Table of Contents

1. PURPOSE **4**
2. DESCRIPTION OF PROJECT **4**
3. MANAGEMENT COMMITMNET TO HEALTH & SAFETY **5**
3.1 Zero Accident Philosophy 5
3.2 H&S Objectives 5
4. HEALTH AND SAFETY MANAGEMENT SYSTEM **7**
4.1 Control and Distribution 7
4.2 Legal Requirements 7
4.3 Health and Safety Management Approach 10
5. HEALTH AND SAFETY LEADERSHIP AND ACCOUNTABILITY 10
5.1 Safe Working Arrangement 11
5.2 Organization & Responsibilities 12
6. RISK MANAGEMENT 16
6.1. Hazard Identification & Risk Management 16
6.2. General 17
6.3. Risk Assessment Review & Revision 19
6.4. Risk Assessment Process 19
6.5. Risk Assessment 19
7. METHOD STATEMENT 31
8. IMPLEMENTATION AND OPERATION 67
8.1. H&S Awareness (Communication & Consultation with Employees) 67
8.2. H&S Education and Training 67
8.3. H&S Meeting & Communication 69
8.4. Reward and Recognition 72
8.5. Housekeeping 74
9. SAFE SYSTEM OF WORK & PROCEDURES 75
9.1. Safety Rules & Disciplinary Actions 76
9.2. Personal Protective Equipment 77
9.3. Hazardous Materials 78
9.4. Scaffolding Safety 82
9.5. Permit To Work Procedure 85
9.6. Welding Cutting and Other Hot Work 86
9.7. Power Lockout Procedure 88
9.8. Confined Space Entry Procedure 92
9.9. Power Industrial Equipment Safety Procedure 93
9.10. Barricades, Manhole Covers, Sign & Signals 93
9.11. Fire Protection 96
10. MANAGEMENT OF OCCUPATIONAL HEALTH 98
10.1. First Aid 99
10.2. First Aid Box 100
10.3. Substance Abuse 100
10.4. Provision for Healthcare 101

11. GENERAL REQUIREMENT ON THE PROJECT SAFETY 101
11.1. Health & Safety Performance 102
12. SUBCONTRACTOR MANAGEMENT 106
13. INSPECTION & WALK ABOUT 108
14. ACCIDENT REPORTING AND INVESTIGATION 110
14.1. Incident Reporting 110
13. H&S REVIEW 111

o REVISION RECORD

Rev. No.	Date	Prepared By (Name & Designation)	Signature	Checked By (Name & Designation)	Signature	Description and Page Numbers of Revisions
00	13/05/2024	Abdul Mujeeb – Health and Safety Manager		Mohammed Abu Dawood – CTO		

1. PURPOSE

The purpose of this Project H&S Plan is to provide guidance for the implementation of Health and Safety Management for all EACC operations and activities at the Project detailed below.

It is the firm commitment by all members of EACC to prevent accidents and conditions that lead to injuries, damage the environment or result in loss or damage to property.
Each employee will accept the responsibility and be held accountable for the safety performance of any activity under their direction.
EACC will follow the Project Health and Safety Management Plan for the EACC management of health and safety on site.

This Project Health and Safety Management Plan aims to promote and implement high standards of health, safety and environment at TMC Projects. The Plan will facilitate EACC in establishing, implementing and integrating control, monitoring and mitigation measures for the project and demonstrates EACC's commitment to the philosophy of 'Zero Accidents' and that all work- related accidents, incidents, injuries and illnesses are preventable.

2. DESCRIPTION OF PROJECT

Project Name: Light Revamp Station Project
Client: Tashelat Marketing Co.

- A thorough assessment of the existing fuel station will be conducted to identify areas requiring repair, renovation, or replacement. This assessment will cover fuel dispensers, canopy structures, signage, lighting, underground storage tanks, fuel lines, convenience store, restrooms, and other relevant facilities. Based on the assessment, a detailed plan will be developed, outlining the scope of work, design considerations, and project timeline.
- The necessary repairs and renovations will be carried out to address identified issues. This may include fixing fuel dispenser pumps, repairing or replacing damaged canopy structures, upgrading lighting systems for improved visibility, and ensuring compliance with safety regulations. The convenience store and restrooms may also undergo refurbishment to enhance the customer experience.

