	31
5.1 Requirement.....	31
5.2 Foot Protection.....	32
5.3 Hand Protection.....	32
5.4 Head Protection.....	32
5.5 Hearing Protection.....	32
5.6 Eye and Face Protection	32
5.7 Respiratory Protection.....	32
5.8 Protective Clothing	33
Section F	33
6.0 Fire Protection/Prevention.....	33
6.1 Requirement.....	33

6.2 Fire Extinguishers.....	33
6.3 Flammable and Combustible Liquids.....	33
6.4 Fuel Storage	33
Section G.....	34
7.0 Signs/Barricades	34
7.1 Requirement.....	34
7.2 Barricades	34
7.3 Signage Tape.....	34
7.3.1 Yellow Caution Signage Tape.....	34
7.3.2 Red Danger Signage Tape	34
7.3.3 Red and White Candy Stripe Tape (Used Solely for Commissioning).....	35
Section H.....	35
8.0 Materials/Handling and Storage	35
8.1 Requirement.....	35
8.2 Trip Hazards	35
8.3 Liquid Spills	35
8.4 Rigging Equipment for Material Handling	35
Section I	36
9.0 Tools/Hand and Power	36
9.1 Requirement.....	36
9.2 Condition	36
9.2.1 Cutoff Wheels	36
9.3 Guarding	36
9.4 Powered Tools	36
9.4.1 Operating Controls and Switches	36
9.5 Identification	36
9.6 Powder Actuated Tools	37
Section J.....	37
10.0 Welding and Cutting.....	37
10.1 Requirement.....	37
10.2 Clothing/PPE	37
10.3 Protection	37

10.4 Storage.....	38
10.5 Restricted Hot Work:	38
Section K.....	38
11.0 Electrical	38
11.1 Requirement.....	38
11.2 Cord Sets (i.e., Extension Cords).....	38
11.3 GFCI.....	38
Section L	39
12.0 Scaffolding (Elevated Work)	39
12.1 Requirement.....	39
12.2 Assembly.....	39
12.3 Scaffold Tags	39
12.4 Falling Object Protection	39
12.5 Rolling Scaffolds.....	39
12.6 Scissor Lifts	40
12.7 Aerial Lifts	40
12.8 Aerial Lift Operation	40
Section M.....	40
13.0 Fall Protection.....	40
13.1 Requirement.....	40
13.2 Fall Protection Plan.....	40
13.3 Fall Protection Equipment	41
13.4 Walking Working Surfaces.....	41
13.5 Leading Edges	41
13.6 Warning Lines	41
13.7 Floor Openings.....	41
13.8 Roof Work/Access	42
13.9 Controlled Access Zone (CAZ)	42
13.10 Working Over Water.....	42
Section N.....	42
14.0 Helicopter Lifts.....	42
14.1 Requirement.....	42

14.2 Notification	42
Section O	43
15.0 Motor Vehicles/Mechanized Equipment	43
15.1 Speed Limits.....	43
15.2 Equipment	43
15.3 Operation.....	43
15.4 Inspections.....	43
15.5 Forklifts	43
Section P	44
16.0 Excavation/Trenching	44
16.1 Requirement.....	44
16.2 Protection	44
16.3 Inspections.....	44
16.4 Access	44
Section Q	45
17.0 Concrete and Masonry	45
17.1 Requirement.....	45
17.2 Support/Protection.....	45
Section R.....	45
18.0 Steel Erection.....	45
18.1 Requirement.....	45
18.2 Protection from Falling Objects.....	45
18.3 Inclement Weather.....	45
Section S	46
19.0 Demolition	46
19.1 Building or Structure.....	46
19.2 Machines and/or Equipment.....	46
Section T	46
20.0 Energy Control Policy and Program.....	46
20.1 Control of Hazardous Energy (Lockout).....	46
20.2 Lockout Training	47
20.3 Group Lockout	47

20.4 Lock Abandonment.....	48
Section U.....	48
21.0 Ladders and Mobile Ladder Stands	48
21.1 Requirement.....	48
21.2 Mobile Ladder Stands.....	48
21.3 Ladder Use	48
Section V.....	49
22.0 Toxic and Hazardous Substances.....	49
22.1 Requirement.....	49
22.2 Material Usage Request	49
22.3 SDS Sheets	49
22.4 Storage/Labeling/Use.....	49
22.5 Emergency Response.....	49
22.6 Disposal.....	49
Section X.....	50
23.0 Confined Spaces	50
23.1 Requirement.....	50
23.2 Confined Space Procedures.....	50
Section Y	50
24.0 Safety Qualifications.....	50
24.1 Supervisors/Project Managers	50
24.2 Dedicated Construction Safety Representative (CSMS 3.8)	50
24.3 Designated Safety Representative	52
24.4 Workers	52
Section CC.....	52
25.0 Cranes and Derricks.....	52
25.1 Requirement.....	52
25.2 Conditions.....	52
25.3 Operations	53
25.4 Qualifications.....	53
25.4.1 Hoist Operator	53
25.4.2 Signal Person	53

25.4.3 Riggers	53
25.4.4 Rigging	53
Appendix.....	54
Revision History	95
Job Safety Analysis (JSA) Guidelines	96

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Section A

1.0 Purpose and Scope

1.1 Toyota Safety Rules

All Contractors are to ensure their workers are given free access to the Toyota Construction Safety Requirements and the host plant local Security Requirements. The requirements are to be available for review and shall be posted in a conspicuous location.

1.2 Contractor's Responsibility

Each contractor has responsibility for the safety of their personnel and shall be responsible for compliance with all Toyota standards, applicable laws, applicable codes, and accredited consensus standards applicable to their scope of work. The General or Prime Contractor assumes the entire responsibility under the contract and the Subcontractor assumes responsibility with respect to their portion of the work. With respect to subcontracted work, the General and Prime Contractors, and any Subcontractor(s), shall be deemed to have joint responsibility. Where joint responsibility exists, both the Prime and General Contractor and their Subcontractor(s), regardless of tier, shall be considered subject to the enforcement provisions of all applicable laws, codes, standards and the requirements contained herein.

1.3 Toyota Acting as General Contractor/Contractor

When an internal Toyota Division, Department, Section, or Group hires a Prime Contractor or is acting in the role of the General Contractor/Contractor, they shall be responsible for performing all required functions of the General Contractor and shall make provisions to satisfy the base requirement of a dedicated on-site Safety Representative as specified in Section 1.6 Safety Representation.

1.4 Monitoring of Construction Site (CSMS 6.5, 6.6, 6.7)

All contractors shall ensure that proper monitoring of the work site and their personnel are conducted per the requirements of this document. The contractor is required to implement a program of planned, regular safety inspections and meetings. Daily Safety Inspections shall be conducted to ensure compliance with their Site Specific Safety Plan, Toyota Guidelines, and applicable law, to maintain good housekeeping of their project sites.

Inspections shall be documented and submitted via the designated Toyota Construction Safety Representative on-site and the Toyota Project designee, and submitted to Toyota Safety on a weekly basis. (CSF D-35)

When Toyota Safety performs audits of work areas, the Dedicated Construction Safety Representative(s) (or designee), shall participate in the audit. The audit results shall be reviewed with the Contractor(s) managing staff and workforce on a daily basis. General Contractors shall review, monitor and document Subcontractor safety performance and make records available to the Toyota Safety Representative upon request.

1.5 Safety Training and Education (CSMS 3.20, 4.2)

All contractors shall ensure that all their workers, and subcontractor's workers, are properly trained, fully qualified for their work, and be prepared to provide declarations of qualification, when requested. The employer shall instruct each employee in the recognition and avoidance of unsafe conditions and the regulations applicable to his or her work environment to control or eliminate any hazards or other exposure to illness or injury. All contractors shall, upon request, provide Toyota Safety access to their training programs and personal training records for their workers on a Toyota project site. Training records include but are not limited to: sign-in sheets, lesson plans, and verification forms. Training records will be subject to review to ensure compliance with governmental regulations and Toyota policies and procedures. **All workers in the U.S. shall have OSHA 10 hour or equivalent (as approved by TEMA Safety) training and certification at a minimum.** Contractors requesting to utilize local or regional safety training programs shall submit to TEMA Safety a letter from OSHA stating the local program meets or exceeds the OSHA 10 curriculum. All contractor submitted safety training programs are subject to review and auditing prior to acceptance.

1.6 Safety Representation

The level of safety representation shall be determined by the exposure or risk associated with the scope of work for the project. General Contractors (including the requirements in Section 1.3) shall provide an on-site Dedicated Construction Safety Representative, on all shifts, who shall be responsible for general site safety. This requirement shall be enforced for the General Contractor regardless of the number of workers onsite. This person shall confirm and enforce all aspects and requirements of the Site Specific Safety Plan and all Toyota requirements, applicable laws and/codes, and consensus standards that are considered to be best practices in their scope of work. This person shall be qualified and knowledgeable in safety and how it applies to the construction industry (Section Y).

Additionally, General Contractors shall ensure appropriate safety coverage and safety deliverables (e.g. a daily safety audit of all jobs) for all subcontractors and jobs performed by ensuring an appropriate span of control based on the requirements in **Table 1**. This safety representation requirement can be satisfied by General Contractor or subcontractor appointed safety representatives, or by (only when directed by Toyota) a combination of safety representatives of the contracting Toyota Department, Section or Group. Where contractors are found not to be in compliance, it is up to the Toyota Project Leader to provide immediate direction, and to suspend activities until adequate coverage is established. General Contractors shall be ultimately accountable for the safety representation, safety programs and performance of their subcontractors. Additional Safety representation may be requested to supplement a subcontractor's lack of safety performance.

NAMCs shall have a designated and onsite management presence for all construction work, including weekend and Shutdown work, to ensure contractor adherence to the requirements in **Table 1**. Where contractors are found not to be in compliance, it is up to the NAMC designee to provide immediate direction, and to suspend activities until adequate coverage is established.

Table 1 – Expected Contractor/Subcontractor Safety Representation

Workers	Required Safety Representation
Fewer than 10	1 Designated
10 or greater	1 Dedicated
30 or greater	2 Dedicated
75 or greater	3 Dedicated
150 or greater	4 Dedicated
Every additional 100	1 additional Dedicated

See Section Y – 24.0 Safety Qualifications on page 50 for reference to contractor safety representation qualifications.

1.7 Required Documentation

Contractors shall maintain a daily roster of all workers on site for accountability purposes. In addition, contractors shall submit Weekly Manpower Reports to Toyota Safety. (CSF D-07) The Toyota Safety Cross (CSF D-09) shall be maintained by the contractor and displayed on the contractors' site visual control display. The required documentation that shall be submitted prior to beginning work, are the (CSF D-01, CSF D-08), a Site Specific Safety Plan and a completed JSA (forms and samples located in the Appendix).

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Section B

2.0 Glossary of Terms used/Interpretations

Three (3) point contact: When climbing, the requirement of having 2 feet and 1 hand on the rungs or 2 hands and 1 foot on the rungs.

5S: Toyota's principal that guides us in maintaining a neat and organized workplace. It stands for; Sort, Straighten, Sweep, Standardize, and Sustain.

Affected Worker: (US/Canada) A worker whose job requires him/her to operate or use a machine or equipment on which service or maintenance is being performed under lockout, or whose job requires them to work in close proximity to the device under the lockout.

ANSI: American National Standards Institute.

Applicable Law: Refers to any acts, regulations, codes, or standards applicable in the jurisdiction where the work is being performed. The contractor shall be aware of all legal requirements that apply to their work.

ARSC: Association of Reciprocal Safety Councils.

Assigned Safety Coordinator: A person and/or person(s) acting as the Designated Safety Representative where a Dedicated Construction Safety Representative has not been assigned, or requirement waived.

Authority Having Jurisdiction (AHJ): (US/Canada) The governmental agency or sub-agency which regulates a construction or installation process and provides final approval of the finished construction project or equipment installation. The AHJ may be a state or local inspector or a representative from the NAMC.

Authorized Worker: A person who has the training, knowledge, and experience to lockout machinery or equipment in order to perform service or maintenance on the machine or equipment.

Certified Crane Operators "CCO" Card: (NCCCO) Certification card issued by the National Commission for the Certification of Crane Operators.

CFR: Code of Federal Regulations. The OSHA Standards are contained in 29 CFR 1910 (General Industry) and 29 CFR 1926 (Construction).

CHST: Construction Health and Safety Technician.

Commissioning: The progressive process utilizing the Toyota Kanban system of installing, testing, and buy-off, for equipment installations and initial start-up.

Commissioning Zone: The area established around the commissioning process, defined by red and white candy striped tape. Please see TEMA PE Commissioning Training for additional specifications and requirements.

Competent Person: (USA) (OSHA 29 CFR 1926.32(f)) (Canada) (OHSA 1.1) One who is capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous to workers, and who has the authorization to take prompt corrective measures to eliminate them.

Confined Space: A space that meets the following requirements: (See Permit Required Confined Space)

- Space is large enough and so configured that a worker can enter and perform assigned work.
- Space has limited or restricted means for entry or exit (example, tanks, vessels, storage bins, hoppers, vaults, and pits).
- Space is not designed for continuous human occupancy. (Sample CSF D-19)

Construction: The activity of work that is not production, maintenance, service, or administrative, that can be performed by contractors, vendors, and installers.

Construction Safety Representative: A person hired by the contractor that is qualified and knowledgeable in safety and how it applies to construction and the project. This knowledge shall have been demonstrated through a combination of experience in the construction field and formal safety training/education.

Constructor: (Canada) A person who undertakes a project for an owner and includes an owner who undertakes all or part of a project by himself or by more than one employer.

Contractor(s): Any person or organization that is hired to perform or lead construction, equipment installation, or decommissioning activities. This includes, but is not limited to, companies that install machines and are responsible for industrial asset disposal. For the purposes of this document, the term Contractor(s) shall be interchangeable with the term General Contractor, Prime Contractor or Subcontractor and shall include their directors, officers, Supervisors, agents or workers, unless otherwise specified.

Controlled Access Zone: (CAZ) An area where the work may take place without the use of a guardrail system, PFAS, or safety net system and where access to the area is controlled by an attendant.

CPR: Cardio Pulmonary Resuscitation.

Critical Lift: A lift that exceeds 75 percent of the rated capacity of the crane or derrick, requires the use of more than one crane or derrick, the lifted item requires more than 1 month to replace, and/or the value of the item is more than \$10,000. (CSF D-26)

CSA: (Canada) Canadian Standards Association.

CSMS: Toyota's Construction Safety Management System.

CSP: Certified Safety Professional.

Danger Area: A controlled area including any work that involves, but not limited to; control of hazardous energy, energized electrical work, confined space, suspended loads, elevated work, excavation and hot work activities.

Dedicated Construction Safety Coordinator: A person whose only job duty is to provide safety coverage and support to the crew, contractor, and/or subcontractor. This person shall not be perform or direct construction activities apart from their safety duties.

Dedicated Spotter: A person whose only job duty is observing a specific task or tasks. This person is shall not have any other job responsibilities or perform any work not related to the observation and assistance of the work they are observing.

Designated Safety Representative: A person whose job duties include providing safety coverage and support to the crew and/or contractor. This person may perform and direct construction activities and shall be the point of contact for any safety related information, concerns, requests and implementation.

Emergency: A sudden, urgent, usually unexpected occurrence or occasion requiring immediate action.

Employer: A person or business that employs one or more people, especially for wages or salary.

Enhanced Capability: A capability change resulting in a new hazard or an increased risk with an existing hazard. This normally involves a change in the machine's function involving one or both of the following: 1) A change in the primary power/energy source (e.g., replacing an air driven motor with an electrical one or increasing voltage feed from 24V to >50V), or 2) A change resulting in enhanced speed, torque, reach, capacity, etc. of the machine.

ESA: (Canada) Electrical Safety Authority (Ontario).

Fall Arrest: Equipment allows a worker to reach a hazard, and then protects them if they fall.

Fall Protection Plan: A written document that includes measures that shall be taken to reduce or eliminate the fall hazard for workers.

Fall Restraint: PFAS equipment that prevents a worker from reaching a fall hazard.

Fall Zone: An area (including but not limited to the area directly beneath the load) in which it is reasonably foreseeable that partially or completely suspended materials could fall in the event of an incident.

Fire Watch: A person whose only job duty is observing Hot Work being performed with an appropriate size and type of fire extinguisher, extending 30 minutes past the conclusion of the hot work. This person shall be trained in the use of the extinguisher, and have the means to contact emergency services.

First Aid: The provision of initial care of an illness or injury, usually performed by non-expert, but trained personnel, until appropriate medical treatment can be accessed.

FLL: (Mexico) Mexican Federal Labor Law.

Foreman: The worker or tradesman who is in charge of a construction crew, for the contractor.

FSR: (Mexico) Mexican Federal Security, Hygiene and Environmental Regulation.

General Contractor: A construction organization that is responsible for the day-to-day oversight of the project, management of vendors and trades, and communication of information to involved parties throughout the course of the project. Responsibilities shall include but not be limited to: managing personnel on site, monitoring schedules, maintaining accurate records, and overseeing of the projects safety performance (see Appendix Construction vs. Non Construction).

Governing Authority: (USA-OSHA) (CANADA-OHSA) the agency prescribed to administer and enforce compliance with applicable law.

Ground Fault Circuit Interrupter: (GFCI) A device used in conjunction with a plug and cord attached cord sets (extension cord), appliance, or device. It is designed to stop the flow of electricity to the device when current from a current-carrying conductor(s) to ground exceeds a preset limit. GFCI's are used to protect people, limiting the current to 5 mA, thereby providing protection from an otherwise potentially lethal shock, and shall be designated as a Class A device.

Hazard Communication: (HAZCOM) The OSHA Hazard Communication Standard, or "HAZCOM," is a set of regulations designed to inform workers of hazards, particularly chemical hazards, in the workplace and to provide information on the type of PPE required for handling chemicals. This standard is also known as the "Worker Right to Know Law".

High Risk Activities: This includes, but is not limited to, any work that involves: control of hazardous energy, energized electrical work, permit required confined space, critical lift, elevated work above 6', excavations over 4' deep, and hot work in hazardous areas during the duration of a project.

Hot Work: Any work that produces or generates an ark, spark, or open flame.

IDLH: Immediate Danger to Life or Health.

Incident: An unwanted or unplanned event that could or does cause injury to people, damage to property, or loss to process.

Individual: All Toyota employees and non-employees such as variable work force (VWF), contractors, temporary employees (temps), and co-ops, who are working on a project under the scope of this document.

Job Control Lock: A lock, which is placed on a group lockout box by a Lockout Job Control Leader. The purpose of the lock is to prevent a lockbox from being unintentionally opened during shift changes or other events. It is the first lock applied to the group lockbox and the last to be removed. This lock may also be the Job Leader's personal lock if a designated Job Control lock is not available.

Job Safety Analysis: (JSA) A proactive risk assessment method for analyzing the potential safety hazards associated with a particular job or task. Each element of the task is analyzed to determine if a potential hazard exists and, if necessary, what method(s) of safeguarding shall be used to counter the risk. The findings of this analysis are used to create a document that is then reviewed with the workers involved with the task. (Sample CSF D-16)

Kanban: As it applies to construction, Kanban is the "visual, efficient and orderly flow of the necessary steps or stages of a work activity to 'safely' install and/or modify equipment and machinery". It is a formal project

management system Toyota utilizes for building and equipment installation and modification start-up and commissioning.

Lay-down Area: The area provided to contractor Companies for the temporary storage of equipment, tools, materials, and supplies, etc. while performing construction work.

Limited Access Zone: (LAZ) A defined area, which shall be established whenever a masonry wall is being constructed. The zone shall be restricted to entry by employees actively engaged in constructing the wall. No other employees shall be permitted to enter the zone.

Lockout: (LO) Placement of a lock on an energy-isolating device to control hazardous energy in accordance with an established procedure, thereby preventing the energy-isolating device from being operated until removal of the lock or in accordance with established procedures.

Machine(s): An assembly of linked parts or components, at least one of which moves, with the appropriate machine actuators, control and power circuits, etc. joined together for a specific application, in particular for the processing, treatment, moving or packaging of a material.

Maintenance: The act of keeping equipment working in its existing state, i.e., preventing its failure or decline or the one-for-one replacement of a component, i.e. replacing a gear for a new, identical gear.

Major Project: Any project that is involved in working with high risk activities (control of hazardous energy, energized electrical work, confined space, scaffolding, elevated work, excavation or hot work), or has a duration of 14 or more working days. (Note: working Saturday and Sunday for 2 weekends equals 4 working days.)

Modify/Modification: Replacing or making changes to one or more major components of a machine resulting in an enhancement to its design, purpose, capacity, or function. (See “Enhanced Capability”).

MOL: (Canada) Ministry of Labor.

MSDS: See “SDS.”

MSHA: Mine Safety and Health Administration.

NAMC: Toyota North American Manufacturing Company. (i.e. TMMK, TMMC, TMMTX, TMMWV, etc.)

Near Hit: A near miss involving a moving object. (See near miss)

Near Miss: An unplanned event that did not result in, illness, injury, or damage but had the potential to do so. (See near hit)

NEC: National Electrical Code.

NFPA: National Fire Protection Association.

NIOSH: National Institute for Occupational Safety and Health.

Non-Permit Required Confined Space: A confined space that does not present an additional life threatening hazard. Documented testing shall be on file certifying that the Confined Space meets the requirements of a Non-permit Required Confined Space as defined by governing agencies. (Sample CSF D-19)

Notice of Project: (Canada) A Notice of Project is required to be submitted by the 'Constructor' to the Ministry of Labor for construction work as defined in the Ontario Regulations for Construction Projects 213/91.

OCIP: Owner Controlled Insurance Program.

OHSA: (Canada) Occupational Health and Safety Act.

ORO: Owner's Representatives Office – a project management organization, usually located on the site of the construction project for major project. It functions as a representative and/or agent of Toyota for the project, and normally includes Toyota and/or contract project leaders, safety representatives, and other technical support staff.

OSHA: (USA) Occupational Safety and Health Administration.

Owner: (Canada) Includes a trustee, receiver, mortgagee, in possession, tenant, lessee, or occupier of any lands or premises used or to be used as a workplace, and a person who acts for or on behalf of an owner as an agent or delegate.

Permit Required Confined Space: A confined space that has one or more additional life threatening hazard(s) (e.g. hazardous atmosphere, risk of engulfment, entanglement, or drowning). (See Confined Space) (Sample CSF D-19)

Personal Fall Arrest System: (PFAS) A system designed to prevent a worker from free falling to a lower level. As a minimum for a Toyota site, it consists of a full body harness, lanyard, and a proper connection point. (See Fall Arrest and Fall Restraint)

Prime Contractor: Any contractor on a project having a contract directly with the owner without any subcontracts/subcontractors.

Project: Any work, or group of work that is performed during construction, installation, and/or decommissioning.

Qualified Person: (USA-OSHA 29 CFR part 1926.32(l)) A person, who by possession of a recognized degree, certificate, third party training, professional standing, or by extensive knowledge, training and experience, can successfully demonstrate the ability to solve/resolve problems relating to the subject matter, the work, or the project.

Qualified Rigger: A person who is certified (See Qualified Person) in the lifting and moving of extremely large or heavy objects and meets the criteria for a qualified person.

Qualified Signal Person: A person who understands the operations and limitations of crane equipment, including the crane dynamics involved in swinging, raising, lowering and stopping loads and boom deflection

from hoisting loads. The person shall be trained and competent to effectively communicate signals through voice, audible, or standard method hand signals.

Recordable: Any injury or illness beyond first-aid, used in reporting to OSHA.

Restricted Hot Work: Hot work that is performed in an NEC Class I Division 1, or Class II Division 1 area.

Rigging: Any type of ropes, cables, hooks, clamps, slings, or other lifting accessories, used for lifting of materials and equipment.

Scaffold Tag: A colored label(s) (green, red, or yellow) that is hung near the scaffold access ladder to identify the safety status of the scaffolding. (See Appendix Scaffold Tags)

SDS: (Formally Material Safety Data Sheet, MSDS) These documents include several important pieces of information regarding the safe handling, first aid, required PPE, firefighting and chemical properties of a product.

Shall: Without exception; a requirement.

Shutdown: The period of time when production has stopped and Construction projects are performed at Toyota facilities. (Refers to Winter Shutdown and/or Summer Shutdown time frame) Determine coverage considering overall scope of project including size of site, shifts, number of personnel, and risk level of work.

Site Specific Safety Plan: A written plan that contains safety procedures for the specific job hazards that the contractor plans to encounter on the project site. (Request sample)

Site Visual Control: A visual display (solid board, vinyl pouches etc.) placed so the contractors and subcontractor's workers have direct and immediate access to information for the safe operation of the project site. (Example in Appendix)

STPS: (Mexico) Mexico's Ministry of Labor, authority in charge of enforcing the labor legislation in Mexico.

Subcontractor: Any contractor that signs a contract with a higher tier Contractor to perform all or part of the obligations of the contracted scope of work. A Subcontractor has all of the same safety obligations and responsibilities as that of the General Contractor.

Supervisor: Member of management or person responsible for providing direct oversight or job specific direction. (See Foreman)

Supplier: Someone who, via business arrangements such as award of a bid or specific service, works on Toyota premises to complete the requirements of the specified task or job. The terms of what they supply specify their task, responsibilities, and duration of the work.

TEMA: Toyota Motor Engineering and Manufacturing North America, Inc.

TEMA Safety: A team member from the TEMA PE Construction Safety group, a TEMA PE Construction Safety Representative (contracted), or an authorized designee (e.g., an NAMC Safety representative).

Toyota: A reference used within this document, which includes Toyota Motor Engineering and Manufacturing North America, Inc. (TEMA), Toyota Owner's Representative's Office (ORO), Toyota Motor Corporation (TMC), and any of the North America Manufacturing Company's (NAMC).

Toyota Electrical Safety Standard (50-1000V) or TEMAS SEI 2001-001: This standard is a formal means to document and establish electrical requirements, standards, procedures, safe work practices, and recommendations necessary for work on or near exposed energized electrical equipment or systems as well as performing other work activities that can expose personnel to electrical hazards.

Vendor/contract employer: Someone who has a business purpose to be on Toyota premises to perform a specific task.

Visitor: A person who is on Toyota premises for a purpose other than performing any work on equipment or systems.

WHMIS: (Canada) Workplace Hazardous Material Information System.

Worker: A person who performs work or supervises work as part of a Toyota construction, equipment installation, or decommissioning project.

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Section C

3.0 General Safety Requirements

3.1 Safety and Health Program (CSMS 3.10)

All Contractors shall create, implement and maintain a Safety and Health Program that demonstrates a level of control by the Contractor over their workers and Subcontractors and addresses all items listed in this document. A copy of the Contractors' Safety and Health Program shall be submitted to Toyota Safety, or their designee, at least two weeks (determination based on the size, scope, and risk) prior to the contractor beginning work on the project.

3.2 Safety Policy, Procedure, and Organization Charts

General Contractors shall obtain, review, and have available Subcontractor safety policies and procedures along with their own to provide to Toyota Safety when requested. General Contractors are required to obtain an organization chart from each of their subcontractors along with their own, and post it on the Site Control Board. All supervisors and Safety representatives shall be identified on each chart.

3.3 Environmental Policy

Contractors shall comply with all requirements published by the Toyota Environmental Engineering Department. It is the Contractors' responsibility to recognize and comply with all necessary NAMC, local, State, Provincial, and Federal environmental laws and requirements. Forms that may be required may be obtained from the host NAMC.

3.4 Hazard Communication/WHMIS (CSMS 3.11)

Contractors shall be using potentially hazardous or restricted substances on the project site shall ensure that the proper Toyota forms have been submitted. Approval from the local NAMC shall be required prior to bringing these substances onto the project site. The forms are available from the local NAMC. Contractors shall be responsible for preparing an inventory and maintaining an SDS file in their office for all approved hazardous chemicals used and documentation of worker training in the hazards and use of these chemicals. SDS files shall be current, per applicable law, and in a location such that they are readily available for inspection.

3.5 Emergency Action Procedures

Contractors shall develop an emergency action plan to be used in the event of a fire, explosion or natural disaster such as a severe thunderstorm, tornado, or earthquake. The emergency action plan shall be in writing and shall cover those designated actions Contractors and their workers shall take to ensure worker safety from fire and other emergencies. The contractor shall review the plan with each worker covered by the plan.

3.6 Substance Abuse Control Program

Toyota is a drug free workplace and insists that its contractors maintain the same. Drug screening shall be required for all workers on Toyota properties (except in Canada). **Proof of current 10 panel drug screening, or greater, within the previous 30 days of hiring shall be provided prior to being issued, or reactivating a badge.** Workers shall be required to provide proof of negative test results at the time of orientation, unless otherwise specified by the local NAMC. Toyota shall not be liable for any delays caused throughout the drug screen process prior to the reception of the negative test results. A break of more than 180 days from any Toyota site shall require submission of a new drug screen prior to badge reactivation. The contractor shall also submit and implement an effective substance abuse control program that shall include a “post-incident,” random (where allowed by law) and “for cause” testing, while under contract at Toyota.

3.7 Site Specific Safety Plan

All General Contractors shall create, implement and maintain a Site Specific Safety Plan, designed specifically for the work for which they have been contracted. This plan shall contain safety procedures for the specific job hazards that the contractor plans to encounter on the project site. The contractor shall identify all tasks associated with the project and then describe the risk reduction methods being taken. Toyota Safety reserves the right to reject any portion of the Site Specific Safety Plan. (Sample available upon request)

3.8 Job Safety Analysis (JSA) (CSMS 3.24, 3.26, 3.27, 6.1, 6.3)

Contractors shall be required to develop a daily Job Safety Analysis, or JSA (CSF D-16) for any activities physically being performed during the project. The JSA shall be submitted to Project Management/Toyota Safety 2 weeks (recommended), but not less than 48 hours prior to the scheduled work for review. The JSA shall be communicated with all workers involved with the task, and signatures acquired prior to work starting. Toyota reserves the right to request that a JSA be performed for specific activities not addressed in the project schedule. If work is discovered being performed without a Toyota Safety reviewed JSA, Toyota reserves the right to stop the work until the situation is rectified. Where the JSA content is substandard; Toyota reserves the right to reject the document at which time up to an additional 48 hours may be used for additional review. (CSF D-16)

3.9 CPR and First Aid Trained Resource Requirement

All contractors shall be responsible for providing a full time, qualified First Aid/CPR person who meets all applicable training requirements as required by applicable law or contract specification. The contractor shall submit a resume and Declaration of Competency (CSF D-01) of their candidate(s) for this position to Toyota Safety or their designee for review prior to any work beginning on site. Toyota Safety reserves the right to reject any candidate they feel is not qualified or cannot otherwise perform the duties for the position.

3.10 Proof of Insurance (CSMS 2.1)

All Contractors shall be responsible for providing Certificates of Insurance to prove valid coverage for Automobile Insurance, Workers’ Compensation Insurance, Owner Controlled Insurance Policy (OCIP) coverage and a valid State Contractors License. When applicable, Contractors not in the Toyota OCIP program shall also provide Certificates for General Liability and Worker’s Compensation Insurance for their workers. Certificates of Insurance shall be provided to Toyota, or their designee, prior to having their

workers being admitted to orientation. Contractors shall not be allowed to work on Toyota property without the required licenses and insurance coverage in place. General Contractors shall ensure that Subcontractors have proof of applicable insurance.

3.11 Project Coordination/Notification of Work (CSMS 6.2)

All General Contractors are responsible for coordinating their work with all affected Toyota Production, Engineering, Facilities, Safety and Security Departments. The Contractors shall provide a JSA and a CSF D-15 or Form 4.0 Notice of Work Permit (Canada) to Toyota Safety, or their designee, prior to beginning actual on-site work. Internal and External led maintenance and service activities shall be considered and included in this requirement. Project Leaders shall stop any work that has not been appropriately coordinated.

3.11.1 Contractor Use of Toyota Equipment

Contractors that wish to utilize Toyota owned, leased or rented equipment shall first submit the request in writing to the designated Toyota contact, comply with any local policies, forms or procedures prior to making use of the equipment. Contractor shall be liable for any damages caused to, or as a direct result of the use of the equipment.

3.12 Toyota Safety Orientation (CSMS 3.28)

All contractor workers who will be working on a Toyota project site, the Contractor's management team, and anyone else, who is given authorization by the appropriate Toyota Management to enter a construction zone, shall attend Toyota Construction Safety Orientation prior to performing any actual work on the site. This training shall be provided by Toyota Safety or their designee and shall be scheduled frequently enough to meet demand. This training is typically provided at the beginning of the work shift. Workers attending orientation shall be attired in such a manner as to be ready to begin work on the project site. Proper clothing (shirts with minimum 4" sleeves etc.), safety-toed boots, and safety eyewear shall be worn when accessing the plant/work site. If the contractor has not worked on site for 180 days (or more), they must retake the Toyota Construction Safety Orientation and must submit all required documentation for reverification (Proof of Drug Screen, OSHA 10, etc.). Contractors shall confirm with each NAMC any local requirements for site orientation. (See sample form CSF D-11.)

3.13 Coordination Meetings

Contractors' supervision shall conduct daily safety coordination meetings with their workers and other contractors to discuss that day's work activities and their associated safety practices. These may be done as part of, or in conjunction with, the pre-shift work planning meetings. Meeting attendance shall be taken and records kept, and submitted to Toyota Safety when requested.

Examples of topics to discuss at coordination meetings are:

- Work coordination specific to that day's activities
- High Hazards and countermeasures for the day's work
- Safety Alerts, Safety Incidents
- General safety practice reinforcement
- Results of previous day's safety audits

The Contractor Safety Representative or member of management from each contractor shall participate in a Safety Review Meeting, when applicable. These shall be scheduled and conducted by a Toyota Safety representative for all larger projects or smaller projects, as needed. The purpose of this meeting is to discuss any safety deficiencies found from auditing work areas, provide updates on changing safety standards, review incidents, JSA's and other pertinent safety information. **The Safety Review Meeting is mandatory for all Contractor Safety Representative or their designees.**

3.14 Contractors Tool Box Talks

Contractors shall conduct Toolbox Safety Meetings at least weekly with their personnel for safety awareness and discussion of special Safety topics. Copies of the meeting shall be available to Toyota Safety upon request.

3.15 Site Visual Control (CSMS 4.3)

All major projects shall have a site visual control board (see Appendix). Each General Contractor shall maintain a Site Visual Control Board during the duration of the major project. Refer to the Toyota Construction Safety Standards Appendix – Site Control Board for a listing of required documents that shall be posted. For all other projects, site visual control may be maintained in a binder, protective sleeves, or other means readily known and available to all affected workers and Toyota representatives.

3.16 Means of Egress

In every building or structure, exits shall be maintained to provide free and unobstructed egress from all parts of the building at all times when it is occupied. No containers, working materials, building materials, etc. shall impede egress. No lock or fastener to prevent free escape from the inside of any building shall be used. Readily visible signs shall mark access to all exits including where they are not immediately visible to the occupants. Workers are prohibited from walking through any overhead door unless transporting materials or providing dedicated walking spotter/escort duties. Where man doors are not available, workers shall proceed with caution only after confirming it is safe to do so.

3.17 Emergencies: Evacuation/Severe Weather/Spills/Fires

The contractor shall use the host plant's fire, spill, and evacuation/seek shelter plan which provides site-wide procedures to be followed in case of fire, explosion, spills, or severe weather. Where there is no host plant plan or it does not cover the location/scope of the Contractor's project, the contractor shall implement their own. This plan shall be in writing and provide a set of procedures to be followed throughout all phases of the project. As the project progresses, emergency plans shall change to accommodate new conditions at the site that introduce a previously unidentified hazard, including procedures which cover incidents occurring both before and after building enclosure timing. Emergency Contact List (CSF D-08) shall be submitted to Toyota Safety and posted on the Contractors Site Control Board.

3.18 Incident Reporting Procedures

All injuries and injury-free incidents (Near Hit/Miss, Property Damage etc.) shall be reported immediately to contractor supervision and TEMA Safety. A copy of the Toyota Incident Report (CSF D-12) shall be completed for all accidents and submitted to TEMA Safety within 24 hours of the incident. Recordable injuries and illnesses shall be investigated separately using an acceptable root cause analysis document and submitted to

TEMA Safety in accordance with the schedule outlined in the Incident Report instructions. The incident shall be communicated to all workers at the project site, to prevent re-occurrence.

3.19 Housekeeping/5S

All areas shall be maintained in a good “5S” (Sort, Straighten, Shine, Standardize, and Sustain) condition at all times. During construction, debris shall be kept cleared from work areas, emergency equipment, passageways, and stairs. Debris shall be removed at regular intervals as often as necessary, but no less than once on each day work is performed. Containers shall be provided by the contractor for collection of debris and personal trash.

The supplier, contractor, or other responsible party is responsible for proper storage (including time limitations), handling, and disposal of hazardous waste generated on site according to applicable Federal, State and Local laws and regulations. Notify Toyota Environmental for disposal requirements, where applicable. For additional information reference the most recent version of Toyota’s Construction Site/Construction Project Environmental Management Handbook.

3.20 Commissioning

Commissioning is the process to verify and validate the performance of equipment (e.g. initial power-up, debugging, confirming safety function, etc.). All commissioning members shall review the work area with the Toyota Project Leader or designee responsible for the equipment, prior to commissioning activities commencing and identifying pertinent issues that need to be explained to all persons participating in the commissioning:

- All commissioning participants shall be identified by a badging or other identification system.
- Each specific commissioning zone shall have a sign in sheet.
- A notice shall be sent out by the commissioning contractor to TEMA Engineering, TEMA Safety (host NAMC Safety Dept. where requested), and other affected contractors, 72 hours prior to initial equipment activation.
- Tape dimension shall create clear barrier to prevent reaching into the hazard area.
- Signage shall be posted in adequate locations stating “DANGER, Do Not Enter, Commissioning in Progress, Authorized Personnel Only” or similar (CSF D-25). Prior to ‘start up’, the line shall be inspected to ensure it is ready for commissioning and to ensure that no unauthorized personnel are in the testing area.
- Only authorized personnel shall be in/over/under the commissioning zone during testing. Authorized personnel shall be visually identified as Commissioning Team Members. (e.g. badge, sticker)
- If the line of visibility is obstructed, spotters shall be stationed, complete with a communication system to ensure a safe start up.
- When commissioning tests are completed the red and white candy striped tape and commissioning signs shall be removed.

3.21 Safety Violations (CSMS 9.1, 9.2)

Where Toyota or its authorized representatives observe or are formally made aware of a violation of Toyota Construction Safety Requirements or applicable law by the Contractor, its workers, Subcontractors or

Suppliers, the contractor shall be immediately notified. Each contractor shall immediately notify Toyota Project Management and Toyota Safety regarding violations of any applicable legal requirements by its own workers, Subcontractors or Suppliers. (CSF D-13)

Every contractor shall have a progressive corrective action policy that where applicable, it shall address any collective agreement and shall meet the requirements for this project. Contractors shall inform Toyota Security of any actions taken regarding corrective action that includes removal or barring from a Toyota site(s). In addition, Toyota reserves the right, based on the severity of the incident(s), to request that the contractor remove worker(s) from the site for rule(s) violations.

If contractor is found to be in violation of a plant specific safety or security matter, Toyota shall investigate the incident with the host plant to determine access privileges of the party involved. Contractors shall inform Toyota Security of any actions taken regarding security matters. The supervisor of any worker who is requested to be removed from the project shall also be reviewed for corrective action by the contractor (employer).

The Toyota project management team and Toyota Safety shall be notified of any formal safety or security related corrective action the contractor may take while on the project. Toyota reserves the right to enforce corrective action up to and including termination.

Violations subject to immediate dismissal from all Toyota sites:

Fall Protection/Lockout/Confined Space/Hot Work

- Intentional violation of Fall Protection, Lockout, Hot work and/or Confined Space standards.

Behavior

- The willful and/or reckless failure to comply with a standard and/or abate a recognized hazard and the consistent failure to observe safety rules.
- Intentionally disabling a safety guard or device.
- Falsification of a qualification or certification to operate specialized machinery.
- Possession, sale, or use of alcoholic beverages or controlled substances.
- Supervisors or foremen intentionally instructing workers to work in an unsafe manner or intentionally not enforcing the Toyota site safety policies with their workers.

Violence

- Fighting on Toyota property/Assaulting another person.
- Sexual misconduct, sexual harassment, or public indecency.
- Arson/Intentional property damage.
- Robbery or Burglary/Criminal trespass.
- Disorderly conduct.
- Possession of a firearm or other deadly weapon on Toyota property.

Security

- Insubordination.
- Failure to surrender official Toyota identification when asked to by Toyota, Security or contractor supervision.

Traffic

- Willful violation of Toyota's established and posted traffic controls.

Any other acts that may result in injury to the worker, other workers or cause damage to contractor or Toyota property.

3.22 Smoking and Tobacco Products Policy

Smoking and the use of any tobacco or herbal products including, but not limited to, chewing tobacco, electric cigarettes, clove cigarettes, and tobacco pouches shall follow local NAMC's policies and procedures. Violation of the tobacco policy may result in disciplinary action up to and including termination. Smoking and tobacco product infractions not directly related to the safety of workers shall be referred to NAMC Security.

3.23 Recording Devices

Use of recording devices (e.g., cameras, video recorders, photo capable cell phones, digital recorders etc.) is prohibited without prior written authorization from Toyota Security. Violations will be referred to NAMC Security.

3.24 General Security Rules

Please contact the local TEMA or NAMC representative for a comprehensive list of security requirements. A badge request form and Safety Orientation verification shall be required for security prior to entering any NAMC.

Section D

4.0 Environment/Site Conditions

4.1 First Aid

Provisions shall be made prior to the beginning of the project by the contractor to ensure the availability of prompt medical attention in case of injury. First aid supplies are required to be easily accessible (within two (2) minutes). The contractor shall provide suitable facilities for quick drenching or flushing of the eyes and body within the work area for immediate emergency use.

4.2 Sanitation

An adequate supply of potable water shall be provided for drinking. Contractors shall make arrangements for or provide toilets for workers according to applicable law for the jurisdiction. When toilets are provided

by contractors they shall maintain an adequate cleaning schedule as to not affect the health and safety of their workers or other contractor workers on the site.

4.3 Noise Exposure

Protection against the effects of noise exposure shall be provided by the Contractor. The proper protection shall meet or exceed OSHA/ANSI/OHSA requirements. (See Section E)

4.4 Illumination

The contractor shall provide general and task lighting suitable for the work activities being performed. Construction areas shall be lighted with either natural or artificial illumination and shall be lighted to not less than the minimum illumination intensities required by (29CFR 1926.56(a), Table D-3).

4.5 Ventilation

The contractor shall provide adequate controls of fumes, vapors, mists, or gases that meet or exceed OSHA/MSHA requirements. Air monitoring shall be utilized in the presence of a potential hazardous atmosphere.

4.6 Dust Control

Contractors shall develop and implement a dust control program that contains a description of the methods to be used for controlling dust. Water shall be the preferred method. Any variance shall be approved by Toyota Safety. Contractors shall have this program on file and submit it to Toyota Safety when requested.

4.7 Radiation

In construction and related activities involving the use of sources of ionizing radiation, the pertinent provisions of the Nuclear Regulatory Commission's Standards for Protection against Radiation, relating to protection against occupational radiation exposure, shall apply. Any activity which involves the use of radioactive materials or X-rays shall be performed by a Competent Person trained in the proper and safe operation of such equipment.

Section E

5.0 Personal Protective Equipment

5.1 Requirement

Proper clothing (shirts with minimum 4" sleeves etc.), safety-toed boots, and safety eyewear shall be worn when accessing the plant/work site. Contractors shall ensure their workers, Subcontractors, suppliers, and visitors are familiar with all personal protective equipment required on the project, and have been instructed how to use and maintain the equipment according to good safety and hygiene practices. Failure to wear required PPE may subject the worker to corrective action, up to and including dismissal from Toyota property. Other personal protective equipment may be required in specific areas of the local NAMC. Verify the additional PPE requirements with the local NAMC.

5.2 Foot Protection

Safety-toed work boots covering the ankle, appropriate for the work activity, and approved by applicable law (e.g. CSA approved “Green Triangle” safety shoes for Canada), shall be worn at all times by construction workers. All leather, EH rated safety-toed work boots are required when exposed to electrical hazards. Metatarsal foot covers are required when using Jack Hammers or hand controlled tamping equipment. Contractors shall verify with the local NAMC as to any additional foot protection requirements outside of the construction areas. (ANSI Z41.1)

5.3 Hand Protection

Employers shall make available to their employees the appropriate hand protection when employees’ hands are exposed to hazards such as those from skin absorption of harmful substances; cuts or lacerations; abrasions; punctures; chemical burns; thermal burns or harmful temperature extremes.

The selection and use of hand protection shall be based on an evaluation of hand position and task as it is relative to the exposure or tool. This can be accomplished by reviewing the task, conditions present, duration of use and hazards/potential hazards that have been identified through the JSA (Job Safety Analysis). (CSF D-16)

5.4 Head Protection

Approved hard hats, meeting the requirements of “Type I, Type II Class E or G”, shall be worn at all times by construction workers in construction areas. Hard hats shall be worn with the brim facing forward. It may only be worn in reverse if: the job, task, or work environment necessitates wearing it backward (e.g. face shield or welding helmet), and the hard hat has a reverse orientation mark. No “cowboy” hardhats or “bump” cap style hats allowed in construction areas.

5.5 Hearing Protection

When noise levels exceed 85dBa, the proper hearing protection shall be worn, and provided by the Contractor.

5.6 Eye and Face Protection

Approved eye protection (ANSI Z87/CSA Z94.3) with fixed side shields or safety rated goggles shall be worn properly at all times. Prescription safety glasses shall be fitted with secured side shields and have a minimum ANSI rating of Z87-2. The use of thin plastic slip-on side shields shall not be used. Tinted safety glasses shall not be worn inside of buildings.

5.7 Respiratory Protection

The contractor shall take all actions necessary to ensure air quality standards are met on the project and in their work areas. Contractors shall evaluate emissions caused by their work processes (e.g., welding, running vehicles, etc.) and/or by the materials used. The contractor shall have a respiratory protection program and provide NIOSH/MSHA approved respirators, dust masks, and training when such equipment is necessary to protect the health of the worker.

5.8 Protective Clothing

Proper protective clothing shall be worn at all times; full length pants and shirts with a minimum of 4" sleeves. Approved high visibility shirts, vests, or jackets shall be used at all times while on the site. It shall be permissible to remove high visibility vests that are not arc rated (AR) while performing work activities where danger of sparks, arc, or fire. Contractors shall verify with the local NAMC as to any additional protective or mutilation-free clothing requirements outside of the construction areas.

Section F

6.0 Fire Protection/Prevention

6.1 Requirement

The contractor shall at no time impede or impact any life safety system (e.g., fire suppression, fire alarms, etc.) without written authorization from Toyota Safety or designee and local NAMC's Security according to local requirements. The contractors shall verify with local NAMC any documentation requirements. The contractor shall be responsible for the development of a fire protection program to be followed throughout all phases of the construction and demolition work. Contractors shall train their workers in the potential fire hazards of their jobs. A record of this training shall be kept on file by the contractor and submitted to Toyota Safety upon request.

6.2 Fire Extinguishers

In case of fire, contractors may try to extinguish incipient (beginning) fires with a portable fire extinguisher of the proper size and rating, only if they have been properly trained and it is safe to do so. Fire extinguishers that have been listed or approved by a nationally recognized testing laboratory shall be used to meet the requirements of this guideline. Contractors shall not be permitted to claim a local NAMC's fire extinguisher to satisfy their requirements as part of construction activities. Any discharge of a local (NAMC) fire extinguisher, whether by accident or in the event of extinguishing a fire, shall be reported to the NAMC's Security Department.

6.3 Flammable and Combustible Liquids

Only approved containers and portable tanks shall be used for storage and handling of flammable and combustible liquids. Such materials shall be handled and stored consistent with the requirements of the SDS (formerly MSDS).

6.4 Fuel Storage

Propane, fuel, oxygen, etc., shall be stored away from work or working areas, outside of buildings and in appropriate lockable storage "cages" in accordance with all federal, state and local laws. All storage "cages" shall be identified with the Contractor's name and contact number. Verify with local NAMC or Toyota Safety for the proper "storage area".

Section G

7.0 Signs/Barricades

7.1 Requirement

Construction work areas shall be posted with appropriate signs and shall be positioned conspicuously around the perimeter of the protected area (CSF D-38). In addition to the warning information, signs shall contain the Contractor's name, contact number(s), list of the hazards within, and a clear indication of the PPE required for entry. Safety warning signs may be attached directly to barrier fences or signage tape and shall be posted at all access/egress points. Barricaded areas shall have designated entry and exit points and these shall be maintained and functioning at all times to prevent the need to go under, or step over signage tape.

7.2 Barricades

Barricades or guardrails are required around excavations, openings in floors or roof areas, edges of platforms, roof and overhead work areas. Means of access or egress shall be available where it does not pose a hazard. Barricades and guardrails used for the prevention of falls shall comply with applicable federal, state and local laws.

7.3 Signage Tape

7.3.1 Yellow Caution Signage Tape

Yellow Caution signage tape is used to designate a controlled area that poses no specific, immediate hazard such as laydown/storage areas, break areas, general construction or work area boundaries etc.. Workers may enter this area only if it is necessary and only after first determining it is safe to do so by confirming the general hazard(s) within and any PPE requirements as indicated on the warning signage. Yellow Caution signage tape shall be maintained in working condition and shall be supported to hang such that it is between 42 inches (1.1 m) plus or minus 3 inches (8 cm) above the walking/working level.

7.3.2 Red Danger Signage Tape

Red Danger signage tape is used to designate a Danger Area that poses a specific and immediate danger to workers within due to the high risk activity. Workers not directly involved with the work in progress inside this area shall not enter unless given permission by the controlling contractor. Additionally, the entering worker shall fully understand the hazards in the area (review of the JSA is recommended) and Red Danger signage tape shall have signage indicating specific hazards (ex: overhead work). Areas barricaded with Red Danger signage tape shall be maintained in working condition and for only as long as necessary to perform the work. The area designated by Red Danger signage tape shall not completely block access to other areas of the work site. Pathways are to be created to allow access around the designated areas. Red Danger signage tape shall be maintained in working condition and shall be supported to hang such that it is between 42 inches (1.1 m) plus or minus 3 inches (8 cm) above the walking/working level.

7.3.3 Red and White Candy Stripe Tape (Used Solely for Commissioning)

Red and White Candy Stripe tape, or Commissioning tape, is used to designate a controlled area that is under the commissioning process to indicate the unique hazards experienced during the commissioning procedure. The designated area shall completely encompass the area under commissioning including any adjacent areas that are being used for commissioning purposes (e.g. drive path of a vehicle, extents of a robot in teach mode, etc.). Workers entering the commissioning zone shall be properly trained and identified as part of the commissioning team for that specific process or work zone. A sign shall be posted at the entrance of the commissioning zone, (CSF D-25) warning of restricted access. The sign shall be in English, Japanese, and Spanish. (Please see TEMA PE Commissioning Training for additional specifications and requirements.) Commissioning tape shall be maintained in working condition and shall be supported to hang such that it is between 42 inches (1.1 m) plus or minus 3 inches (8 cm) above the walking/working level.

Section H

8.0 Materials/Handling and Storage

8.1 Requirement

The contractor shall only store material in the “lay-down” area(s) approved by Toyota. The perimeter of the designated areas shall be barricaded, roped-off, or otherwise identified. Contractors shall relocate their material lay-down and fabrication areas upon the request of Toyota. All contractor material shall be removed from the site at the completion of the job. Materials shall not be stored on scaffolds or runways in excess of supplies needed for immediate operations. All material shall be stacked, racked, blocked, interlocked, or otherwise secured to prevent sliding, falling or collapse. All materials stored outside of building(s) shall be secured in the event of severe weather.

8.2 Trip Hazards

Aisles and passageways shall be kept clear to provide for the free and safe movement of material, handling equipment, and employees in accordance with Section C, 3.19.

8.3 Liquid Spills

Report all spills to the appropriate Toyota member immediately. Spill Kits shall be provided by the Contractor, readily available, and fully stocked at all times while working with or around oils, liquids, and chemicals.

8.4 Rigging Equipment for Material Handling

Each day before being used, the rigging equipment, all fastenings, and attachments shall be inspected for damage or defects by a competent person designated by the employer. Additional inspections shall be performed during rigging equipment use where service conditions warrant. Damaged or defective rigging equipment shall be immediately removed from service. The equipment shall have permanently affixed and legible identification markings as prescribed by the manufacturer that indicate the recommended safe working load. The rigging shall be stored in such a manner as to prevent a hazard to workers, or damage to the rigging or rigging equipment.

Section I

9.0 Tools/Hand and Power

9.1 Requirement

Contractors shall be responsible for ensuring that hand tools, power tools, and equipment are maintained in safe working order.

9.2 Condition

Electrical tools shall be maintained per the manufacturers' requirements and inspected before each use.

9.2.1 Cutoff Wheels

Multipurpose wheels shall be used only with Toyota Construction Safety and Toyota Management approval and used as a last resort if alternative methods are not feasible. Contractors Supervisor shall review, and issue the appropriate media for the task after receiving Toyota approval. Approved multipurpose cutting / grinding discs that can both cut and remove excess material shall be made of 3 layers of bonded reinforcement and manufactured to EN12413 standards. The minimum thickness shall be 5/64" or 19mm. Before an abrasive wheel is mounted, it shall be inspected closely for damage and should be sound or ring-tested to ensure that it is free from cracks or defects.

9.3 Guarding

Proper guards shall be installed on all power tools before being issued. Tools that have been modified (i.e., missing handles, or homemade handles or extensions) are not permitted.

9.4 Powered Tools

All mechanically powered equipment, tools, machines, and devices rated at greater than 10 horsepower shall be inspected by a competent person on a regular planned basis and documented.

9.4.1 Operating Controls and Switches

The following hand-held power tools shall be equipped with a constant-pressure switch or control that shuts off the power when pressure is released: drills; tappers; fastener drivers; horizontal, vertical, and angle grinders with wheels more than 2 inches (5.08 centimeters) in diameter; disk sanders with disks greater than 2 inches (5.08 centimeters); belt sanders; reciprocating saws; saber saws, scroll saws, and jig saws with blade shanks greater than ¼ inch (0.63 centimeters) wide; and other similar tools. It is recommended that the constant-pressure control switch be regarded as the preferred device on all power tools. Tools that are not manufactured with a constant pressure switch shall be submitted and approved by Toyota Project Leader and Toyota Safety, and be clearly identified on the JSA prior to use.

9.5 Identification

Contractors shall have company name, signs/labels on all job boxes, toolboxes and equipment, to include: lifts, site carts, job trucks etc.

9.6 Powder Actuated Tools

Powder actuated hand tools used on the construction site shall comply with the following:

- Operator shall be certified by the tool manufacturer or their representative, with a copy on file with the contractor, available upon Toyota Safety request.
- All powder actuated hand tools used on site, shall utilize low velocity shot, comply with all applicable safety requirements, and shall be maintained in a safe working condition.
- The powder actuated tool shall be tested in accordance with the manufacturer's recommended procedure before loading, to verify all safety devices are in proper working condition.
- All shot casings (spent or misfired) shall be placed in a metal receptacle used only for this purpose, and disposed of regularly.

Section J

10.0 Welding and Cutting

10.1 Requirement

A "Hot Work Permit" shall be issued by the local NAMC for any work that produces an arc, spark, flame and/or has the ability to ignite flammable or combustible materials. All contractors shall follow the local NAMC's "Hot Work" requirements including any special requirements for Fire Watch training or identification.

10.2 Clothing/PPE

Welders and other employees who are exposed to radiation from welding and sparks from grinding operations shall be suitably protected (welding hood, eye protection, gloves, leathers, leather shoes etc.) so that the skin is covered completely to prevent burns and other damage from the work process. Also, special care shall be taken to protect fall protection equipment during welding, grinding and burning operations while still allowing for the fall protections devices to operate properly.

10.3 Protection

Flashback or flame arrestors shall be provided on all gas welding equipment. The contractor shall provide proper protection for the surrounding area(s) of "Hot Work" including protection for equipment, product, and workers. Whenever practicable, all arc welding and plasma cutting operations shall be shielded by noncombustible or flameproof screens which shall protect employees and other persons in the vicinity from the direct rays of the process.

The contractor shall provide an employee to serve as Fire Watch during the welding or cutting operation. The Fire Watch shall be equipped and trained by the Contractor, with an appropriate fire extinguisher of the proper type and size for the work area. The Fire Watch shall be maintained for 30 minutes unless site conditions warrant further time (e.g. re-ignition after the welding or cutting has been completed). While serving as Fire Watch the employee shall not perform any other duties or leave the area.

10.4 Storage

Temporary storage of gas cylinders shall be allowed with gauges removed and protective caps installed. Long term storage of full or empty gas cylinders shall be outside of the building, in locked cages, and separated per OSHA and any federal, state or local requirements.

10.5 Restricted Hot Work:

Certain areas of the NAMC's have been designated as "RESTRICTED HOT WORK AREAS" due to extremely high fire and/or explosion risks. Local NAMC verification of document requirements for any Hot Work occurring in a Restricted Hot Work Area shall be completed prior to the pre-job review. All applicable risks shall be identified on the JSA. The JSA shall then be sent the Shop Manager, Project Leader, Toyota Safety Representative, and Fire Prevention member at the site for review and approval.

Section K

11.0 Electrical

11.1 Requirement

All electrical equipment/systems, which have been connected to an electrical source of power, shall be considered energized until de-energized, locked out, and verified as zero energy using appropriate procedures. All contractors who are required to work near or on exposed energized conductors or circuit parts shall use the guidelines identified in NFPA 70E, CSA Z462, NOM 029-STPS or Toyota Electrical Safety Standard (50-1000V) TEMAS SEI 2001-001 as applicable, to determine appropriate PPE requirements and establishment of Shock and Arc Flash Boundaries. All workers subject to being exposed to energized electrical conductors or circuit parts must have received adequate training on electrical safe work practices. In addition, all workers trained in electrical safety/electrical safe work practices must have proof of proper training. If work is required on an energized conductor or circuit, an Electrical Energized Work Permit (EEWP) shall be utilized as prescribed in the most current version of NFPA 70E, CSA Z462, NOM 029-STPS or the TEMAS SEI 2001-001.

11.2 Cord Sets (i.e., Extension Cords)

Extension cord sets used shall be of the three-wire type and shall be designed for hard or extra-hard usage per National Electric Code (NEC) Table 400.4, Canadian Electrical Code (CEC) Table 11 or the Mexican Electrical Code (MEX) Table 400.5. Cord sets of "flat" construction are strictly prohibited. Cord sets having ground prongs which are damaged or removed shall not be used at any time. Cord sets shall be inspected prior to each shift and removed from service if defective. Cord sets shall only be repaired by qualified individuals using "Listed" components (e.g., Underwriters Laboratory (UL)) intended for the purpose and to an equivalent level of performance.

11.3 GFCI

Contractors shall use ground fault circuit interrupters (GFCI) on all 125 volt single phase, 15 and 20 ampere receptacles, cord sets, devices, and portable electric tools used on the site. GFCI protection shall be provided at the supply end (plug) of the cord set or power cord for a portable electric tool. Portable GFCI's shall be

tested prior to each use and permanently installed GFCI's shall be tested monthly to ensure proper operation. Cord sets, portable electrical tools, and equipment operating at greater than 125 volts shall utilize either properly rated Class "A" GFCIs, or where appropriate Class "C" GFCIs, or an Assured Equipment Grounding Conductor Program (AEGCP). Requirements for the AEGCP can be found in the Toyota Electrical Safety Standard (50-1000V) TEMAS SEI 2001-001. A written log of all GFCI tests and/or AEGCP tests shall be maintained by the contractor and made available to Toyota Safety or their designee upon request. All 125-volt, single-phase, 15-and 20-ampere receptacle outlets that are a part of a 15-kW or smaller portable generator shall have ground-fault circuit-interrupter protection for personnel integral to the generator or receptacle. If the generator was manufactured or remanufactured prior to January 1, 2015, listed GFCI adapters or cord sets incorporating GFCI protection at the supply end shall be permitted when plugged directly into the generator.

Section L

12.0 Scaffolding (Elevated Work)

12.1 Requirement

All scaffolding equipment and installations shall comply with applicable laws and regulations. Contractors shall train all workers using, dismantling, or erecting scaffold in accordance with applicable federal, state and local laws and manufacturers guidelines. A training record for this activity shall be available for review or submitted to Toyota Safety, as requested.

12.2 Assembly

A Competent Person Declaration Form (CSF D-01) shall be completed by the contractor for the worker(s) who shall be supervising the assembly, modification and disassembly of scaffolding.

12.3 Scaffold Tags

Scaffolding shall have a Scaffold Status Tag attached to it at all times. A competent person employed by the contractor shall complete and apply this tag. The tags shall be supplied by the Contractor and inspected daily. (Sample in appendix)

12.4 Falling Object Protection

The area below a scaffold shall be cordoned off and have appropriate warning signs while work is performed from the scaffold. Where workers are required to work or pass under the scaffold, scaffolds shall be provided with falling object protection.

12.5 Rolling Scaffolds

Contractors shall not permit their workers to ride a rolling scaffold at any time. All tools and material on the deck shall be removed or secured before moving. The wheels shall be locked prior to using rolling scaffolding.

12.6 Scissor Lifts

Toyota does not distinguish between Scissor type lifts and Aerial Lifts. All requirements of Section 12.7 Aerial Lifts apply to all scissor type lifts and elevated work platforms.

12.7 Aerial Lifts

All Aerial Lifts shall also follow the standards in Section O in this document pertaining to Equipment, Operation and Inspections. Only certified operators, trained in the manufacturer's recommended methods, shall operate an aerial lift. Documentation of such training shall be available for review by Toyota Safety upon request. Personal fall restraint shall be worn at all times while operating, riding, and/or working in/on an aerial lift. Where aerial lifts are equipped with a designated or pre-engineered tie-off point, that point shall be used as the fall restraint tie-off point. If no pre-engineered point is provided; the contractor shall be responsible for determining and utilizing the location of the manufacturer's approved tie-off point(s). Hand rails shall be of sound structural integrity, with no visible signs of damage, including bending, crimping, cracking, breakage or other deformations. Workers are not allowed to stand on the work platform toe-boards, mid-rail or top-rail, or use the railings for lifting or placement of work unless specifically approved in the JSA and operated in accordance to the manufacturer's guidelines and listed on the contractor's JSA. Operators shall be required to utilize a dedicated walking spotter when traveling through interior areas when not directly inside of a designated construction area with clearly defined aisles or paths of travel.

12.8 Aerial Lift Operation

Only authorized operators, trained in the manufacturer's recommended methods, shall operate an aerial lift. Red danger signage tape shall be used to identify the hazard area below the elevated work platform and/or a dedicated spotter shall be used during overheard work operations. High visibility cones with signage or a dedicated spotter may be substituted, with Toyota Safety review/approval, if signage tape is not practical. Operators shall be required to utilize a dedicated walking spotter when traveling through interior areas when not directly inside of a designated construction area with clearly defined aisles or paths of travel.

Section M

13.0 Fall Protection

13.1 Requirement

The contractor shall develop a detailed Fall Protection Plan to cover all work conducted where the workers' feet are at or higher than 6 feet (1.8 meters) above a lower level or where there is a potential to fall into equipment or other hazard (e.g., vertical rebar, etc.). Fall protection shall be required at lower elevations where a fall into equipment may cause impalement or other serious injury.

13.2 Fall Protection Plan

The Fall Protection Plan shall address the prevention of falls through the use of training, guardrails, and travel restraint. The fall protection plan shall identify the type of equipment that shall be used including anchor points, lifelines, connectors, lanyards, retractables, and harnesses. It shall also include procedures to

train personnel, inspect equipment, and a plan to rescue a fallen worker. The plan shall be submitted to Toyota Safety at least four (4) working days in advance of work beginning.

13.3 Fall Protection Equipment

Full body harnesses, shock absorbing lanyards, locking snap hooks and proper anchorage points are the minimum requirements for a personal fall arrest system. Body belts are not acceptable. All components shall be inspected prior to and after each use. An inspection procedure shall be put in place.

For work requiring free climbing (e.g., climbing on top of machines), leaving the basket or scaffold, a double lanyard system shall be used to maintain 100% tie-off. This work shall be identified in a JSA.

13.4 Walking Working Surfaces

Adequately secured and identified covers and/or guardrails shall be provided to protect personnel from the hazards of open pits, tanks, vats, ditches, or any other such hazards. Open-sided floors or platforms 4 feet (1.2 meters) or more above adjacent floor or ground level shall be guarded with a standard railing and toe board wherever persons can pass underneath, where there is moving machinery, or where falling materials could create a hazard. All floor surfaces should be kept free from protruding objects (nails, splinters, or other projections) and loose boards, holes, etc. Contractors shall determine the floor load ratings or load capacities of all temporary and permanent structures prior to commencing work on or loading materials onto the floors or structures. Sufficient safe clearances should be allowed between machinery and adjacent aisles or passageways. Snow, ice, and other hazardous walking surface contaminants shall be removed or treated as soon as possible.

13.5 Leading Edges

Each employee who is constructing a leading edge 6 feet (1.8 meters) or more above lower levels shall be protected from falling by guardrail systems, safety net systems, or personal fall arrest systems. Exception: When the employer can demonstrate that it is infeasible or creates a greater hazard to use these systems, the employer shall develop and implement a fall protection plan which meets current requirements.

13.6 Warning Lines

Warning lines shall be erected around all sides of a roof work area. Warning lines shall be located not closer than six (6) feet (1.8 meters) from the roof edge. PFAS shall be provided and be used by any workers who are required to work on the roof edge side of a warning line.

13.7 Floor Openings

No floor hole covers, grating, or access hatches shall be opened or removed without first contacting Toyota Safety or their designee and completing a Floor Opening Checklist (CSF D-40). Prior to removal and start of work, Toyota Safety (or designee) shall review the checked procedures and protective measures on the permit. Only then shall the contractor be allowed to remove the covering. After completion of work, or the end of shift, the floor covering shall be replaced and clearly marked and easily identifiable. No floor opening shall remain open beyond shift end.

13.8 Roof Work/Access

It is the responsibility of all contractors or other party(s) requiring roof access to prepare a fall protection plan that includes the precautions and emergency/rescue plan for work on the roof (e.g. skylight protection/roof openings). The contractor shall identify why, when, where, and how their work is to be performed. Procedures should also address such issues as work during inclement weather (wind, ice, snow, etc.). When required by the local NAMC, the contractor shall obtain a Roof Access Permit or similar before allowing workers on the roof.

13.9 Controlled Access Zone (CAZ)

Before any non-conventional fall protection systems are used as part of the work plan, a Controlled Access Zone, or CAZ, shall be clearly defined by a competent person as an area where a recognized hazard exists. The demarcation of the CAZ shall be communicated by the competent person in a recognized manner, either through signs, wires, tapes, or ropes. The contractor shall take the following steps to ensure that the CAZ is clearly marked or controlled by a competent person:

- All access to the CAZ shall be restricted to authorized entrants.
- All workers who are permitted in the CAZ shall be listed in the appropriate sections of the Fall Protection Plan, prior to implementation.
- The Competent Person shall ensure that all protective elements of the CAZ be implemented prior to the beginning of work.

13.10 Working Over Water

Contractors working over or near water, liquids, or other materials where the danger of drowning exists shall require the workers to wear life jackets or buoyant work vests as required by applicable federal, state and local law. Prior to each use, the buoyant work vest/life preserver shall be inspected for defects. Ring buoys shall be available with at least 90 ft (27.4m) of line for emergency rescue. Distance between available ring buoys shall not exceed 200 ft (61m).

Section N

14.0 Helicopter Lifts

14.1 Requirement

When the need for a helicopter service has been established, a pre-lift meeting shall be held a minimum of one (1) month prior to the actual lift date.

14.2 Notification

Notification shall be given to Toyota and Contractor(s) that a helicopter lift shall be taking place on a given date and time. A written plan shall be submitted and a follow-up meeting held with TEMA Safety or their designee two (2) weeks prior to the lift taking place with appropriate confirmations and notices by Governing Authorities.

Section O

15.0 Motor Vehicles/Mechanized Equipment

15.1 Speed Limits

All posted Speed limits on Toyota property(s), shall be followed. The on-site construction zone speed limit (near active construction) is 7mph, inside buildings speed limit is 4mph. Toyota production equipment has the right of way.

15.2 Equipment

All vehicles and mechanized equipment shall prominently display the Contractor's name and on site contact number. For rental equipment temporary signs may be used. All equipment not designed for "over the road" use shall be equipped with an operable horn, headlights (if equipped), back-up alarm, and a fire extinguisher rated at 5ABC minimum.

15.3 Operation

Vehicle operators shall not talk, text, or use a "hands free" device on cell phones while operating a vehicle or mechanized equipment. Vehicles shall operate with lights on at all times, if equipped, unless otherwise reviewed by Toyota Safety. Personnel may not ride in the bed of a pickup truck. All mechanized equipment shall maintain a 3 foot (0.9 meters) clearance from pits, trenches or other floor openings. If required to perform work within 3 feet (0.9 meters) of the opening, the equipment shall be positioned parallel to the opening and have its wheels chocked. The contractor shall ensure that the vehicle and equipment exhaust is adequately controlled to maintain safe concentrations of carbon monoxide and other exhaust components inside any building. Operators shall be required to stop and sound the horn when entering/exiting buildings and other locations where visibility is obstructed.

15.4 Inspections

All rental equipment shall be inspected and documented prior to delivery to the project site. Any repairs shall be completed before being delivered. All equipment shall be inspected prior to use at the beginning of each day and a record of mechanical fitness shall be documented. This record shall be available for review by Toyota Safety when requested. If the equipment is propane fueled, the valve of the tank shall be closed during overnight storage.

15.5 Forklifts

The employer shall ensure that each forklift operator is competent to operate a forklift safely, as demonstrated by the successful completion of training, **and have a valid and current operating certificate in his/her possession.** This operating certificate shall be readily shown to any Toyota project member or Safety member upon request. Lift trucks shall have the rated capacity clearly posted on the equipment so as to be clearly visible to the operator. Unauthorized personnel shall not be permitted to ride on forklifts. All attachments shall be manufacturer approved and certified for capacities. When not directly inside of a designated construction area with clearly defined aisles or paths of travel, operators shall be required to utilize a dedicated walking spotter when transporting or positioning a load which extends beyond 12" (30.5

cm) from the forks or backrest and/or is large enough to obstruct their vision. While traveling through interior areas, a dedicated walking spotter shall be required when operating in congested areas regardless of the work location. Operators shall follow all local NAMC, and/or federal/state policies when operating outside of a designated construction area. Loads, when not specifically designed to be lifted by forks, shall be secured to the backrest/mast during transport.

Section P

16.0 Excavation/Trenching

16.1 Requirement

As-built drawings shall be reviewed and the work areas shall be surveyed by the contractor prior to work beginning to determine the locations of underground lines (pipe, electrical, or otherwise). An Excavation Permit (CSF D-02) shall be required prior to starting the excavation work. Precautions to control hazardous energy of any known underground lines that are suspected in the area shall be implemented prior to the start of work. Should a buried obstruction be encountered, all excavation shall stop until the Toyota project leader or representative investigates and clears the situation. Soil classification shall be determined by a competent person.

16.2 Protection

While the excavation is open underground installations shall be protected, supported, or removed as necessary to safeguard workers. All excavations shall be sloped, benched, or shored, depending on soil conditions, in accordance with applicable standards. No worker shall be permitted under loads handled by lifting or digging equipment. Workers shall be required to stand far enough away from any vehicle being loaded or unloaded to avoid being struck by any spillage or falling materials. Employees shall be protected from excavated or other materials or equipment that could pose a hazard by falling or rolling into excavations: a) by placing and keeping such materials or equipment at least 3 feet (1 meter) from the edge of excavations, or b) by the use of retaining devices that are sufficient to prevent materials or equipment from falling or rolling into excavations, or c) by a combination of both if necessary. Protection for excavations greater than 20 feet (6.1 meters) deep shall be designed by a registered professional engineer.

16.3 Inspections

Daily inspections of excavations, their adjacent areas, and protective systems shall be made by a competent person for evidence of hazardous conditions, prior to the start of work and as needed throughout the shift. Inspections shall also be made after every rain event or other event that has the potential to increase the hazards of the excavation.

16.4 Access

A means of egress from trench excavations shall be provided by the contractor. A stairway, ladder, ramp or other safe means of egress shall be located in trench excavations that are 4 feet (1.2 meters) or more in depth so as to require no more than 25 feet (7.6 meters) of lateral travel for employees.

Section Q

17.0 Concrete and Masonry

17.1 Requirement

The contractor shall provide adequate means of washing/flushing of exposed areas when workers contact wet concrete. Workers shall wear the proper PPE for protection of concrete materials.

17.2 Support/Protection

Workers shall be guarded from exposed reinforcing steel where scratching, lacerations or impalement is a hazard. A “limited access zone” shall be established whenever a masonry wall is being constructed. All masonry walls over eight feet in height shall be adequately braced to prevent overturning and/or to prevent collapse. This bracing shall remain in place until permanent supporting elements of the structure are in place.

Section R

18.0 Steel Erection

18.1 Requirement

During all phases of steel erection, the contractor shall provide all safety devices, (e.g., guardrails, handrails, hole covers, etc.) required to keep the work area safe. These devices shall not be removed from the project until their use is no longer required. The contractor shall implement a written fall protection plan that requires their worker to use fall protection 100% of the time for any work over 6 feet (1.8 meters) in elevation during all steel erection. (CSF D-27)

18.2 Protection from Falling Objects

The controlling contractor shall bar other construction processes below steel erection unless overhead protection for the employees below is provided.

18.3 Inclement Weather

No steel erection work shall be performed during bad weather (rain, snow, or severe weather) where workers are expected to walk on or straddle steel. Work can continue if employer is using aerial lifts to reduce slip/fall hazards. Work shall cease if crane operator cannot maintain adequate visual contact with connectors fastening steel due to weather conditions.

Section S

19.0 Demolition

19.1 Building or Structure

Prior to permitting workers to start demolition operations an engineering survey shall be made by a competent person (

CSF **D-42**). The survey is used to determine the condition of the framing, floors, and walls, and possibility of unplanned collapse of any portion of the structure. Any adjacent structure where workers may be exposed shall also be equally checked. The contractor shall have evidence, in writing, that such a survey has been performed. The survey shall be presented to Toyota Safety or their designee at least 48 (working) hours in advance of the commencement of work.

A written plan detailing how exposure and the possible spread of contaminants shall be controlled is to be submitted and approved by Toyota Safety and Environmental Department designated person(s) 2 days before demolition begins. All electric, gas, water, steam, sewer, compressed air, and other service lines shall be shut off, capped, or otherwise controlled outside the building or in the specified area(s) of demolition before demolition work is started.

19.2 Machines and/or Equipment

Follow the manufacture's or TEMA PE recommendations for isolating/shutting down any machines, process, or support equipment prior to demolition. It shall be verified that all energy sources are disconnected or terminated prior to removal.

Section T

20.0 Energy Control Policy and Program

20.1 Control of Hazardous Energy (Lockout)

Control of hazardous energy is required where the unexpected energizing, startup, or release of stored energy could occur and cause injury. The contractor shall implement an energy control program. It shall consist of energy control procedures, employee training, and periodic inspections to ensure workers are trained before they perform any servicing or maintenance of any machinery, supply lines, or equipment.

- For each job/task requiring energy control a JSA (CSF D-16) shall be completed and submitted to Toyota Project Leader (or designee) preferably 2 weeks, or no later than 48 hours, prior to beginning the work.
- The contractor shall identify all sources of energy, with host NAMC and Toyota Project Leader (or designee) prior to locking out which may affect their work such as hydraulic, pneumatic, thermal, electrical, gravitational, residual, chemical, radioactive, etc.

- Electric equipment and lines, pressurized lines (hydraulic, pneumatic), stored energy (electrical, mechanical), pressurized tanks/vats, etc., shall be considered energized/pressurized until determined de-energized/de-pressurized by tests or other appropriate methods or means.
- After all designated switches and disconnections have been opened, rendered inoperable, drained, blocked and/or locked out, the appropriate inspection and/or test(s) shall be conducted to ensure that all equipment or energy sources are de-energized, controlled and are zero energy lockout only.
- While locking out, workers shall apply their personal lockout lock and identification. This identification can be in the form of:
 - A durable tag securely affixed to the lock, and have a visible means of identification (i.e. the Company name, employee's name, and telephone contact information), or;
 - Label affixed to the lock with the required information.

Prior to locking out any existing equipment, the contractor shall contact a Toyota Project Management Representative to coordinate lockout activities with existing Toyota NAMC facility.

Contractors shall submit copies of their general Control of Hazardous Energy Program to TEMA Safety or their designee, when requested. The program shall meet or exceed Toyota's Control of Hazardous Energy policy.

20.2 Lockout Training

The employer shall provide training to ensure that the purpose and function of the energy control program is understood by employees and that the knowledge and skills required for the safe application, usage, and removal of the energy controls are proficient by employees. Only trained, qualified, and authorized personnel shall work on equipment requiring lockout. Toyota reserves the right to review training records for any contract employee.

20.3 Group Lockout

Group lockout shall be applied when the following conditions exist (not all inclusive):

- Multiple crews.
- Multiple crafts.
- Multiple Contractors.
- NAMC members working with contractors.
- Work involving multiple shifts.

Multi-lock hasps or group-lock boxes shall be used to ensure others can apply additional locks. When there are two (2) or more isolation points that shall be locked out and when more than one (1) worker is required to work on the equipment, a group lockout method shall be used.

When a group lock box is used there shall be a designated Job Leader for each shift that shall be performing work. The Job Leader shall use a "Job Control Lock" and be responsible for maintaining an accurate log of locks installed and removed. The Job Control Lock shall remain in place until the lockout is complete. Each Job Leader may have a key to the Job Control lock OR there may be one key that is under their exclusive

control in a designated location. Only a Job Control Leader may remove the Job Control Lock except in the case of lock abandonment.

20.4 Lock Abandonment

Where a lock is considered to be abandoned, immediately notify the Toyota Project Leader or designee and Toyota Safety or designee. Where it has been determined that the removal of the lock is essential, the appropriate Toyota and NAMC Management members shall partner with Security to assist in its removal. The (CSF D-14) form or NAMC form shall be completed and signed prior to lock removal.

Section U

21.0 Ladders and Mobile Ladder Stands

21.1 Requirement

Extension or step ladders shall be constructed of fiberglass, wood, or other approved non-conductive materials with anti-slip footings are allowed on Toyota sites. Ladders shall be visually inspected for structural integrity and damage before each use. Ladders that are faulty or defective shall be removed from the project/jobsite.

21.2 Mobile Ladder Stands

Where practicable, mobile ladder stands are the preferred device for use instead of step (A frame) ladders. Mobile ladder stands shall not be used for or near energized electrical work.

21.3 Ladder Use

When portable ladders are used for access to an upper landing surface, the ladder side rails shall extend at least 3 feet (.9 m) above the upper landing surface to which the ladder is used to gain access; or, when such an extension is not possible because of the ladder's length, then the ladder shall be secured at its top to a rigid support that will not deflect, and a grasping device, such as a grab rail, shall be provided to assist employees in mounting and dismounting the ladder. In no case shall the extension be such that ladder deflection under a load would, by itself cause the ladder to slip off its support.

The use of a personal fall arrest system shall be required when performing work on a ladder that is 6 ft (2m) or greater above a secondary walking working surface (e.g. work being performed from a ladder on mezzanine where working height from ladder exceeds the height of guardrail).

Personal fall arrest systems are NOT required when ascending/descending the ladder. However, workers shall maintain three (3) point contact while ascending/descending the ladder and shall never carry an object that could cause the employee to lose balance and fall. Workers shall always face toward the ladder. Ladders shall not be moved, shifted, or extended while occupied. The top or top step of a stepladder shall not be used as a step.

Ladders placed in any location where they can be displaced by workplace activities or traffic, such as in passageways, doorways, or driveways shall be secured to prevent accidental displacement, or a barricade

shall be used to keep the activities or traffic away from the ladder. Ladders shall be inspected by a competent person for visible defects on a periodic basis and after any occurrence that could affect their safe use. (See OSHA 29 CFR 1926.1053)

Section V

22.0 Toxic and Hazardous Substances

22.1 Requirement

Contractors shall obtain approval before bringing any chemical on any Toyota property. The contractor shall also maintain and provide SDS (formerly known as MSDS) information on the chemicals they are using or handling at Toyota. Contractors shall be familiar with the information and inform their workers if they will be working in areas where chemicals are used. This information includes descriptions, handling precautions, protective equipment, symptoms of exposure and first aid for each chemical.

22.2 Material Usage Request

Toyota Safety and the local NAMC environmental departments shall review and approve all chemicals prior to them being brought on site.

22.3 SDS Sheets

The SDS files shall be current, per federal, state and local law, and readily available for inspection. The location of the SDS file shall be posted on the job control board or equivalent.

22.4 Storage/Labeling/Use

All hazardous materials shall be properly labeled and stored in accordance with federal, state and local law. Contractors shall provide all necessary PPE and train all workers in the use and limitations of the PPE, required for safe handling of chemicals used by their workers.

22.5 Emergency Response

Contact the local NAMC Security/Fire for procedures and requirements regarding Emergency Response to release of toxic or harmful chemicals at the project site.

22.6 Disposal

Contractors shall be responsible for proper disposal of hazardous waste in accordance with the Toyota Environmental Requirements for construction and federal, state and local law. When the contractor has plans or has reason to believe that hazardous waste shall be generated, the contractor shall contact the local Toyota Environmental Department for assistance in dealing with the waste. After drumming, the hazardous material shall be delivered to the containment area as designated by the local NAMC Environmental Department.

Section X

23.0 Confined Spaces

23.1 Requirement

All Confined Spaces shall be considered “Permit Required” unless otherwise identified as a Non-Permit required space. Testing and verification is the Contractor’s responsibility.

23.2 Confined Space Procedures

Prior to any confined space entry (permitted or non-permitted), the contractor shall submit a copy of their written confined space entry procedures to Toyota Safety and contact appropriate Toyota member for confined space permit review. All contractor confined space programs shall meet or exceed the Toyota confined space program requirements.

Contractors shall provide appropriate safety equipment (including communications), attendant, and where necessary, ventilation equipment, 12-volt lighting or the equivalent, and appropriate rescue equipment and rescue plan. This equipment shall be in place prior to entering the confined space. Contractors shall document the testing results, and have them available for Toyota Safety review. (Sample CSF D-19) If the space meets the criteria for a non-permit required confined space, the contractor may proceed with the entry. If the space fails the criteria for a Non-Permit Required Confined Space, an entry permit shall be completed prior to entering the space. Some NAMCs require additional confined space entry instruction. Please consult your Toyota Safety contact for possible requirements. The checklist/permit (Sample CSF D-19) shall be posted in the work area where confined space entry work is done. They are valid for one shift only and are not valid for more than 12 hours. Evaluation and permitting is the responsibility of the Contractor.

Section Y

24.0 Safety Qualifications

24.1 Supervisors/Project Managers

Contractors shall ensure that all supervisors are adequately trained. **All supervisors shall have completed, at minimum, the OSHA 30-hour Construction Outreach or equivalent prior to working onsite.** Some projects may require additional training specific to the location or project. All supervisors shall have the authority to make immediate decisions and corrections with regards to safety issues that may arise on the project.

24.2 Dedicated Construction Safety Representative (CSMS 3.8)

A resume shall be submitted to TEMA Safety prior to work beginning on the project for the approval of the Dedicated Safety Representative. All dedicated Construction Safety Representatives shall have the authority to make immediate decisions and corrections with regards to safety issues that may arise on the project.

Education and Certification

Required – Construction Health and Safety Officer (CHSO) Designation (Canada)

Required – OSHA 510 Construction Industry Standards (U.S.)

Required – Knowledge of applicable consensus standards i.e. NFPA 70E/CSA Z462, if electrical work will fall under his/her scope.

Preferred – OSHA 500 Construction Industry Train the Trainer (indicates the ability to communicate safety information to others) (U.S.)

Preferred – Degree in Occupational Safety, or related field.

Preferred – A recognized, independent third party safety certification. Examples: CSP/ASP, CHST, etc.

Experience

Required – Minimum of 5 years direct experience with the specific type of hazards that can reasonably be expected in the contractor's daily work.

- Example - If the contractor will perform site prep, the contractor's Safety Representative should be knowledgeable in trenching and shoring, earth moving equipment, dust control measures, etc. If performing crane work, the Safety Representative should have extensive knowledge of crane safety, rigging requirements, signaling requirements, etc.

Required – Minimum 3 years' experience conducting safety related activities including, not limited to:

- Construction Safety Orientation
- Construction Safety Audits
- Implementing countermeasures for systemic problems that did not minimize risk or that lead to illness/injuries
- Formally tracking and reporting illness/injury data to project leadership
- Leading construction safety meetings with trade workers, project engineers/management, construction safety professionals, etc.

Required – Experience developing or improving a construction safety management system or process:

- Writing a Site Specific Safety Plan, etc.
- JSA review and approval
- Construction safety orientation program
- Site audit program
- Line-side management review process for safety

Preferred – Experience leading successful interactions with any Federal/Provincial/State inspections, e.g. OSHA, Ministry of Labor, Fire Marshall, etc.

24.3 Designated Safety Representative

A resume shall be submitted to TEMA Safety prior to work beginning on the project for the approval of the Designated Safety Representative. All designated safety representatives shall have the authority to make immediate decisions and corrections with regards to safety issues that may arise on the project. See Section A – 1.6 Safety Representation for criteria on when a Dedicated Construction Safety Representative is required.

Required – OSHA 30 Construction Industry Outreach Program (U.S.)

Required - Minimum of 5 years direct experience with the specific type of hazards that can reasonably be expected in the contractor's daily work.

Required – Knowledge of applicable consensus standards i.e. NFPA 70E/CSA Z462, if electrical work will fall under his/her scope.

Required – All designated safety representatives shall have the authority to make immediate decisions and corrections with regards to safety issues that may arise on the project.

24.4 Workers

All construction workers shall be at a minimum, OSHA 10 hour Construction Safety certified (U.S.) or have completed an previously accepted equivalent (See Section A – 1.5 Safety Training and Education (CSMS 3.20, 4.2)).

Section CC

25.0 Cranes and Derricks

25.1 Requirement

Prior to any crane, derrick, hoist, elevator, or temporary conveyor being placed into service at the Toyota site, a copy of the current annual inspection shall be provided to Toyota Safety. Records of required frequent and periodic inspections shall be readily available while equipment is on site. All mobile cranes shall be inspected before its first use and comply with the most current version of ANSI or the equivalent and with federal, state and local law. The inspection report shall be provided to Toyota Safety prior to the equipment being allowed on site.

25.2 Conditions

Contractors shall verify the equipment placement areas support the weight of the equipment and loads prior to any hoisting. The contractor shall mark boundaries for the minimum approach distance (MAD) with items such as flags or range limit/range control warning devices. The operator shall not operate the crane beyond those boundaries. All overhead power lines and obstructions shall be located and marked prior to placement of the crane and incorporated in the minimum approach distance planning. Contractors shall comply with the manufacturer's specifications and limitations applicable to the operation of any and all

cranes, especially as it relates to high wind speeds. Special care shall be taken to ensure that the wind speed is known for the appropriate elevation (e.g. - ground level, lift level, top of boom, etc.).

25.3 Operations

For all Critical lifts, the contractor shall perform a lift analysis and complete a copy of (CSF D-35). This requirement does not apply to the lifting of building construction steel members. (CSF D-27) All critical lift plans shall be submitted for review to TEMA Safety two (2) weeks prior to the lift-taking place. The operator shall maintain a 20 foot (6.1 meters) clearance from any power line (up to 350 kV). A qualified rigger and a qualified signal person shall be used on all lifts. Where swinging hazards to workers exist, tag lines or other suitable devices shall be used to control loads being handled by hoisting equipment. A safe working zone shall be established and barricades erected to prevent inadvertent entry by unauthorized personnel. Operators shall be required to utilize a dedicated walking spotter when traveling through interior areas, to or from intended work areas, and within a designated construction area.

25.4 Qualifications

25.4.1 Hoist Operator

Certified Crane Operator (CCO) certificate or other third party recognized crane certification organization such as TVA (Tennessee Valley Authority) is required to operate any crane. The record of training and qualification required by federal, state and local law shall be submitted to Toyota Safety. If a contractor feels a certification meets or exceeds the CCO requirement, the contractor shall submit organization credentials to Toyota Safety for evaluation and disposition.

25.4.2 Signal Person

The signals used (hand, voice, or audible) and means of transmitting the signals to the operator (direct, line of site, radio, etc.) shall be appropriate for the site conditions. The types and means of signaling shall be determined prior to hoisting by all involved. The signal person shall be qualified.

25.4.3 Riggers

Contractors shall use qualified riggers during hoisting activities for assembly and disassembly work. Additionally, qualified riggers are required whenever workers are within the fall zone and hooking, unhooking, or guiding a load, or doing the initial connection of a load to a component or structure

25.4.4 Rigging

All rigging hardware and slings shall be properly rated, labeled or tagged and have the accompanying manufacturer's specifications present at the workplace. All rigging hardware and slings shall be visually inspected prior to each use and shall be stored in locations that shall not allow any type damage or deterioration to occur.

This area intentionally left blank.

Toyota Construction Safety Requirements

Version 2.01

Appendix

January 2016

Toyota Motor Engineering and
Manufacturing, North America

Toyota Production Engineering -
Safety Engineering



Index

Construction Support Forms

The forms in the appendix are to be used as needed to provide information from the contractor to Toyota Construction Safety. A contractor must receive permission from Toyota Construction Safety for substitution of documentation. **These forms are available electronically and may differ from the official version accepted at each NAMC. Contractor shall ensure submission of the latest required forms.**

<u>CSF D-01</u>	Declaration of Competent Person Form	56
<u>CSF D-02</u>	Excavation Review Form	57
<u>CSF D-04</u>	Safety Committee Meeting Minutes	58
<u>CSF D-05</u>	Contractor's Daily Safety Coordination Meeting Topic	59
<u>CSF D-06</u>	Weekly Toolbox Talk Record	60
<u>CSF D-07</u>	Contractors Weekly Man Power Report	61
<u>CSF D-08</u>	Emergency Contact List	62
<u>CSF D-09</u>	Safety Cross Calendar	63
<u>CSF D-11</u>	Contractor Badge Request Form	64
<u>CSF D-12</u>	Incident Reporting Form	65
<u>CSF D-13</u>	Safety Violation Reporting Form	70
<u>CSF D-14</u>	Lock Surrender / Abandonment Form	71
<u>CSF D-15</u>	TEMA Notice of Work Form	72
<u>CSF D-16</u>	JSA Form (sample)	73
<u>CSF D-17</u>	Utility Request Form(sample)	74
<u>CSF D-18</u>	Utility Tie-In Request Form	75
<u>CSF D-19</u>	Confined Space Entry Form (sample)	76
<u>CSF D-20</u>	Contractor Equipment Inspection Form (sample)	77
<u>CSF D-25</u>	Commissioning Warning Sign	78
<u>CSF D-26</u>	Critical Lift Form	79
<u>CSF D-27</u>	Crane Review	80
<u>CSF D-28</u>	TCSR Change Request	81
<u>CSF D-29</u>	Steel Erection Plan / Checklist	82
<u>CSF D-35</u>	Toyota Safety Construction Audit Form (USA)	84
<u>CSF D-35C</u>	Toyota Safety Construction Audit Form (Canada)	86
<u>CSF D-38</u>	Construction Area Sign	88
<u>CSF D-40</u>	Floor Opening Checklist	89
<u>CSF D-42</u>	Demolition Checklist	90
<u>Form 4.0</u>	TMMC Notice of Work Permit (Canada)	91
<u>Site Control Board</u>		92
<u>Construction vs. Maintenance Definition</u>		93
<u>Scaffold Tags</u>		94
<u>Revisions</u>		95
<u>JSA Guidelines</u>		96

Contractor: _____

(Check only the box that applies)

- ☐ Confined Space
- ☐ Energy Control/Lock-out
- ☐ Excavation
- ☐ Fall Protection
- ☐ First Aid / CPR
- ☐ Scaffolding
- ☐ Other

**THE UNDERSIGNED WILL PERSONALLY ENSURE COMPLIANCE IN ACCORDANCE WITH APPLICABLE LAW,
THE CONTRACTOR'S PROGRAM AND HAZARD SPECIFIC WORK PROCEDURES.**

----- PRINT NAME ----- SIGNATURE ----- DATE -----

----- PRINT NAME ----- SIGNATURE ----- DATE -----

PRINT NAME

SIGNATURE

DATE

----- PRINT NAME ----- SIGNATURE ----- DATE -----

CSF D-02 Excavation Review Form

Contractor performing work: _____
 Work Description: _____
 Work Location: _____
 Excavation Dimensions: _____

SOIL EVALUATION

Penetrometer Test Results: (Check One) ☐ >2.5 ☐ 2.5 ☐ 2.0 ☐ 1.5 ☐ 1.0 ☐ <1.0

Protective System Used:

- ☐ Hydraulic Shoring System
☐ Timber Shoring System
☐ Trench Shield/Box
☐ Sloped Angle of Repose (Width & Height)
☐ Benched (Measurement Required)
☐ Unsupported Wall - (Height)

Soil Type:

- ☐ Stiff Clay
☐ Firm Clay
☐ Dry Granular
☐ Wet Granular
☐ Saturated Granular
☐ Running

Conditions:

- ☐ Dry
☐ Wet
☐ Saturated

SITE EVALUATION

- | Yes | No | N/A | |
|--------------------------|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Employee protection from cave-ins and loose rock/soil planned for |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Spoils, material, and equipment, 3 feet set back required and planned for |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Engineering designs reviewed for excavations over 20 feet deep |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Manufacturer's data for trench box or hydraulic shoring on file if used |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Adequate sign posting and barricades planned for |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Will utility company be contacted 72 hrs. prior to starting work |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Any overhead lines located, and noted for review with the operator |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Any underground utility locations located and marked for review with the operator |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Any underground utility support or protection that crosses the excavation planned for |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Any underground structure protection, supported, or removed planned for |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are plans in place to protect employees from water accumulation if necessary |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Will the excavation be exposed to surface water or runoff |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Will inspections be made after every rainstorm or other hazard-increasing occurrence |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Will excavation meet Confined Space requirements (attach Confined Space Permit) |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Will special permitting be required for the equipment used to excavate |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are plans in place for entrance and egress of the excavation |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are plans for severe weather in place |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Arrangements in place for access to the excavation for workers and equipment |

Competent Person:

Name Signature Date

TEMA Safety Review:

Name Signature Date

ORO Review:

Name Signature Date

NAMC Review:

Name Signature Date

CSF D-04 Safety Committee Meeting Minutes

MEETING # _____
Facility/ Site: _____ Date: _____ Start Time: _____ End Time: _____

(Present) Name	Position

Please inform of any omissions or errors.

Item	Action By	Resolved
(Old Business)		
(New Business)		

Management Representative

Worker's Representative

The next Safety Committee Meeting will be held on _____ @ _____

CSF D-05 Contractor's Daily Safety Coordination Meeting

Company:	Date:	
NUMBER OF WORKERS ON SITE FOR YOUR SUBCONTRACTORS	A	
NUMBER OF WORKERS ON SITE FOR YOUR COMPANY	B	
TOTAL NUMBER OF WORKERS ON SITE FOR YOU AND YOUR SUBCONTRACTORS	A + B	
1) AREA/ LOCATION OF WORK FOR THE DAY:		
DESCRIBE WORK ACTIVITIES FOR THE DAY:		
DESCRIBE KEY SAFETY CONCERNS AND CONTROLS RELATED TO YOUR WORK ACTIVITIES		
2) AREA/ LOCATION OF WORK FOR THE DAY:		
DESCRIBE WORK ACTIVITIES FOR THE DAY:		
DESCRIBE KEY SAFETY CONCERNS AND CONTROLS RELATED TO YOUR WORK ACTIVITIES		
3) AREA/ LOCATION OF WORK FOR THE DAY:		
DESCRIBE WORK ACTIVITIES FOR THE DAY:		
DESCRIBE KEY SAFETY CONCERNS AND CONTROLS RELATED TO YOUR WORK ACTIVITIES		

CSF D-06 Weekly Toolbox Talk Record

Contractor: _____

Date: _____

Supervisor: _____

Project ID # _____

Time: _____

Work: _____

SITE SPECIFIC TOPIC(s)

- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____

Attendance: Print Name and Initial	Attendance: Print Name and Initial
1.	13.
2.	14.
3.	15.
4.	16.
5.	17.
6.	18.
7.	19.
8.	20.
9.	21.
10.	22.
11.	23.
12.	24.

Recommendations from Workers:

Supervisor Comments:

Supervisor Signature: _____	Date: _____

SAFETY BEGINS WITH YOU

[illegible]

* THIS FORM IS TO BE FILLED OUT BY EACH CONTRACT COMPANY (GENERAL OR SUB), AND SUBMITTED BY TUESDAY NOON, OF THE FOLLOWING WEEK

CSF D-08 Emergency Contact List

[illegible]

Safety Calendar

Safety Slogan

Accident Free Day	Green
-------------------	-------

OSHA Case	Red
-----------	-----

First Aid / Near Miss	Yellow
-----------------------	--------

		1	2		
		3	4		
		5	6		
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
		25	26		
		27	28		
		29	30	31	

CSF D-11 Contractor Badge Request Form (Verify with local NAMC for current form)

This Section To Be Completed By Security Only		
Safety Orientation Date: ____/____/____	Day: _____	Time: _____

Name (Please print your name the way you want it displayed on your badge – Middle initial is not shown on badge)

First Name	Middle	Last Name

Company (1)	
Worker #	
Company Name (Who you are employed by)	
Company Address (Your Company's address)	
Department/ Cost Center	
Title (Optional) (Your Company Title)	
Business Phone (Your Company Phone No.)	

Personal (2)	
SSN/(Last 4 digits)	
Address 1 (Personal)	
Address 2 (Personal)	
City of Residence	State
Zip Code	
Date of Birth	
Phone (3)	
Home Phone	

Physical (4)	
Gender	
Race	
Height	feet inches
Weight	
Hair	
Eyes	

Additional Information (5)	
Shift	Mail Code
Supervisor Name	
Supervisor Phone	
Hire Date	
Emergency Contact Name	
Relationship	
Emergency Contact Phone	

Toyota only below this line

Authorization Signatures (On-site Toyota Asst. Mgr. or above)

PRINT RESPONSIBLE SECTION / NAME / TITLE /
DEPT.

PRINT SAFETY/SECURITY NAME

_____/____/____
RESPONSIBLE SECTION SIGNATURE DATE

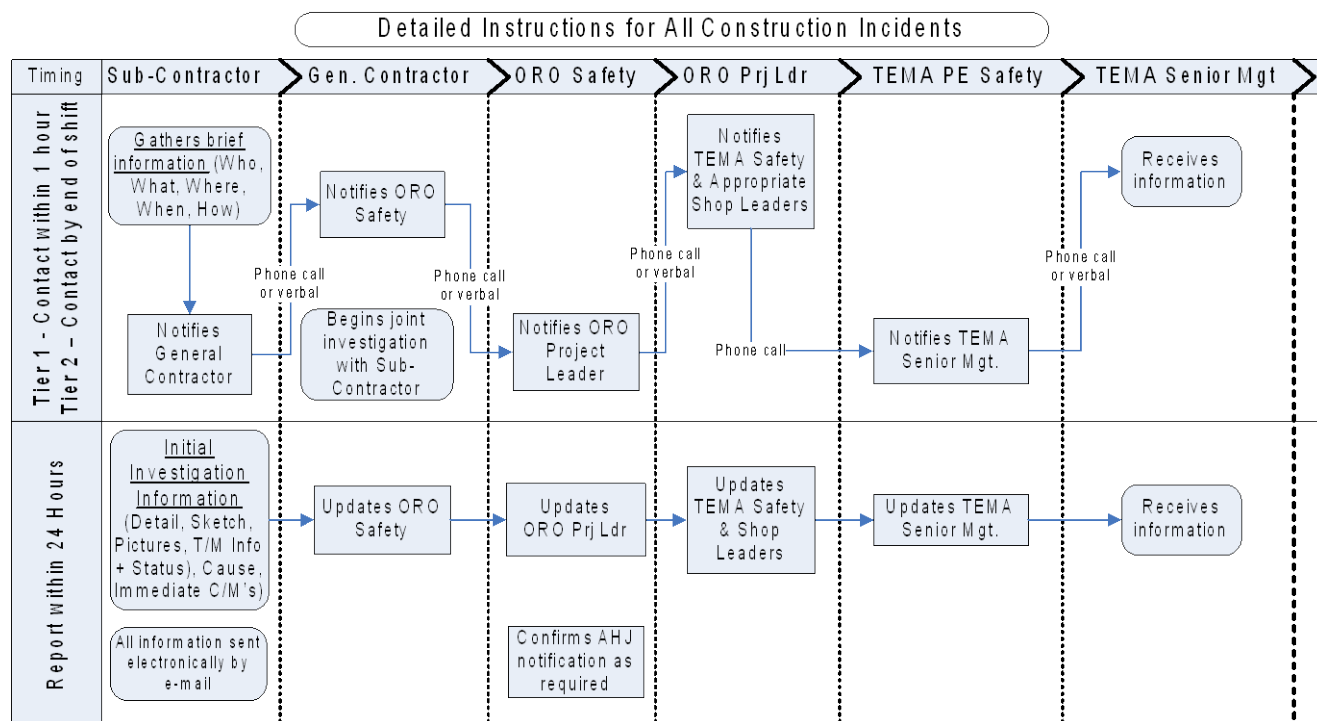
_____/____/____
SAFETY/SECURITY SIGNATURE DATE

Security Use Only

Type	Sequence	Site Code	Card #	Access Level	Data Entry (Signature)	Photo Taken (Signature)

CSF D-12 Toyota Construction Incident Report

Contractors are required to report and document all incidents (regardless of severity) and near miss events while on Toyota property. Below is a diagram to detail the flow of information from the Contractor to Toyota. Any question shall be submitted to the designated Toyota representative at the start of the work. The first page of the D-12 (below) shall be submitted within 24 hours as the initial report. Contractor shall obtain the latest electronic form prior to report submission.



This area intentionally left blank.

TOYOTA D12 Construction Incident Investigation Report Page 1

D12 Cover Page: This page to be completed by the Superintendent/Foreman and submitted within 24hrs MAX.

TEMA LOG #	
INITIAL REPORT ISSUE DATE:	
REPORT FOR:	
INCIDENT DATE:	
INCIDENT TIME (24hr Clock):	
PLANT:	
DEPARTMENT:	
INJURY CATEGORY	
INJURED WORKERS AFFILIATION:	

INJURY / ILLNESS / DAMAGE:	
----------------------------	--

INCIDENT SEVERITY:	
--------------------	--

BRIEF SUMMARY:	
----------------	--

Sketch of Incident:	
---------------------	--

TOYOTA

Construction Incident Investigation Report Page 2

Part 1: Supervisor/Foreman to complete sections I-IV within 2 Business Days of incident	I. Employee	Involved Employee _____ Gender <input type="checkbox"/> M <input type="checkbox"/> F Company _____ Supervisor _____														
	II. Inc Data	Inc Date _____ Time _____ <input type="checkbox"/> am <input type="checkbox"/> pm Shift <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 Inc Location _____ Col Line _____ Reported By: _____ To _____ On _____ At _____														
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="background-color: #ff0000; color: white; text-align: center;">Final Report Date</td> <td style="width: 150px;"></td> <td style="background-color: #ff0000; color: white; text-align: center;">Lost work days</td> <td style="width: 50px;"></td> <td style="background-color: #ff0000; color: white; text-align: center;">Restricted Work Days</td> <td style="width: 50px;"></td> </tr> </table>		Final Report Date		Lost work days		Restricted Work Days									
	Final Report Date		Lost work days		Restricted Work Days											
III. Employee Statement	TM Statement (includes what happened, symptoms being experienced, how affecting position, etc) <div style="display: flex; justify-content: space-between; margin-top: 10px;"> Name _____ Signature _____ Date _____ </div> <p style="font-size: small; margin-top: 5px;">*witness and other statements entered in notes section</p>															
Part 2: Supervisor/Foreman to Complete Sections V-IX within 5 Business Days of Incident	IV. Incident Description	<div style="display: flex; justify-content: space-between; margin-top: 10px;"> Name _____ Signature _____ Date _____ </div>														
	V. Incident Investigation	Were any risk assessments completed? <input type="checkbox"/> Y <input type="checkbox"/> N Was the worker aware of the hazards? <input type="checkbox"/> Y <input type="checkbox"/> N Did the employee review the JSA? <input type="checkbox"/> Y <input type="checkbox"/> N Did the employee sign the JSA? <input type="checkbox"/> Y <input type="checkbox"/> N Was appropriate PPE being used? <input type="checkbox"/> Y <input type="checkbox"/> N Was the proper tool/equipment being used? <input type="checkbox"/> Y <input type="checkbox"/> N Type of injury: <input type="checkbox"/> Fall <input type="checkbox"/> Electrocution <input type="checkbox"/> Struck by <input type="checkbox"/> Caught in between <input type="checkbox"/> Ergonomic <input type="checkbox"/> Burn <input type="checkbox"/> Chemical <input type="checkbox"/> Contacts with sharps <input type="checkbox"/> Other _____ Employee was: <input type="checkbox"/> Treated on site/First Aid <input type="checkbox"/> Transported to Clinic/Hospital <input type="checkbox"/> Employee refused treatment (attach document to this report) Has the same type of incident occurred in the last 3 months? <input type="checkbox"/> Y <input type="checkbox"/> N														
VI. Investigate - 5 Why		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2" style="text-align: center;">5 Why Analysis</th> </tr> <tr> <td style="width: 150px; text-align: center;">Why</td> <td></td> </tr> <tr> <td style="text-align: center;">Why</td> <td></td> </tr> <tr> <td style="text-align: center;">Why</td> <td></td> </tr> <tr> <td style="text-align: center;">Why</td> <td></td> </tr> <tr> <td style="text-align: center;">Why</td> <td></td> </tr> <tr> <td style="text-align: center;">Why</td> <td></td> </tr> </table>	5 Why Analysis		Why		Why		Why		Why		Why		Why	
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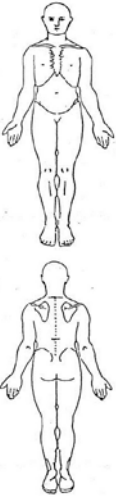
VI. Direct Cause	Unsafe Act	Unsafe Condition
	<input type="checkbox"/> Failing to use PPE properly <input type="checkbox"/> Failure to secure <input type="checkbox"/> Failure to warn <input type="checkbox"/> Horseplay <input type="checkbox"/> Improper lifting <input type="checkbox"/> Improper loading <input type="checkbox"/> Improper placement <input type="checkbox"/> Making safety device inoperable <input type="checkbox"/> Operating at improper speed	<input type="checkbox"/> Operating equipment w/o authority <input type="checkbox"/> Removing safety devices <input type="checkbox"/> Servicing equipment in operation <input type="checkbox"/> Under the influence <input type="checkbox"/> Using defective equipment <input type="checkbox"/> Using equipment improperly <input type="checkbox"/> Other _____

VII. Root Cause	MAN	METHOD	MACHINE	MATERIAL	SYSTEM
	<input type="checkbox"/> Behavior-Did not use STOP-call-wait <input type="checkbox"/> Behavior Inattention <input type="checkbox"/> Behavior- Poor decisiot <input type="checkbox"/> Behavior-Rushing <input type="checkbox"/> Behavior- No Teamwork <input type="checkbox"/> Comm between shi <input type="checkbox"/> Comm inadequate <input type="checkbox"/> Std Wk - Not followed <input type="checkbox"/> Std Wk-not followed consistently <input type="checkbox"/> Training not followed <input type="checkbox"/> Other <input type="checkbox"/> None	<input type="checkbox"/> Controls not identified <input type="checkbox"/> Hazard not identified on Instructions <input type="checkbox"/> Risk Asst/JHA Incomplete <input type="checkbox"/> Risk Asst/JHA Not Current <input type="checkbox"/> Risk Asst/JHA Not done <input type="checkbox"/> St Wk/JIS/WIS Incomplete <input type="checkbox"/> St Wk/JIS/WIS Not Current <input type="checkbox"/> St Wk/JIS/WIS Not done <input type="checkbox"/> Training Incomplete <input type="checkbox"/> Training Not current <input type="checkbox"/> Training Not done <input type="checkbox"/> Other <input type="checkbox"/> None	<input type="checkbox"/> Eqpt Checks not perf <input type="checkbox"/> Eqpt defective <input type="checkbox"/> Eqpt-Station design <input type="checkbox"/> Eqpt-Station Layout <input type="checkbox"/> Labeling-Chemicals <input type="checkbox"/> Labeling-Equipment <input type="checkbox"/> Labeling-Hazards <input type="checkbox"/> Mnt-Defective repair <input type="checkbox"/> Mnt-Eq-not-maintained <input type="checkbox"/> Mnt-Incomplete repair <input type="checkbox"/> Mnt-Prev mnt not comp <input type="checkbox"/> Other <input type="checkbox"/> None	<input type="checkbox"/> Defective parts <input type="checkbox"/> Handle design <input type="checkbox"/> Out-of-spec part <input type="checkbox"/> Packaging <input type="checkbox"/> Other <input type="checkbox"/> None	<input type="checkbox"/> Communication <input type="checkbox"/> Enforcement-Standard <input type="checkbox"/> Supervision-Inadequate <input type="checkbox"/> Training-Not conducted <input type="checkbox"/> Design-Force/weight <input type="checkbox"/> Design-Poor posture <input type="checkbox"/> Design-Repetition <input type="checkbox"/> Design-Tool <input type="checkbox"/> Standard-Incomplete <input type="checkbox"/> Standard-Not current <input type="checkbox"/> Standard-Not done <input type="checkbox"/> Other <input type="checkbox"/> None

NOTE: Prior to implementation of C/M, conduct risk assessment to ensure no additional risk is introduced.

IX. Countermeasures	Action	Responsible Party	Target Date	Comp Date	Date Closed
	Temp				
Retraining Required <input type="checkbox"/> Y <input type="checkbox"/> N					
Perm					
	Retraining Required <input type="checkbox"/> Y <input type="checkbox"/> N				
If more space is needed, please attach additional sheet.					

Completed By	Signature	Date	Approved By	Signature	Date
--------------	-----------	------	-------------	-----------	------

Part 3: TEMA Construction Safety to complete	X. Illness / Injury Data	Accident Type <input type="checkbox"/> Body Reaction <input type="checkbox"/> Caught Between <input type="checkbox"/> Caught In <input type="checkbox"/> Caught On <input type="checkbox"/> Contact By <input type="checkbox"/> Contact With <input type="checkbox"/> Fall - Diff level <input type="checkbox"/> Fall - Same Level <input type="checkbox"/> Overexertion <input type="checkbox"/> Overexposure <input type="checkbox"/> Struck Against <input type="checkbox"/> Struck By	Source <input type="checkbox"/> Animal <input type="checkbox"/> Bodily Motion <input type="checkbox"/> Box, Crate, Pkg <input type="checkbox"/> Building, Not Floor <input type="checkbox"/> Chemicals <input type="checkbox"/> Dolly <input type="checkbox"/> Dust <input type="checkbox"/> Floor / Ground <input type="checkbox"/> Furniture, Fixtures <input type="checkbox"/> Knife, Cutting Inst <input type="checkbox"/> Ladders <input type="checkbox"/> Liquids <input type="checkbox"/> Molten Metal <input type="checkbox"/> Noise <input type="checkbox"/> Pallet <input type="checkbox"/> Production Parts <input type="checkbox"/> Stairs / Steps <input type="checkbox"/> Tools - Hand <input type="checkbox"/> Tools - Power <input type="checkbox"/> Vehicles	Nature <input type="checkbox"/> Amputation <input type="checkbox"/> Blister <input type="checkbox"/> Burn (Chemical) <input type="checkbox"/> Burn (Temp) <input type="checkbox"/> Contusion <input type="checkbox"/> Dermatitis <input type="checkbox"/> Electrical Shock <input type="checkbox"/> Foreign Body <input type="checkbox"/> Fracture <input type="checkbox"/> Hearing Loss to Ns <input type="checkbox"/> Hearing Loss / Trma <input type="checkbox"/> Hernia <input type="checkbox"/> Inflammation <input type="checkbox"/> Irritation <input type="checkbox"/> Laceration <input type="checkbox"/> Loss of Consciousness <input type="checkbox"/> Minor Discomfort <input type="checkbox"/> Sight loss / Trauma <input type="checkbox"/> Sprain <input type="checkbox"/> Strain	Injury/Illness <input type="checkbox"/> Acute Non-MSD <input type="checkbox"/> Acute MSD <input type="checkbox"/> Cumulative MSD <input type="checkbox"/> Cumulative Non-MSD 	Primary Body Part <small>(mark P for Primary and S for Secondary)</small> <input type="checkbox"/> Finger <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> Toe <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> Right <input type="checkbox"/> Front <input type="checkbox"/> Upper <input type="checkbox"/> Left <input type="checkbox"/> Back <input type="checkbox"/> Lower <div style="display: flex; justify-content: space-between;"> <div> P S <input type="checkbox"/> Abdmn <input type="checkbox"/> Hand <input type="checkbox"/> Ankle <input type="checkbox"/> Head <input type="checkbox"/> Arm <input type="checkbox"/> Hip <input type="checkbox"/> Back <input type="checkbox"/> Knee <input type="checkbox"/> Buttock <input type="checkbox"/> Leg <input type="checkbox"/> Chest <input type="checkbox"/> Lip <input type="checkbox"/> Chin <input type="checkbox"/> Mouth <input type="checkbox"/> Ear <input type="checkbox"/> Neck <input type="checkbox"/> Elbow <input type="checkbox"/> Nose <input type="checkbox"/> Extrems <input type="checkbox"/> Rsp Sys <input type="checkbox"/> Eye <input type="checkbox"/> Ribs <input type="checkbox"/> Face <input type="checkbox"/> Shoulder <input type="checkbox"/> Foot <input type="checkbox"/> Teeth <input type="checkbox"/> Groin <input type="checkbox"/> Wrist </div> </div>
		Additional Work Related <input type="checkbox"/> Y <input type="checkbox"/> N Property Damage <input type="checkbox"/> Y <input type="checkbox"/> N				

XI. Status	<input type="checkbox"/> CSA Date _____ <input type="checkbox"/> CSB Date _____ <input type="checkbox"/> CSC Date _____ <input type="checkbox"/> Lost Time Date _____ <input type="checkbox"/> Restricted Date _____ <input type="checkbox"/> Recordable Date _____ <input type="checkbox"/> First Aid Date _____ <input type="checkbox"/> ES/Wellness Date _____ <input type="checkbox"/> Minor Dscmfrt Date _____ <input type="checkbox"/> Near Miss Date _____	XII. Illness Type For OSHA Log <input type="checkbox"/> Hearing <input type="checkbox"/> Poison <input type="checkbox"/> Respiratory <input type="checkbox"/> Skin <input type="checkbox"/> Other	XIII. Inc Escalation	CSA <input type="checkbox"/> Fatality CSB <input type="checkbox"/> Amputation <input type="checkbox"/> Burn <input type="checkbox"/> Fracture <input type="checkbox"/> Head Injury <input type="checkbox"/> Hospitalization <input type="checkbox"/> Loss of Hearing <input type="checkbox"/> Loss of Sight	CSC <input type="checkbox"/> A Pwered Machine <input type="checkbox"/> B Heavy Object/Crane <input type="checkbox"/> C Contact with Vehicle <input type="checkbox"/> D Fall>2m <input type="checkbox"/> E Electrical <input type="checkbox"/> Burns	NM <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
------------	--	---	----------------------	--	--	---

XIV. Yokoten	Yes/No <input type="checkbox"/> Y <input type="checkbox"/> N	To	By	Date

Completed By	Signature	Date	Approved By	Signature	Date
Approved By	Signature	Date	Approved By	Signature	Date

* Musculoskeletal disorders (MSDs) are disorders of the muscles, nerves, tendons, ligaments, joints, cartilage, and spinal discs. MSDs do not include disorders caused by slips, trips, falls, motor vehicle accidents, or other similar accidents. Examples of MSDs include: Carpal Tunnel Syndrome, Rotator Cuff Syndrome, De Quervain's Disease, Trigger Finger, Tarsal Tunnel Syndroms, Sciatica, Epicondylitis, Tendonitis, Raynaud's Phenomenon, Carpet Layer's Knee, Hemiated Spinal Disc, and Low back . [1904.12(b)(1)]

NOTE: Corrective Action Request may be issued when C/M is not effective.

After C/M Comp	Confirmation	C/Ms Completed <input type="checkbox"/> Yes <input type="checkbox"/>	Checked By	Date	Comments
		<input type="checkbox"/> Yes <input type="checkbox"/>			
		<input type="checkbox"/> Yes <input type="checkbox"/>			
		<input type="checkbox"/> Yes <input type="checkbox"/>			

TOYOTA

D13 Safety Violation Investigation Report

D13: This report to be completed by the Superintendent/Foreman and submitted within 24hrs MAX.

TEMA LOG # VIOLATION DATE: VIOLATION TYPE: VIOLATION TIME (24hr Clock): PLANT: DEPARTMENT: PERSON OBSERVING VIOLATION COMPANY NAME WORKERS NAME: SUPERVISORS NAME:	PHONE:
<div style="display: flex; justify-content: space-between;"> WAS AN INJURY A RESULT OF THIS VIOLATION: <input type="checkbox"/> YES (attach to form CSF D12) <input type="checkbox"/> No </div>	
VIOLATION DESCRIPTION	
WORKERS STATEMENT:	
SUPERVISOR/FOREMAN BRIEF SUMMARY:	
<div style="display: flex; justify-content: space-between;"> ACTION BY CONTRACTOR: <div style="position: absolute; right: 10px; top: -5px;">Length:</div> </div>	
<div style="display: flex; justify-content: space-between;"> ACTION BY TOYOTA: <div style="position: absolute; right: 10px; top: -5px;">Length:</div> </div>	
PICTURES, SKETCH, COMMENTS:	

CSF D-14 Lock Surrender/Abandonment Form

Date: _____ **Time:** _____ **LOCATION:** _____

EQUIPMENT: _____

CONTRACTOR: _____ **SUPERVISOR:** _____

Lock removal due to:

- | | |
|---|---|
| <input type="checkbox"/> Missing or lost key | <input type="checkbox"/> Worker went home without removing his/her lock |
| <input type="checkbox"/> Abandon Lock without Tag | <input type="checkbox"/> Mechanical failure of lock |
| <input type="checkbox"/> Lock obstructed from removal | <input type="checkbox"/> Other |

If other, please give details:

Lock Surrender:

All attempts must be made to contact the worker. (please complete this section)

	Yes	No
Was the worker contacted?	<input type="checkbox"/>	<input type="checkbox"/>
Did the worker give permission to remove the lock?	<input type="checkbox"/>	<input type="checkbox"/>

Workers signature to remove lock: _____

	Yes	No
Worker contacted off site and gave permission to remove the lock.	<input type="checkbox"/>	<input type="checkbox"/>

Competent Supervisor Signature : _____

Witness Signature: _____

Abandoned Lock

(complete this section if the worker did not give permission to remove the lock)

If the worker did not give permission to remove the lock please state the reason.

	Yes	No
Were all attempts made to contact the owner of the lock	<input type="checkbox"/>	<input type="checkbox"/>

If the owner of the lock cannot be located, then the system or equipment must be inspected by a competent person to ensure if is safety to remove the lock.

Signature of competent person that it is safe to remove the lock. _____

Authorization to remove the lock.

(all parts of the surrender and abandon lock out form must be completed and reviewed)

Supervisor Signature _____ **Date & Time** _____

Safety Reps Signature _____ **Date & Time** _____

Const. Safety Signature _____ **Date & Time** _____

ORO Rep. Signature _____ **Date & Time** _____

NAMC Shop Signature _____ **Date & Time** _____

NAMC Safety Signature _____ **Date & Time** _____

CSF D-15 Notice of Work Form

Date: _____	General Contractor: _____																																																														
P.O. #: _____	Supervisor Name: _____																																																														
Location: _____	Contact Phone #: _____																																																														
Dept.: _____	Plant / TEMA Contact _____																																																														
Column# _____	Contact Number: _____																																																														
# Workers Per Day: _____	Work Period	From: _____	To: _____																																																												
	Time Period	From: _____	To: _____																																																												
<i>Check all that apply</i> <input type="checkbox"/> Weekday <input type="checkbox"/> Saturday <input type="checkbox"/> Sunday <input type="checkbox"/> Day <input type="checkbox"/> night																																																															
<i>If Contractor requires use of utilities during non-production hours, please complete and attach local NAMC utility request form.</i>																																																															
Description of Work: _____																																																															
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Special Work Items</th> <th style="width: 10%;">Yes</th> <th style="width: 10%;">No</th> <th style="width: 45%;">Initials</th> </tr> </thead> <tbody> <tr> <td>Hot Work</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>_____</td> </tr> <tr> <td>CO2 System</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>_____</td> </tr> <tr> <td>Confined Space</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>_____</td> </tr> <tr> <td>Overhead or roof Work</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>_____</td> </tr> <tr> <td>Gas, Diesel, Propane, etc.</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>_____</td> </tr> <tr> <td>Equipment Commissioning</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>_____</td> </tr> <tr> <td>Floor Penetrations/Excavations</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>_____</td> </tr> <tr> <td>Work on or within 4 ft. of energized circuits > 50V?</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>_____</td> </tr> <tr> <td>Equipment Lockout</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>_____</td> </tr> <tr> <td>Local NAMC Restricted Substances</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>_____</td> </tr> <tr> <td>Chemical Substances</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>_____</td> </tr> <tr> <td>Fire Alarm/Suppress System Work</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>_____</td> </tr> <tr> <td>Tie into Existing Equip/Sply lines</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>_____</td> </tr> <tr> <td>Special Protective Equipment</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>_____</td> </tr> </tbody> </table>				Special Work Items	Yes	No	Initials	Hot Work	<input type="checkbox"/>	<input type="checkbox"/>	_____	CO2 System	<input type="checkbox"/>	<input type="checkbox"/>	_____	Confined Space	<input type="checkbox"/>	<input type="checkbox"/>	_____	Overhead or roof Work	<input type="checkbox"/>	<input type="checkbox"/>	_____	Gas, Diesel, Propane, etc.	<input type="checkbox"/>	<input type="checkbox"/>	_____	Equipment Commissioning	<input type="checkbox"/>	<input type="checkbox"/>	_____	Floor Penetrations/Excavations	<input type="checkbox"/>	<input type="checkbox"/>	_____	Work on or within 4 ft. of energized circuits > 50V?	<input type="checkbox"/>	<input type="checkbox"/>	_____	Equipment Lockout	<input type="checkbox"/>	<input type="checkbox"/>	_____	Local NAMC Restricted Substances	<input type="checkbox"/>	<input type="checkbox"/>	_____	Chemical Substances	<input type="checkbox"/>	<input type="checkbox"/>	_____	Fire Alarm/Suppress System Work	<input type="checkbox"/>	<input type="checkbox"/>	_____	Tie into Existing Equip/Sply lines	<input type="checkbox"/>	<input type="checkbox"/>	_____	Special Protective Equipment	<input type="checkbox"/>	<input type="checkbox"/>	_____
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Special Protective Equipment	<input type="checkbox"/>	<input type="checkbox"/>	_____																																																												
<i>Contractors must submit a JSA with this form for review & approval.</i>																																																															
<i>I have read and understand the Construction Safety Requirements, and agree to comply with all requirements and procedures as outlined within, and in addition, any special instructions on this form.</i>																																																															
Contractor Supervisor _____ <div style="display: flex; justify-content: space-between; width: 100%;"> Name Signature Date </div>																																																															
Dept. / Area Rep (Mgr/AM/Maint/etc) _____ <div style="display: flex; justify-content: space-between; width: 100%;"> Name Signature Date </div>																																																															
TEMA Engineering _____ <div style="display: flex; justify-content: space-between; width: 100%;"> Name Signature Date </div>																																																															
TEMA Safety Review _____ <div style="display: flex; justify-content: space-between; width: 100%;"> Name Signature Date </div>																																																															
Special Instructions: _____ _____ _____ _____																																																															
<i>Work cannot commence until this form has been signed by a Plant Representative (when appropriate).</i>																																																															

CSF D-16 (Sample) Job Safety Analysis (JSA)

CSFD-16 Job Safety Analysis (JSA) sample			
Company Name:	Start Date:	Page 1 of	
Task Description:	Supervisor	Phone:	
Task Location:	Safety Rep:	Phone:	
Task (in sequential order)	Potential Hazards	Preventative Measures	Countermeasures
SAMPLE			

CSF D-17 Utility Request Form (Verify with local NAMC for current form)

REQUEST DATE:			REQUESTED BY:		
Location	Dept.		General Contractor		
UTILITIES REQUIRED IN:			Contractor Supervisor		
<input type="checkbox"/> Paint	<input type="checkbox"/> Administration				
<input type="checkbox"/> Assembly	<input type="checkbox"/> Welding				
<input type="checkbox"/> Plastics	<input type="checkbox"/> Stamping	TEMA Engineering Specialist			
<input type="checkbox"/> Engine	Column Location:				

Details of Work: (Purpose, Location) _____

UTILITY REQUEST		Date	Date	Date	Date	Date	Date	Date
COMPRESSED AIR 8.0 KPA / 5.0 KPA	From (Time)							
	To (Time)							
STEAM	From (Time)							
	To (Time)							
DOMESTIC WATER	From (Time)							
	To (Time)							
PROCESS WATER	From (Time)							
	To (Time)							
D.I. WATER	From (Time)							
	To (Time)							
LIGHTING	From (Time)							
	To (Time)							
WASTE TREATMENT	From (Time)							
	To (Time)							
VENTILATION	From (Time)							
	To (Time)							

FACILITIES MAINTENANCE APPROVALS:

FACILITY ENGINEERING SPECIALIST _____ DATE _____

FACILITY GROUP LEADER _____ DATE _____

BUILDING SERVICES GROUP LEADER _____ DATE _____

DISTRIBUTION:

Requester----- Shop Engineer ----- Facilities Engineer----- Facilities/Building Services G/L ----- Requester

ALL REQUEST FORMS MUST BE SUBMITTED TO FACILITY ENGINEER BY 4PM ON SECOND LAST PRODUCTION DAY OF THE WEEK.

CSF D-18 Utility Tie-In Request Form (Verify with local NAMC for current form)

Date _____	General Contractor _____					
Location _____	Supervisor Name _____					
Dept. _____	Contact Phone # _____					
Column # _____	TEMA Eng. Specialist _____					
North / South _____	Requested Timing of Tie In _____ Date _____ Time _____					
Description of Work:						
REQUIREMENTS						
ITEM	HEADER SIZE (inch.)	PRESSURE KPA	MAX. VOLUME	TEMP °C	TIE IN LOCATION	BACKFLOW PREVENTOR
STEAM			Kg/hr			
COMPRESSED AIR			M³/hr			
NATURAL GAS			M³/hr			
CHILLED WATER			M³/hr			
WATER DOMESTIC <input type="checkbox"/> RO <input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> PROCESS <input type="checkbox"/> DI <input type="checkbox"/>			M³/hr			ID NUMBER *** see Note below
WASTE WATER INDUSTRIAL <input type="checkbox"/> ROW <input type="checkbox"/> DEGREASE <input type="checkbox"/>			M³/hr			
ELECTRICITY	PHASE	VOLTS	RUNNING AMPS	FLA	BUSS DUCT #	
	1Ø 3Ø					
	DUTY CYCLE	FUSE/BREAKER	FUSE/BREAKER SIZE	DISC. (SIZE)	COLUMN #	
OTHER CONTROL WIRING <input type="checkbox"/> HYDRAULICS <input type="checkbox"/> PLC PROGRAMMING <input type="checkbox"/> FIRE ALARM <input type="checkbox"/> FIRE PROTECTION <input type="checkbox"/> COMMUNICATION WIRE <input type="checkbox"/> STRUCTURAL <input type="checkbox"/>	POTENTIAL RISKS			COUNTERMEASURE PLANS		

NOTES:

THIS FORM IS INTENDED TO AID IN RISK ANALYSIS AND PROVIDE CRITICAL INFORMATION TO TEMA TO AVOID PROBLEMS DURING THE TIE IN OF EQUIPMENT. PLEASE ATTACH ALL ADDITIONAL INFORMATION THAT MAY ASSIST IN REDUCING RISK WHEN EVER POSSIBLE TIE INS ARE TO BE DONE DURING NON PRODUCTION TIME.

*** OBTAIN ID# FOR ALL NEW BACKFLOW PREVENTORS FROM NAMC PLANT FACILITY ENGINEERING SPECIALIST

Requestor → TEMA Engineering Specialist → Shop Mtc. G/L → Plan (F) Eng. → NAMC Engineering Specialist → Requestor

Copy as Required → Building MTC → MTC File



CSF D-19 (Sample) Confined Space Entry Checklist/Permit

Company/Contractor _____ Entry Supervisor _____

Date _____ Estimated Start Time _____ Estimated Completion Time _____

Area of Entry _____ Description of Space to be Entered _____

Purpose of entry: ☐ Inspection ☐ Repairs ☐ Cleaning ☐ Installation ☐ Other (specify) _____

If **ANY** of the following questions answer **YES**, the space is a permit required confined space

If **ALL** of the following questions answer **NO**, the space is a non-permit required confined space.

	YES	NO		YES	NO
Has the space been identified by Toyota as a Permit Required Confined Space?			Does the space have an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a small cross-section?		
Does the space contain a hazardous atmosphere?			Does the space contain materials which could cause entrapment, engulfment, and/or suffocation?		
Does the space contain any other recognized serious safety or health hazard?			Will you be introducing a hazard into the space?		

Atmospheric Conditions must be analyzed by a competent person prior to entering the confined space.

Test	Results	Permissible Entry Level	Date	Time	Tester Initials
Oxygen (O ₂)		% 19.5% to 23.5%			
Flammable (LFL)		% Under 10%			
Carbon monoxide (CO)		ppm Under 35 ppm			
Hydrogen Sulfide (H ₂ S)		ppm Under 10 ppm			
Temperature (for oven entry)		F			
Other:					

The following questions/procedures must be documented prior to entering the confined space.

Measures used to isolate the permit space and to eliminate or control permit space hazards before entry	SAMPLE
Equipment which will be provided (PPE, testing equipment, communications, rescue equipment)	
Emergency & Entrant communication procedures	
Rescue procedures (include name and numbers of rescuer service)	
Additional permits needed or issued (if any)	
Additional notes	

Signature of authorized Person Completing Checklist

Date

Time

- All entrants and attendants covered by this permit shall sign and date the back of this form prior to entering the confined space
- Record air monitoring results at least every 2 hours or whenever conditions change.
- Results of the atmospheric tests shall be logged on the back of this form with the names or initials of the testers and time of the tests.
- This permit must be posted at or near the entrance to the space.
- This permit shall be valid for one shift or a maximum of 12 hours.

Entry Authorized (hh:mm)

Signature of Entry Supervisor

Date

Entry Closed Out (hh:mm)

Signature of Entry Supervisor

Date

CSF D-20 (Sample) Contractor Equipment Inspection form

(Required for equipment greater than 10 HP in size)

Contractor:		Supervisor:	
Project:		Date Submitted:	
Equipment Inspected	Make/Serial #	Date on Site	Last Inspection
	SAMPLE		

This report will attest that prior to its first use on this project, all of the mechanically powered equipment, tools, machines, and devices rated at greater than 10 horsepower listed above, have been inspected by a competent person and are considered to be in competent operating condition in accordance with the manufacturer's design, maintenance and testing criteria. All known defects and deficiencies have been corrected prior to use on the project. A list of inspected items, operator's manual, logbook (*if applicable*), engineers reports (*if applicable*), non-destructive test report (*if applicable*), manufacturer's approvals (*if applicable*) and other required documents are provided with the equipment.

Inspector's Name: _____

Signature: _____

Qualifications: _____

Danger - Do Not Enter,
Commissioning in Progress,
Authorized Personnel Only

危険
立入禁止
コミッショニング中

Peligro - No Entre
Instalación de equipo en Proceso
Solo Personal Autorizado

CSF D-26 Critical Lift Checklist

If the answer is YES to any of the following questions, this checklist must be used

1. Will the lift exceed 75% of the rated capacity of the crane?
2. Will the lift require the use of more than one (1) crane or derrick?
3. Are the items lifted valued more than \$10,000 to replace?
4. Will the items lifted require more than one (1) month for replacement if damaged?

Lift Location

DATE

Scope of Work for this Lift

Potential Hazards for this lift

Lifting device

Weight of Load

☐ Actual

☐ Estimated

Equipment Operator

Certification

Equipment Operator

Certification

Qualified Rigger

Signal Person

Pre-lift Check List

Area

Yes

No

☐

☐

Overhead hazards have been checked for?

Yes

No

☐

☐

Lift area protected from workers and visitors?

☐

☐

Will the lift be conducted at night?

☐

☐

Adequate lighting for lift?

☐

☐

Is there a potential of electrical storms?

☐

☐

Will wind speeds be monitored?

☐

☐

Area will support the combined weight of lifting equipment and load?

Equipment

☐

☐

Equipment inspected prior to the lift?

☐

☐

Rigging inspected and capacities checked?

☐

☐

Will tag line(s) be used for this lift?

☐

☐

Will spotters be used for this lift?

Review

☐

☐

Pre-lift review with crew completed?

☐

☐

Notification of work in area obtained? (D-15)

Lift Supervisor

Time

Date

Construction Safety Review

Time

Date

This check list must be completed prior to the lift starting

Contractor's Crane Review

Crane inspections are required when equipment arrives on site, if the crane changes possession, or is reconfigured.

DATE: _____ CRANE MANUFACTURER: _____
 REQUESTED BY: _____ MODEL: _____
 CONTRACTOR: _____ SERIAL NUMBER: _____
 CRANE OWNER: _____ DATE OF LAST INSPECTION: _____
 YEARLY INSPECTION PERFORMED BY: _____

	YES	NO
1. Is there an operator's manual provided with the machine? _____		
2. Is there a load chart available for the machine as it is equipped? _____		
3. Is there an external placard displaying standard hand signals? _____		
4. Do the outriggers function properly without leaks? _____		
5. Are appropriate pads available to prevent outriggers from damaging floor or road surfaces?		
6. If used indoors, is there a diaper in place to catch incidental fluid drips? _____		
7. Is the wire rope(s) in good condition and free of damage? _____		
8. Is the wire rope(s) terminated properly? _____		
9. Does the anti two block device(s) function properly? _____		
10. Do all lights work properly? _____		
11. Does the horn work? _____		
12. Does the backup alarm work? _____		
13. Are safety latches or their equivalent in place and functioning. _____		
14. Is there a functional fire extinguisher available? _____		
15. Are all windows safety plate or equivalent and free of defects? _____		
16. Is the machine capable of running on propane for indoor use? _____		
15. Is the operator properly trained for this machine? _____		

INSPECTED BY: _____

APPROVED: ☐

REJECTED: ☐

CSF D-28 TCSR Change Request

TEMA Contractor Safety Requirements Document

Date Submitted: <mm/dd/yyyy>

Department/NAMC/Contractor: <Submitter>

Current Document Revision Number: <Rev. No.>

Section where change requested: <Section>

Requester Name: <Requester>

Phone/email <Contact>

Document Change Description

Reason for Suggested Change

Benefit of Change

Impact of not making change

Document change approved for investigation?

☐ Yes

☐ No

Assigned Implementer: <Implementer>

Approved by: <Approver>

Date Approved: <mm/dd/yyyy>

Comments

Please send this form to TEMA PE Safety - Construction Safety Specialist - PESAF-ER

CSF D-29 Steel Erection Plan/Checklist

Date: _____

Job Location: _____ Area: _____

Plant ☐ TEMA ☐

Contractor: _____ Engineer: _____

Scope of Work

- | | | |
|--|---------------|----------------------------------|
| <input type="checkbox"/> Pre-Engineered Metal Building | Sq. Ft. _____ | <input type="checkbox"/> Roofing |
| <input type="checkbox"/> Conventional Building | Sq. Ft. _____ | <input type="checkbox"/> Siding |
| <input type="checkbox"/> Miscellaneous Steel | Tons _____ | <input type="checkbox"/> Decking |

Description of Work _____

Approval and Commencement

Y N

- | | | |
|--|--------------------------|--------------------------|
| The concrete in footings, piers, and walls has cured to Adequate Strength for steel erection? | <input type="checkbox"/> | <input type="checkbox"/> |
| 75% of concrete strength verified by Engineer or testing prior to starting the erecting? | <input type="checkbox"/> | <input type="checkbox"/> |
| Project Engineer has approved anchor bolt repairs, replacements, and modifications? | <input type="checkbox"/> | <input type="checkbox"/> |
| Has the Controlling Contractor provided Written Notification to the steel erector for the above? | <input type="checkbox"/> | <input type="checkbox"/> |

Site Layout

- | | | |
|---|--------------------------|--------------------------|
| Has the Controlling Contractor provided adequate Access and means to maintain Access to the site? | <input type="checkbox"/> | <input type="checkbox"/> |
| Is the area firm, properly graded, well drained and accessible? | <input type="checkbox"/> | <input type="checkbox"/> |
| Will the areas of crane placement support the weight of the crane and loads? | <input type="checkbox"/> | <input type="checkbox"/> |
| Is there adequate room for the erection tasks and required support equipment? | <input type="checkbox"/> | <input type="checkbox"/> |
| Has the Controlling Contractor means and methods for Pedestrian and Vehicular Control? | <input type="checkbox"/> | <input type="checkbox"/> |

Pre-planning

- | | | |
|--|--------------------------|--------------------------|
| Has a pre-erection meeting been held with all exposed and effected Sub Contractors and Workers? | <input type="checkbox"/> | <input type="checkbox"/> |
| Has the Sequence of Erection Activities been discussed? | <input type="checkbox"/> | <input type="checkbox"/> |
| Has the coordination of activities with other trades been discussed? | <input type="checkbox"/> | <input type="checkbox"/> |
| Has the path for overhead loads and how effected workers are notified been discussed? | <input type="checkbox"/> | <input type="checkbox"/> |
| Are there special procedures required for Hazardous non-routine Tasks? | <input type="checkbox"/> | <input type="checkbox"/> |
| Certifications for each employee that has received training for steel erection operations on file? | <input type="checkbox"/> | <input type="checkbox"/> |
| A list of Qualified and Competent persons on file? | <input type="checkbox"/> | <input type="checkbox"/> |
| Procedures in the event of Rescue or Emergency Response provided and reviewed? | <input type="checkbox"/> | <input type="checkbox"/> |
| Has all utilities in the area of work, been identified and protection provided if necessary? | <input type="checkbox"/> | <input type="checkbox"/> |

Cranes

- | | | |
|---|--------------------------|--------------------------|
| Has the Crane Operator been trained and certified for the size of the crane? | <input type="checkbox"/> | <input type="checkbox"/> |
| Will a Qualified Rigger be used? | <input type="checkbox"/> | <input type="checkbox"/> |
| Will a signal person be required? | <input type="checkbox"/> | <input type="checkbox"/> |
| Has the operator and signal person agreed on type and means of signals they will use? | <input type="checkbox"/> | <input type="checkbox"/> |
| Is there enough room to assemble / disassemble the crane? | <input type="checkbox"/> | <input type="checkbox"/> |

CSF D-29 (continued)

	Y	N
Will the assembly / disassembly of the crane be directed by a person that meets the criteria for both a competent and qualified person?	<input type="checkbox"/>	<input type="checkbox"/>
Are there any Critical Lifts?	<input type="checkbox"/>	<input type="checkbox"/>
Is the CSF D-26 attached?	<input type="checkbox"/>	<input type="checkbox"/>

Site-Specific Erection Plan

Has a Qualified Person developed the Site-Specific Erection Plan?	<input type="checkbox"/>	<input type="checkbox"/>
Will the plan be posted at the site? If not, where? _____	<input type="checkbox"/>	<input type="checkbox"/>
Does the plan provide, Alternate Means of providing Employee Protection?	<input type="checkbox"/>	<input type="checkbox"/>
Does the plan include the Sequence of Erection Activity?	<input type="checkbox"/>	<input type="checkbox"/>
Does the plan include the description of the crane selection and placement procedures?	<input type="checkbox"/>	<input type="checkbox"/>
Does the plan include a description of Steel Erection Activities and Procedures?	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Employees are not working directly below suspended loads		
<input type="checkbox"/> Employees engaged in the Initial Connection are identified and trained		
<input type="checkbox"/> Employees necessary for the hooking and unhooking of the loads are identified		
<input type="checkbox"/> Temporary bracing / guying		
<input type="checkbox"/> Temporary column / beam connections		
Does the plan list Emergency Rescue Procedures?	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Self-Rescue <input type="checkbox"/> Stair Tower <input type="checkbox"/> Aerial / Scissor lifts <input type="checkbox"/> Man Basket		
<input type="checkbox"/> Emergency Response Team <input type="checkbox"/> First Aid Trained Personnel <input type="checkbox"/> Local Emergency Response		

Fall Protection

Will a competent person in fall protection be on site at all times?	<input type="checkbox"/>	<input type="checkbox"/>
Were fall protection systems designed by a Qualified Person?	<input type="checkbox"/>	<input type="checkbox"/>
Will the erection areas be properly signed and barricaded?	<input type="checkbox"/>	<input type="checkbox"/>
Are methods in place for securing loose items aloft?	<input type="checkbox"/>	<input type="checkbox"/>

Fall Protection Procedures (check all that apply)

Erection of Vertical Structural Members	<input type="checkbox"/> Ladders	<input type="checkbox"/> Aerial / Scissor lifts	<input type="checkbox"/> Horizontal Lifeline	<input type="checkbox"/> Guardrails	<input type="checkbox"/> Free Climbing
Erection of Horizontal Structural Members	<input type="checkbox"/> Ladders	<input type="checkbox"/> Aerial / Scissor lifts	<input type="checkbox"/> Horizontal Lifeline	<input type="checkbox"/> Guardrails	<input type="checkbox"/> Free Climbing
Installation of Roofing and Associated insulation	<input type="checkbox"/> Ladders	<input type="checkbox"/> Aerial / Scissor lifts	<input type="checkbox"/> Horizontal Lifeline	<input type="checkbox"/> Guardrails	<input type="checkbox"/> Free Climbing
Installation of Decking	<input type="checkbox"/> Ladders	<input type="checkbox"/> Aerial / Scissor lifts	<input type="checkbox"/> Horizontal Lifeline	<input type="checkbox"/> Guardrails	<input type="checkbox"/> Free Climbing
Installation of Wall Openings	<input type="checkbox"/> Ladders	<input type="checkbox"/> Aerial / Scissor lifts	<input type="checkbox"/> Horizontal Lifeline	<input type="checkbox"/> Guardrails	<input type="checkbox"/> Free Climbing

Controlling Contractor	_____	_____	_____
	Name	Signature	Date
TEMA PE Review	_____	_____	_____
	Name	Signature	Date
TEMA Safety Review	_____	_____	_____
	Name	Signature	Date

CSF D-35 Toyota Construction Safety Audit Sheet (US)

Contractor: _____

Department: _____

Project: _____

Audit Date: _____

Score

Regulation		O	Δ	X	ss	Comments
Section C	JSA Audit post review					
TCSR	Reviewed by workers, signed	<input type="checkbox"/>	-1	<input type="checkbox"/>		
TCSR	Follows Work: applicable	<input type="checkbox"/>	-1	<input type="checkbox"/>		
TCSR	Updated: being followed	<input type="checkbox"/>	-1	<input type="checkbox"/>		
TCSR	Posted, easy access	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
TCSR	Required Documents on control board	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Section D	Environment / Site Conditions					
OSHA 1926.50	First Aid Kit: stocked, eye wash, accessible	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
OSHA 1926.51	Sanitation: toilets clean, stocked (portables)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
OSHA 1926.52	Noise: below 85dba, protection used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
OSHA 1926.56	Lighting: general, task	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
OSHA 1926.57	Ventilation: heat, odors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
OSHA 1926.55	Dust Control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Section E	Personal Protective Equipment					
OSHA 1926.95	Stand: hard hat, glasses, high vis clothing, boots	<input type="checkbox"/>	-1	<input type="checkbox"/>		
TCSR	Other: correct for area, task, department	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Section F	Fire Protection					
OSHA 1926.150(c)	Extinguishers: present, sized for task	<input type="checkbox"/>	-1	<input type="checkbox"/>		
OSHA 1926.152(a)	Flammable liquids: controlled, stored properly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
OSHA 1926.152	Fuel: stored correctly (Propane, Oxygen)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Section G	Signs, Barricades					
OSHA 1926.202	Proper Barricades: placement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
OSHA 1926.200	Signs: correct, posted, phone #, red/yellow tape	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Section H	Materials / Handling / Storage / 55					
OSHA 1926.250	Mat, Tools, Equip: stored prop, neatly stacked	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
OSHA 1926.250(a)(3)	Trip Hazards: cords neatly run, areas clean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
OSHA 1926.34(c)	Liquids on floor: spill kit available	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
OSHA 1926.251	Rigging for mat handling correct, stored properly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Section I	Tools: hand and power					
OSHA 1926.300(a)	Condition: handles on, cord not cut	<input type="checkbox"/>	-1	<input type="checkbox"/>		
OSHA 1926.300(b)	Guarding: used, adjusted correctly	<input type="checkbox"/>	-1	<input type="checkbox"/>		
OSHA 1926.300	Proper Usage: correct tool for the job	<input type="checkbox"/>	-1	<input type="checkbox"/>		
TCSR	Identification on gang boxes, tools, equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Section J	Welding, Cutting, and Grinding					
TCSR	Hot Work Requirements Met: issued	<input type="checkbox"/>	-1	<input type="checkbox"/>		
OSHA 1926.95(a)	Proper PPE: non flammable clothing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
OSHA 1926.352(a)	Shields, Barriers: equipment, area protected	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
OSHA 1926.350	Gas Equip: proper storage, flash arrestors used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Section K	Electrical					
OSHA 1926.404(b)(1)(ii)	GFCI Protection: tested	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
OSHA 1926.405(a)(2)(ii)(i)	Ext Cords: condition, protected, inspected	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Section L	Scaffolds					
OSHA 1926.451(b)	No missing planking, bracing, guardrails	<input type="checkbox"/>	-1	<input type="checkbox"/>		
OSHA 1926.451(f)(3)	Inspected: tagged, hazards noted	<input type="checkbox"/>	-1	<input type="checkbox"/>		
OSHA 1926.451(h)	Falling Object Protection: toe boards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
OSHA 1926.452(w)(2)	Rolling Scaffolds: wheels locked	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
OSHA 1926.453	Workers tied off in Aerial Lifts, Prop fall pro	<input type="checkbox"/>	-1	<input type="checkbox"/>		
TCSR	Basket: floor cleaned, materials loaded properly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Section M	Fall Protection					
OSHA 1926.502	PFAS: inspected, good condition, worn properly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
OSHA 1926.502	Proper Anchorage: clamps, straps, lines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
TCSR	Workers tied off in scissor lifts	<input type="checkbox"/>	-1	<input type="checkbox"/>		
OSHA 1926.502	100% tie off in use (double Lanyards)	<input type="checkbox"/>	-1	<input type="checkbox"/>		
OSHA 1926.501(b)(2)	Leading Edges: identified, protected	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
OSHA 1926.502(f)	Warning Lines: used, proper distance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

CSF D-35 Toyota Construction Safety Audit Sheet (US) (continued)

Regulation		O	Δ	X	ss	Comments
Section M	Fall Protection cont.					
TCSR	Floor openings: permit issued, followed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
TCSR	Roof work: permitted, weather conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Section O	Motor vehicles / Mechanized Equipment					
TCSR	Daily Inspections, equipment identified	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
OSHA 1926.600	Safety Devices: seat belts, lights, alarm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
TCSR	Operators: certified, authorized, licensed	<input type="checkbox"/>	-1	<input type="checkbox"/>		
OSHA 1910.178	Forklift operated correctly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Section P	Excavations					
OSHA 1926.652	Over 5 ft: sloped, benched, shored	<input type="checkbox"/>	-1	<input type="checkbox"/>		
OSHA 1926.651(c)	Over 4 ft: ladder access, every 25 ft.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
OSHA 1926.651(j)	Spoils: back 3ft	<input type="checkbox"/>	-1	<input type="checkbox"/>		
OSHA 1926.651(h)	Water Intrusion: rain, seepage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
OSHA 1926.651(j)(2)	Excavation Protected: equipment, workers	<input type="checkbox"/>	-1	<input type="checkbox"/>		
Section Q	Concrete and Masonry Construction					
OSHA 1926.701(b)	Rebar / rods capped, protected	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
OSHA 1926.706	Masonry walls supported, Limited access zone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Section R	Steel Erection, Equipment Placement					
OSHA 1926.759	Area protected from overhead lifts	<input type="checkbox"/>	-1	<input type="checkbox"/>		
OSHA 1926.752	Site specific erection plan in place	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
TCSR	Area Will Support Equipment and Load	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Section T	Demolition					
TCSR	Engineer survey by Competent Person made	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
TCSR	All serv: shut off, capped, disc, removed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Section V	Power Transmission / Distribution / LO					
OSHA 1910.147	Energy Sources: identified, isolated, locked out	<input type="checkbox"/>	-1	<input type="checkbox"/>		
TCSR	Sign In/Out Sheet: used and correct	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
OSHA 1910.147(f)(3)(ii)(D)	Group LO: key box used / key inside	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
OSHA 1910.147(c)(5)(ii)(D)	Locks: labeled, contain required info.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
NFPA 70e	Arc Flash: proper PPE, workers trained	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Section X	Ladders					
OSHA 1926.1053(b)(1)	Secured: used properly, right type for work	<input type="checkbox"/>	-1	<input type="checkbox"/>		
TCSR	Non-Conductive: no metal side rails	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
OSHA 1926.1053(a)	Good Condition: rungs, rails, bracing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Section Z	Toxic / Hazardous Substances					
TCSR	Chemicals: identified, labeled	<input type="checkbox"/>	-1	<input type="checkbox"/>		
TCSR	Stored Properly: correct containment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
TCSR	SDS Sheets: available, correct	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
TCSR	Proper PPE Being Used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Section CC	Cranes and Derricks					
OSHA 1926.1427(a)	Crane Operator Certified: card checked	<input type="checkbox"/>	-1	<input type="checkbox"/>		
OSHA 1926.1412	Crane Inspection: certifications current	<input type="checkbox"/>	-1	<input type="checkbox"/>		
OSHA 1926.251	Rigging: condition, inspected, rating tag	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
OSHA 1926.1401	Rigger Qualified: checked	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
OSHA 1926.1419	Signal Person: Qualified, checked	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Section A1	Confined Space					
OSHA 1910.146(c)(5)(ii)(C)	Air Quality Tested	<input type="checkbox"/>	-1	<input type="checkbox"/>		
OSHA 1910.146(c)(2)	Permit / Checklist Posted	<input type="checkbox"/>	-1	<input type="checkbox"/>		
OSHA 1910.146(g)	Workers Trained / rescue notified	<input type="checkbox"/>	-1	<input type="checkbox"/>		
Section	Other					
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Condition	Points	Audit	Possible	Score	Ratings
O Good	2				100% - 95% Excellent
Δ Needs Improvement	1				94% - 86% Needs Improvement
X Unacceptable	down to -1				Below 85% Unacceptable

Project Leadership Comments _____

(required for below 85%)

Dept or Proj
Mgr / Leader _____

Contractor
Representative _____

TEMA Safety
Representative _____

CSF D-35C Toyota Construction Safety Audit Sheet (Canada)

Contractor: _____

Department: _____

Project: _____

Audit Date: _____

Score

--

Regulation		O	Δ	X	ss	Comments
Section C	JSA Audit post review					
TCSR	Reviewed by workers, signed	<input type="checkbox"/>	-1	<input type="checkbox"/>		
TMMC Blue Book	Follows Work: applicable	<input type="checkbox"/>	-1	<input type="checkbox"/>		
TMMC Blue Book	Updated: being followed	<input type="checkbox"/>	-1	<input type="checkbox"/>		
TCSR	Posted, easy access	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
TMMC Blue Book	Required Documents on control board	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Section D	Environment / Site Conditions					
Ont 1101	First Aid Kit: stocked, eye wash, accessible	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Ont 213 / 29	Sanitation: toilets clean, stocked (portables)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Ont 851 / 139	Noise: below 85dba, protection used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Ont 213 / 45.1	Lighting: general, task	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Ont 213 / 46-49	Ventilation: heat, odors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
TCSR	Dust Control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Section E	Personal Protective Equipment					
Ont 213 / 21-27	Stand: hard hat, glasses, high vis clothing, boots	<input type="checkbox"/>	-1	<input type="checkbox"/>		
TCSR	Other: correct for area, task, department	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Section F	Fire Protection					
Ont 213 / 52-55	Extinguishers: sized for task, inspected	<input type="checkbox"/>	-1	<input type="checkbox"/>		
Ont 213 / 43.1	Flammable liquids: controlled, stored properly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Ont 213 / 42	Fuel: stored correctly (Propane, Oxygen)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Section G	Signs, Barricades					
Ont 213 / 44	Proper Barricades: placement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
TMMC Blue Book	Signs: correct, posted, phone #, red, yellow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Section H	Materials / Handling / Storage / 5S					
OSHA 1926.250	Mat, Tools, Equip: stored prop, neatly stacked	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
OSHA 1926.250(a)(3)	Trip Hazards: cords neatly run, areas clean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
OSHA 1926.34(c)	Liquids on floor: spill kit available	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
OSHA 1926.251	Rigging for mat handling correct, stored properly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Section I	Tools: hand and power					
Ont 213 / 35	Condition: handles on, cord not cut	<input type="checkbox"/>	-1	<input type="checkbox"/>		
TMMC Blue Book	Guarding: used, adjusted correctly	<input type="checkbox"/>	-1	<input type="checkbox"/>		
TMMC Blue Book	Proper Usage: correct tool for the job	<input type="checkbox"/>	-1	<input type="checkbox"/>		
TMMC Blue Book	Identification on gang boxes, tools, equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Section J	Welding, Cutting, and Grinding					
Ont 213 / 93-121	Hot Work Requirements Met: issued	<input type="checkbox"/>	-1	<input type="checkbox"/>		
TMMC Blue Book	Proper PPE: non flammable clothing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
TMMC Blue Book	Shields, Barriers: equipment, area protected	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
TMMC Blue Book	Gas Equip: proper storage, flash arrestors used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Section K	Electrical					
Ont 213 / 195	GFCI Protection: tested	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
TMMC Blue Book	Ext Cords: condition, protected, inspected	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Section L	Scaffolds					
Ont 213 / 125-136	No missing planking, bracing, guardrails	<input type="checkbox"/>	-1	<input type="checkbox"/>		
TMMC Blue Book	Inspected: tagged, hazards noted	<input type="checkbox"/>	-1	<input type="checkbox"/>		
Ont 213 / 125-136	Falling Object Protection: toe boards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Ont 213 / 125-136	Rolling Scaffolds: wheels locked	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
TMMC Blue Book	Workers tied off in Aerial Lifts, Prop fall pro	<input type="checkbox"/>	-1	<input type="checkbox"/>		
TCSR	Basket: floor cleaned, materials loaded properly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Section M	Fall Protection					
Ont 213 / 26	PFAS: inspected, good condition, worn properly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
TMMC Blue Book	Proper Anchorage: clamps, straps, lines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
TMMC Blue Book	Workers tied off in scissor lifts	<input type="checkbox"/>	-1	<input type="checkbox"/>		
TCSR	100% tie off in use (double Lanyards)	<input type="checkbox"/>	-1	<input type="checkbox"/>		
Ont 213 / 26	Leading Edges: identified, protected	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
TCSR	Warning Lines: used, proper distance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

CSF D-35C Toyota Construction Safety Audit Sheet (Canada) (continued)

Regulation	O	Δ	X	ss	Comments
Section M	Fall Protection cont.				
TCSR					Floor openings: permit issued, followed
TCSR					Roof work: permitted, weather conditions
Section O	Motor vehicles / Mechanized Equipment				
Ont / 213 93-103					Daily Inspections, equipment identified
TMMC Blue Book					Safety Devices: seat belts, lights, alarm
Ont 213 / 93-103		-1			Operators: certified, authorized, licensed
Ont 213 / 93-103					Forklift operated correctly
Section P	Excavations				
Ont 213 / 222-242		-1			Over 5 ft: sloped, benched, shored
TMMC Blue Book					Over 4 ft: ladder access, every 25 ft.
Ont 213 / 222-242		-1			Spoils: back 3ft
Ont 213 / 222-242					Water Intrusion: rain, seepage
Ont 213 / 222-242					Excavation Protected: equipment, workers
Section Q	Concrete and Masonry Construction				
TCSR					Rebar / rods capped, protected
TCSR					Masonry walls supported, Limited access zone
Section R	Steel Erection, Equipment Placement				
TCSR		-1			Area protected from overhead lifts
TCSR					Site specific erection plan in place
TCSR					Area Will Support Equipment and Load
Section T	Demolition				
TCSR					Engineer survey by Competent Person made
TCSR					All serv: shut off, capped, disc, removed
Section V	Power Transmission / Distribution / LO				
Ont 213 / 181-194		-1			Energy Sources: identified, isolated, locked out
TMMC Blue Book					Sign In/Out Sheet: used and correct
TMMC Blue Book					Group LO: key box used / key inside
TCSR					Locks: labeled, contain required info.
NFPA 70e					Arc Flash: proper PPE, workers trained
Section X	Ladders				
Ont 213 / 78-84		-1			Secured: used properly, right type for work
TMMC Blue Book					Non-Conductive: no metal side rails
TCSR					Good Condition: rungs, rails, bracing
Section Z	Toxic / Hazardous Substances				
Ont 860		-1			Chemicals: identified, labeled
TMMC Blue Book					Stored Properly: correct containment
TMMC Blue Book					MSDS Sheets: available, correct
TCSR					Proper PPE Being Used
Section CC	Cranes and Derricks				
Ont 213 / 150-180		-1			Crane Operator Certified: card checked
TMMC Blue Book		-1			Crane Inspection: certifications current
Ont 213 / 150-180					Rigging: condition, inspected, rating tag
Ont 213 / 150-180					Rigger Qualified: checked
TCSR					Signal Person: Qualified, checked
Section A1	Confined Space				
Ont 632 / 05		-1			Air Quality Tested
TMMC Blue Book		-1			Permit / Checklist Posted
TMMC Blue Book		-1			Workers Trained / rescue notified
Section	Other				
TMMC Blue Book					Supervisor STOP Audits - Comp'd (Daily) & Posted

Condition	Points	Audit	Possible	Score	Ratings
O Good	2				100% - 95% Excellent
Δ Needs Improvement	1				94% - 86% Needs Improvement
X No Good	down to -1				Below 85% Unacceptable

Project Leadership Comments _____

(required for below 85%)

Dept or Proj
Mgr / Leader _____

Contractor
Representative _____

TEMA Safety
Representative _____



CONSTRUCTION AREA

AUTHORIZED PERSONNEL ONLY

PPE Required beyond this point:



Possible Hazards:

Hot Work, Suspended Loads, Elevated Work, Confined Space

CONTRACTOR

ABC Construction Co.

CONTACT

John Anybody

PHONE NUMBER

408-555-1212

AUTHORIZED DURATION

9/1/15

THROUGH

9/30/15

CSF D-40 Floor Opening Checklist

Date: _____	General Contractor: _____
	Supervisor Name: _____
Location: _____	Contact Phone #: _____
Dept.: _____	Plant / TEMA Contact _____
Column# _____	Contact Number: _____

Description of Work: _____

Hazards and Precautions:

<input type="checkbox"/> Fall Protection:	<input type="checkbox"/> Lockout Required: Follow TEMA Lockout Procedures
<input type="checkbox"/> Respiratory protection	<input type="checkbox"/> Confined Space: Attach Confined Space Entry Form
<input type="checkbox"/> Additional protective PPE _____	

No Grating is to be removed from any area (painting, inspection, drainage pit, etc.) without contacting Safety for review.

The following items must be reviewed prior to removing ANY covering protecting a "below grade" void

Y	N
<input type="checkbox"/>	<input type="checkbox"/> Will signs and notices be posted at the area of the grating removal?
<input type="checkbox"/>	<input type="checkbox"/> Will ridged covers be used where the grating was removed?

If no: why? _____

If using a "solid cover" the wording "Hole" or "Opening" must be stenciled or painted on it.

<input type="checkbox"/>	<input type="checkbox"/> Will the cover need cleating or secured by tie wire or clips?
<input type="checkbox"/>	<input type="checkbox"/> Will a barricade be erected prior to the removal of any grating in the area of work?

If no, why: _____

Type of barricade: ☐ rigid ☐ signage tape ☐ other _____

<input type="checkbox"/>	<input type="checkbox"/> Will barricading be constructed of wood (2" X 4" nom) or a material of comparable strength?
<input type="checkbox"/>	<input type="checkbox"/> Will it have a complete top rail? (no voids), with exception to the designed access point.
<input type="checkbox"/>	<input type="checkbox"/> Will the access point be protected to prevent accidental entering?
<input type="checkbox"/>	<input type="checkbox"/> Be of proper height? (no less than 3', nor more than 3'6" in height)
<input type="checkbox"/>	<input type="checkbox"/> Be self supporting and capable of withstanding a side load of 200 lbs.?
<input type="checkbox"/>	<input type="checkbox"/> Have a toe board, with exception to the designed access point?

Removed grating must be:

Set in an area not to cause a tripping hazard or interfere with other work.

Stacked away from the opening , flat, and in a manner to prevent falling into the opening.

Handled wearing the proper hand protection

The area of the removed grating must have enough light, so opening can easily be seen.

If the area is left open past the working hours, the area must be secured to prevent any unauthorized entry.

P/L, Mgr, Spec, Reviewed: _____ Date: _____

Construction Safety Reviewed: _____ Date: _____

CSF D-42 Demolition Checklist

Date: _____	General Contractor: _____
Work Scheduled: _____	Supervisor Name: _____
Location: _____	Contact Phone #: _____
Dept.: _____	P/L Name: _____
Area: _____	Contact Number: _____

Description of Work: _____

The following items must be reviewed prior to demolition starting

Utilities: Check the utilities that require removing/termination

	Location (panel #, bus #, column #, etc.)	Contractor	P/L
1 <input type="checkbox"/> Natural Gas	_____	_____	_____
2 <input type="checkbox"/> Propane	_____	_____	_____
3 <input type="checkbox"/> Oxygen	_____	_____	_____
4 <input type="checkbox"/> Compressed Air	_____	_____	_____
5 <input type="checkbox"/> Water	_____	_____	_____
6 <input type="checkbox"/> Coolant	_____	_____	_____
7 <input type="checkbox"/> Electrical (high V)	_____	_____	_____
8 <input type="checkbox"/> Electrical (low V)	_____	_____	_____
9 <input type="checkbox"/> Ventilation	_____	_____	_____
10 <input type="checkbox"/> Hydraulic	_____	_____	_____
11 <input type="checkbox"/> Data Lines	_____	_____	_____
12 <input type="checkbox"/> Communication	_____	_____	_____
13 <input type="checkbox"/> Fire (sprinkler)	_____	_____	_____
14 <input type="checkbox"/> Fire (data)	_____	_____	_____
15 <input type="checkbox"/> Chemical	_____	_____	_____
16 <input type="checkbox"/> Gas (other)	_____	_____	_____
17 <input type="checkbox"/> Other	_____	_____	_____
18 <input type="checkbox"/> Other	_____	_____	_____

Equipment/fixtures:

Y	N	
19 <input type="checkbox"/>	<input type="checkbox"/>	Will equipment be removed or re-located? (robots, conveyors, crane, etc.)
20 <input type="checkbox"/>	<input type="checkbox"/>	Will the equipment require dis-assembly prior to removal/moving?
21 <input type="checkbox"/>	<input type="checkbox"/>	Will fixtures/ walls be removed or re-located? (stairways, modular office, mezzanine, etc.)
22 <input type="checkbox"/>	<input type="checkbox"/>	Will removal of utilities require removal of #19 or #21 above first?
23 <input type="checkbox"/>	<input type="checkbox"/>	Will removal of #19 or #21 above require large equipment?
24 <input type="checkbox"/>	<input type="checkbox"/>	Will work be performed during production hours?

Structure:

25 <input type="checkbox"/>	<input type="checkbox"/>	Has the demolition of any structure been reviewed by an engineer?
26 <input type="checkbox"/>	<input type="checkbox"/>	Will the demolition of any structure require special permitting? (state, local, environmental)
27 <input type="checkbox"/>	<input type="checkbox"/>	Will any demolition of the structure require shoring/bracing?
28 <input type="checkbox"/>	<input type="checkbox"/>	Will any temporary support(s) require engineering design?

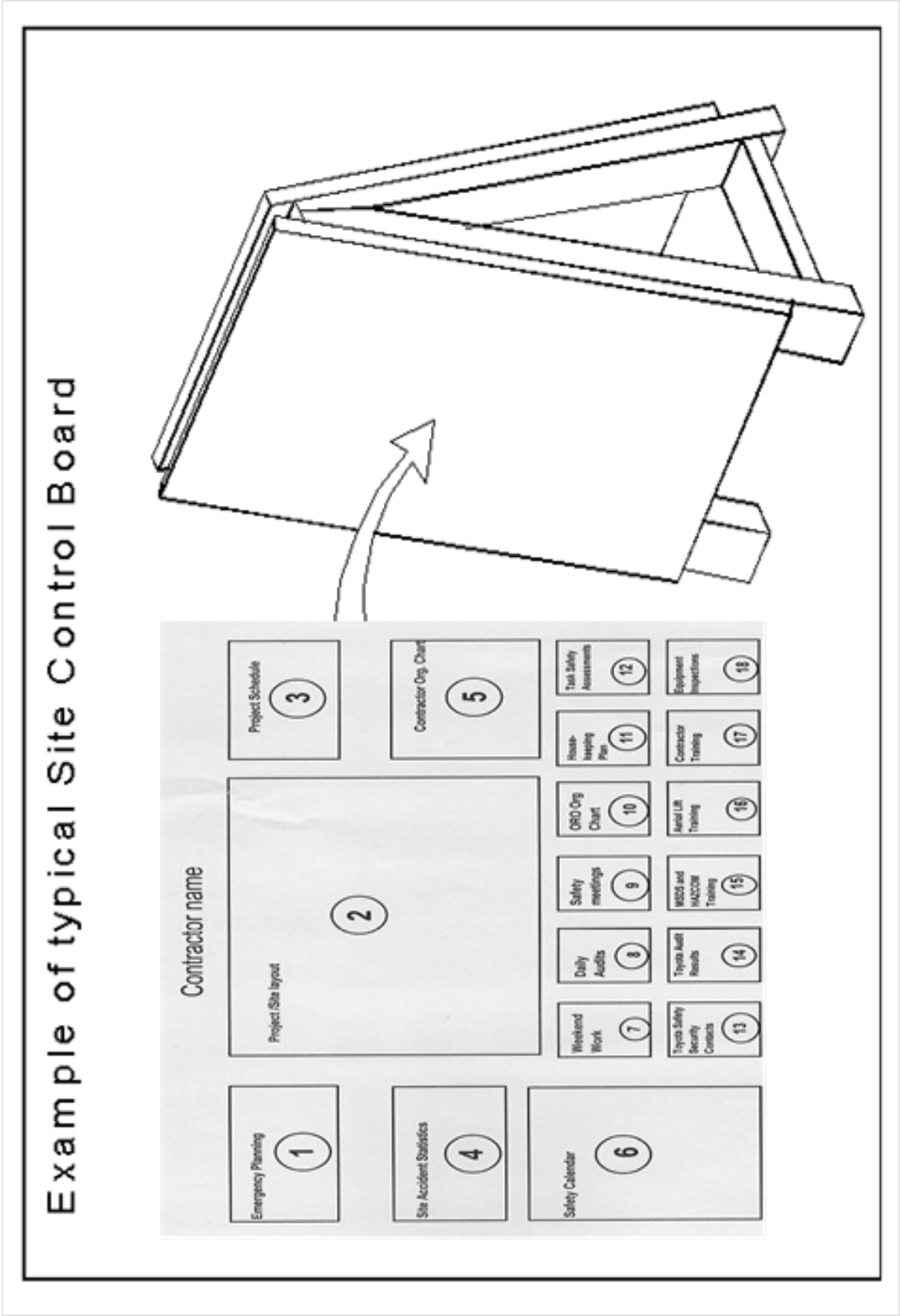
Documentation: Check any documentation/permitting required for this work

29 <input type="checkbox"/>	Hot Work (provided by host facility)
30 <input type="checkbox"/>	Confined Space (contractor supplied)
31 <input type="checkbox"/>	Excavation (attach CSF D-02)
32 <input type="checkbox"/>	Critical lifting (attach CSF D-26)
33 <input type="checkbox"/>	Environmental (check with host location)
34 <input type="checkbox"/>	Facility required What: _____
35 <input type="checkbox"/>	State/local required What: _____

Construction Safety Reviewed: Date: _____ Signature: _____

Form 4.0 Notice of Work Permit (Canada)

TMMC NOTICE OF WORK PERMIT			
Date:	General Contractor:		
P.O. #:	Supervisor Name:		
Department:	Supervisor Phone #:		
Location:	Work Period Date:	From:	To:
Column #:	Time:	From:	To:
TMMC Contact Name:	Weekday:	Yes / No →	Day / Afternoon / Night
TMMC Contact #:	Saturday:	Yes / No →	Day / Afternoon / Night
	Sunday:	Yes / No →	Day / Afternoon / Night
	# of Workers Per Day:		
Description of Work:			
Special Work Items	Yes/No	Instructions	Authorization
Chemical Substances (inc. oil, lubricant, etc)		Complete Chemical Substances Form attach MSDS	
CO2 System		TMMC Security Specialist approval required	
Confined Space		Complete Confined Space Entry Request Form	
Elevated Work or Roof Work		Elevated or Roof Work included in Job Safety Analysis (JSA)	
Equipment Commissioning/Decommissioning		Complete Commissioning/decommissioning Permit	
Equipment Lockout		Confirm lockout plan complete & lockout locations identified	
Excavations		Review of site specific excavation procedure required by TMMC H&S	
Extension Ladders		Used for purposes other than access or egress	
Fire Alarm/Suppression System Work		TMMC Security Specialist approval required	
Floor Openings		Documented floor opening procedure reviewed by TMMC H&S	
Generation or Disposal of Waste		Attach Non-Hazardous Waste Work Plan Form (if applicable) &	
		Attach Hazardous & Liquid Industrial Waste Assessment Form	
Hot Work		Follow TMMC Hot Work procedure & obtain Hot Work Permit	
Mobile Equipment: Gas/Diesel propane		Prior written approval from TMMC Engineering Specialist required	
Potential Environmental Impact		Complete Job Safety Analysis (JSA)	
Press Equipment Risk		Review JSA to remove risk or review extraction team requirements	
Restricted Hot Work		Complete Restricted Hot Work Risk/Counter Measure Form	
Special Protective Equipment		List equipment to be used in safe work procedure	
Surface Penetration (indoor/outdoor)		Locates complete/not required	
Swipe Access to Required Rooms		Documented approval form "Gate Keeper" required	
Tie in to Existing Equipment		Attach Tie in Request Form	
Utilities required during non-production		Attach a TMMC Utility Request Form (obtain from shop engineer)	
Waste Water Discharge		Complete Waste Wanted Discharge Form & submit 2L sample	
Work on piping >15 psi		Proof of Certification to TSSA standard required	
THIS NOTICE OF WORK PERMIT IS NOT VALID UNTIL THE JOB SAFETY ANALYSIS IS PROVIDED AND AUTHORIZED			
AUTHORIZATION			
I have read and understand the Contractor Blue Book Management Standard and agree to comply with all rules, requirements, and procedures as outlined in the Manual, and any special instructional on this permit.			
Print Name		Signature	Date
Contractor Supervisor:			
TMMC Maintenance:			
IMtc Special Instruction:			
TMMC Engineer Spec:			
Special Instructions:			
Work cannot commence until this permit has been signed by the Contractor Supervisor, TMMC Mtc G/L & TMMC Engineering Specialist			
Copies - Originator →TMMC Engineering Specialist →TMMC Maintenance →Health and Safety →TMMC Security (if required) →Originator File			



Toyota Construction vs. Maintenance Definition

The following is a sample list of activities that are classified as construction or maintenance activities per OSHA. This list is in no way meant to be an all-encompassing list, but to provide guidance on classification. Contractors shall verify with the designated Toyota Project and Safety Representatives to confirm the classification of the work prior to starting activities.

Construction Activities

- Building Erection/Demolition
- Excavation/Earth Moving
- Steel Erection/Demolition
- Overhead Rail System Installation
- Concrete/Masonry
- Power Transmission/ Distribution
- Power Cable Routing and termination to machine disconnect
- Equipment Installation/Relocation/Demolition
- Piping up to the Equipment Main Valve
- Heavy Equipment Operation
- Duct/HVAC Ventilation work
- Erection of Scaffolds
- Installation of Conduit, Piping, Cabling, Duct or Hardware
- Machine/Equipment Enhanced Capability
 - *Example: If a machine could previously move at 100mm/sec is upgraded to be able to move at 200mm/sec, regardless of the actual usage speed, it has enhanced capabilities. However, if a machine was designed to move at 200mm/sec, and was previously operated at 100mm/sec, then its speed was increased to 150mm/sec, there is no enhancement to the machine's (speed) capability.*

Maintenance Activities

- Removal/Attachment of Machine/Robot components
 - Tooling Subassemblies
 - Air Cylinders
 - Slide Units
 - Light Curtains
- Internal machine wiring and hosing of newly added machine components
- Logic Programming
 - Debugging
 - I/O Confirmation
 - Automatic Running Confirmation
- Adjustment / Tuning of machine components
- Robot End-of-Arm Tooling Modification
 - Removal/Attachment
 - Wiring / Piping
- Robot Teaching / Programming

Scaffold Tags

Scaffolding must have a Scaffold Status Tag attached to it at all times.

A competent person employed by the Contractor shall complete and apply this tag.



Red Tag –

No access allowed. Scaffold is being erected or dismantled, or a major safety defect has been found.

Yellow Tag –

Scaffold does not meet all Federal, State/Provincial and Local requirements. Access requires Personal fall protection to be used at all times.

Green Tag –

Scaffold meets all Federal, State/Provincial and Local requirements, and is safe to use.

Example of Tag system



Revision History

Revision	Section	Changes	Date
2005-1		Original	Mar, 2005
2006-1		Change all TMMNA to TEMA, TMMC to NAMC, modify the Commissioning Section	May 2006
2007-2	Section 2	Added several required definitions and moved definitions (were previously in an Appendix – moved to integrate as part of document text)	Mar, 2007
2009-1		Entire Document Changed name from “TEMA Construction Safety Management Handbook” to “TEMA Construction Safety Requirements” Changed many “should” requirements to “must”	Oct, 2009
2009-1.3	Annex E	TEMA PE JSA guideline document added	July 2011
2015-2.0	Entire Document	Re-organized, re-written, added and deleted text, information forwarded to appendix, new appendix documentation	Sept 2015
2016-2.01	Section 3.6	Memo issued on suspension of the “previous 30 day” requirement from the Pre-employment drug screening provision. (Page 2)	Jan 2016



TEMA PE

Safety Engineering

Job Safety Analysis (JSA)

Guidelines

(For Construction,
Equipment Installation,
& Decommissioning Projects)

March 11th, 2011

Toyota believes the Job Safety Analysis (JSA) process is a critical component to a successful safety plan. We expect contractors, vendors, and suppliers who provide services to TEMA to embrace the JSA process. To enhance understanding and improve communication with our business partners, the following document was created as a tool for TEMA Production Engineering to reference when construction or machine installation work is conducted by TEMA at a NAMC or other location.

NOTE: This information is intended to provide guidance to TEMA PE regarding the TEMA JSA requirements as contained in the TEMA Construction Safety Requirements document. This document should be referenced when confirming contractors' adherence to the TEMA PE JSA process and content requirements. In addition, the concepts and process discussed in this document should apply to construction and equipment installation projects performed by TEMA PE members.

Introduction

This document will provide answers and direction in the following areas as it relates to JSA's:

- What is a JSA?
- When is a JSA required?
- What are the roles & responsibilities associated with the JSA process?
- Who should create the JSA?
- What are the three (3) key elements of a JSA?
- What is the review process for a JSA?
- How should a JSA be applied in the field?

What is a JSA?

A Job Safety Analysis (JSA) is a proactive technique that, at the job task level, identifies potential hazards and how they will be controlled. The process requires contractors to identify, document, and communicate potential hazards, and the steps to eliminate or reduce that risk to an acceptable level.

The JSA shall be formally documented in writing. The TEMA PE Construction Safety Requirements document provides a JSA template that may be used by contractors. Contractors may use their own form provided it contains, at a minimum the following fields:

1. Company Name.
2. Date JSA was completed.
3. Name of task/job/activity.
4. Steps to complete the task in sequential order.
5. Potential hazards associated with each step of the task.
6. The countermeasures or preventive action associated with each hazard.

The contents of the written document shall be reviewed with all affected workers prior to the initial start of the job and on each subsequent day work is performed on that job. It is important to remember affected workers may include workers on other jobs or from other companies who are working in the area. (The review process will be covered in more detail in a subsequent section).

The JSA process begins in the planning phase and is utilized by those responsible for determining how a job will be performed. The JSA should prompt strong planning of tasks and should begin to outline known hazards associated with the type of work to be performed. This outline is then refined once at the jobsite to include local hazards such as the proximity of other workers, site traffic, and other site specific conditions.

When is a JSA required?

The JSA process is a key risk mitigation tool that shall be implemented on all TEMA PE projects. **The TEMA Construction Safety Requirements document requires contractors to complete a JSA for all construction and machine installation activities/tasks they are contracted to perform or that arise as a consequence of fulfilling those contractual obligations.**

Every construction or machine installation task that is planned to be performed or that arises out of additional requests or unforeseen circumstances must have a JSA. The level of detail included in the JSA should be commensurate with the level of risk. Simple sub tasks may be included or added into a broader scoped JSA.

What are the roles and responsibilities associated with the JSA process?

The JSA process is primarily the responsibility of the contractor. The planning and execution of process steps rest solely with the contractor. TEMA Production Engineering's role includes, but is not limited to:

1. Confirming the contractors understand the JSA process, and;
2. Reviewing JSA's to confirm TEMA PE clearly understands the contractor's tasks, potential hazards, and countermeasures.

The job shall not commence until the applicable JSA has been reviewed by TEMA ORO/Project Management Group Designee(s) AND TEMA PE Safety Representative(s). All questions regarding the steps, potential hazards, and countermeasures must be addressed to the satisfaction of both these groups before the contractor shall allow work to begin on the job.

The roles and responsibilities of each respective area are provided in TABLE 1.

Table 1

Section	Responsibility
TEMA PE Project Department Leads	<ol style="list-style-type: none"> 1 Understand the JSA process. 2 Ensure contractors understand the JSA requirements/expectations when bidding work. 2 Provide time for JSA training.
TEMA ORO/Project Management Group (PMG) Organization or Designee* (e.g., Project Engineers) (*These are TEMA PE resources that are dispatched, assigned, or located at the project location.)	<ol style="list-style-type: none"> 1 Confirm contractor understanding of JSA requirements. 2 Review all JSAs prior to beginning of job to a) confirm understanding of job steps in the required work scope, and; b) risk countermeasures are commensurate with the potential hazards listed on each step. 3 Confirm execution of JSA as part of periodic site tours.
TEMA PE Safety Department	<ol style="list-style-type: none"> 1 serve as Subject Matter Expert for JSA process 2 Set criteria for JSA completion and quality. 3 Train PE team members as needed. 4 Review JSA Audit findings 5 Resolve JSA questions/issues.
TEMA PE Site Construction Safety Team (or designee)	<ol style="list-style-type: none"> 1 Serve as Subject Matter Experts for JSA process. 2 Train PE members as needed. 3 Review all JSAs prior to beginning of job to confirm risk countermeasures are commensurate with the potential hazards listed on each step. 4 Coach TEMA PE and Contractors if JSA quality is substandard.
General Contractor	<ol style="list-style-type: none"> 1 Understand contractual obligations as they relate to the JSA process. 2 Create thorough JSAs for all tasks as identified in the TEMA Construction Safety Requirements document. 3 Ensure JSAs include all critical steps of the job process in sequential order. 4 Submit JSAs in a timely manner to allow proper review. 5 Confirms TEMA appropriate TEMA review conducted before beginning of work. 6 Effectively communicate to workers prior to start of work & obtain signatures on JSA. 7 Confirm execution of JSAs in the field as work progresses. 8 Modify JSAs in the field immediately if conditions/tasks/risks should change & communicate updates to affected workers.

Who should create the JSA?

It is very important to **involve employees of all disciplines and levels in the JSA process; Supervisors, Foremen, Laborers, Technicians, Safety, etc.** They all can contribute in providing a practical understanding of the job which is invaluable in identifying potential hazards. This practical knowledge will help minimize oversights, improve quality of the analysis, and get all workers to “buy in” to the process of identifying hazards and the countermeasures associated with their work.

What are the key elements of a JSA?

There are three (3) elements essential to creating a quality JSA.

1. **Identify each individual step or sub task of the job.**
2. **Identify workplace hazards associated with each step or sub task.**
3. **Determine suitable and sufficient control measures which address identified hazards.**

Let's examine each one in more detail.

1 - Identify each individual step or sub task of the job.

Every job can be broken down into sub tasks or steps. Starting from the project plan, **break down each job into the sequential steps** required to complete it (components or sub tasks). It may be helpful to get input from workers who have performed the same job before in fully understanding the detailed steps and job sequence.

2 - Identify workplace hazards associated with each step or sub task.

Using the breakdown of sequential tasks or steps, the job hazard analysis is now an exercise in detective work. The goal to foresee;

- What could go wrong?
- How could a potential hazard arise?
- What contributing factors exist (not immediately related to the task at hand)?

The best way to identify workplace hazards is to **walk the worksite in advance**. Look for hazards that are directly associated with the task that will be conducted as well as hazards that are not related to the target task. From trip/fall hazards to overhead power lines all potential hazards must be identified.

3 - Determine suitable and sufficient control measures which address identified hazards.

After reviewing this list of hazards, consider what control methods will eliminate or reduce them to an acceptable level. When developing any JSA, the Hierarchy of Risk Control (from most to least effective) should be referenced regularly. (See below)

1. Can the hazard be **eliminated**? Ask if the step is truly necessary to accomplish the task.
If #1 is not practical,
2. Can a **substitution** be put in place? For example: replace a manual task with equipment that eliminates the exposure.
If #2 is not practical,
3. Can workers be **isolated** from the hazard? For example: moving the work to an off shift if excessive noise or atmospheric hazards may be introduced by a process.
If #3 is not practical,
4. Can **engineering controls** be put in place? For example: Can ventilation be provided to decrease heat, remove atmospheric hazards, etc.
If #4 is not practical,
5. Can **administrative controls** be put in place? For example: Move work to off shift if 2 contractors need to work in the same space. Shift workers to off shift on extremely hot days.
If #5 is not practical,
6. Provide appropriate **PPE until better controls are available**.

See appendix 1 for an example of a completed JSA.

What is the review process for a JSA before it is finalized and shared with the work crew?

All JSAs created by contractors must be reviewed by the Toyota ORO/PMG designee responsible for the work. The Toyota ORO/PMG designee is responsible to ensure the contractor has adequately considered the key steps associated with the contracted task, associated hazards, and controls. After the TEMA ORO/PMG review, TEMA Safety or their designee will also review the JSA for content and risk control measures. **The work shall not commence prior to review of the JSA by TEMA PE Project Lead (or designee) and TEMA Site Construction Safety (or designee).**

Periodically, TEMA will conduct field JSA audits to confirm correct application at the jobsite.

Key items covered during the field audit are:

- JSA document is present at the jobsite.
- JSA is applicable to work being performed.
- JSA has been reviewed by workers.
- JSA is signed off by workers

- JSA is being followed by the workers.

Figure 1 provides a flow chart for the JSA initiation, development and review process.

How should the JSA be applied in the field?

The JSA process is only effective if, **prior** to work starting, it is reviewed on a daily basis with all affected workers and followed throughout the day's activity. In addition, the JSA should always be considered a living document at the job site. **If conditions change, or the task must be modified, it is *required* that the JSA is modified in the field to reflect the changes.** Changes to the JSA should be documented in pen by the supervisor and communicated to the affected workers. The affected workers should write their initial and date on the modified JSA next to where they originally signed the JSA to document they are aware of the changes. It is expected that key items included in the audit will be exercised at all times during the course or the work.

If an injury occurs on a specific job, the JSA must be reviewed to determine the failure point in the process. If a hazard was not appropriately identified and/or a countermeasure listed on the JSA was insufficient, the JSA must be updated to address the failure point(s) prior to work restarts and all affected workers must initial and date the JSA. If an employee's failure to follow proper job procedures results in a "close call" or "near miss", discuss the situation with all employees who perform the job and remind them of proper procedures. Any time a JSA is revised, it is important to train all employees affected by the changes in the new job methods, procedures, or protective measures adopted and have them initial and date the updated JSA.

Appendix 2 identifies some key tasks and risks that should be considered when developing a JSA. It is by no means a complete list of all items that should be covered, but serves as a guide to reference when creating a JSA.

Summary

The JSA process outlined in this document is a PROACTIVE technique to protect workers on **Toyota** projects. It is a straightforward process designed to eliminate risk (where practicable) or reduce the risk to an acceptable level. The exception is for TEMA PE to reinforce the use of the JSA process for TEMA-led construction, equipment installation, and decommissioning projects.

If you have any questions on the JSA process, please contact TEMA PE Safety Engineering.