- The project will involve rebranding the fuel station to align with the desired brand image and identity. This may include updating the station's logo, signage, color scheme, and overall visual aesthetics to create a cohesive and recognizable brand presence. The design considerations will focus on creating a welcoming and visually appealing environment for customers.
- Ensuring compliance with local regulations, safety standards, and environmental requirements is of utmost importance. The project will include necessary inspections, permits, and adherence to safety protocols for fuel handling, storage, and dispensing. Any required upgrades or modifications to meet compliance standards will be implemented.
- The project may involve incorporating operational enhancements to streamline processes, improve efficiency, and enhance customer service. This could include upgrading fuel management systems, implementing new payment technologies, enhancing convenience store layouts, and optimizing traffic flow within the station premises.
- Throughout the project, effective communication and engagement with stakeholders will be maintained. This includes informing customers, neighboring businesses, and local authorities about any temporary closures, changes in operations, or potential disruptions. Stakeholder feedback and input may also be sought to ensure their satisfaction and address concerns.
- A dedicated project team will oversee the entire process, managing timelines, budgets, and resources. Regular monitoring, reporting, and coordination among subcontractors, suppliers, and stakeholders will ensure smooth execution and timely completion of the project.

3. MANAGEMENT COMMITMENT TO HEALTH AND SAFETY

3.1. Zero Accident Philosophy

The Senior Management Team at EACC committed to the philosophy that Health & Safety is of paramount importance in everything we do and across all our business activities.

Our aim is not only to meet minimum legal and contractual obligations, but to clearly demonstrate our positive attitude to safety and health.

EACC's Senior Management Team is committed to maintaining a safe and healthy work environment, it adopts the 'Zero Accident' principle at all its projects and will ensure this principle is promoted at all times to its employees and sub-contractors through its processes, practices, communications, and training.

EACC will make every effort to safeguard the safety, health of all its employees and all other persons who may be affected by its operations and activities at its project sites and facilities.

The Senior Management Team acknowledges that in order to achieve its H&S objectives it must ensure that all personnel receive the necessary training and information to guarantee that they are aware of their H&S obligations and to enable them to work in a safe and healthy manner.
The team will ensure that communication channels exist to promote an effective and proper understanding between employees and management teams on matters which relate to H&S. Employees who are allocated specific duties will be advised of their responsibilities towards H&S prior to commencement of work, with emphasis on the 'Zero Accident' philosophy.

The company will promote a culture of constant alertness to potential hazards and risks, and all unsafe practices, conditions and hazards will be identified and eliminated wherever practical.

The commercial activities of the project will at no time be allowed to prejudice the safety and health of any employee or other persons affected by project-related operation or activities.

Sub-contractors will be selected only if they can demonstrate a responsible attitude to site health and safety and it is the duty of every individual to cooperate with EACC's management team and to work in such a manner as to ensure the safety and health of themselves and others. All employees are required to familiarize themselves with the provision of this Policy. Failure to comply with the H&S Policy will result in disciplinary action.

"All Accidental Injuries can be Preventable"

3.2. Health and Safety Objectives

The objective of this Project Health & Safety is to establish systems and procedures that will achieve proactive management of health & safety impacts, hazards and risks that could arise during the implementation and construction phase of the project.

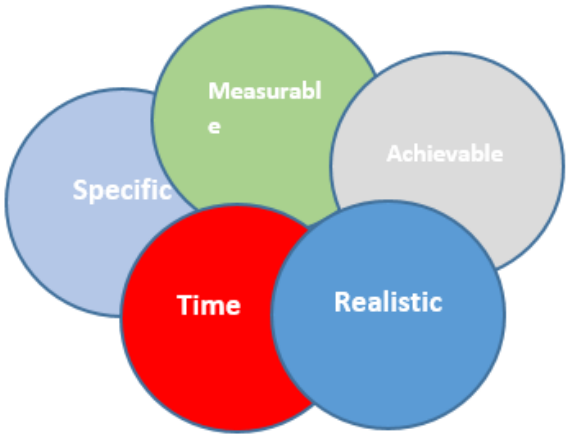
The key outputs of the planning process are the plans and objectives to be develop, maintained and improve the health and safety management system. The various plans across the different parts of **EACC** will be aligned to meet the organization's overall aims and to provide a coherent approach to effective risk control.
A prerequisite of effective health and safety plans and objectives is that they will be **SMART**, i.e.

Specific • **M**easurable • **A**chievable • **R**ealistic • **T**ime- bound
EACC shall involve in preventing non-conformance, committed to quality, environment, health and safety aspects and participate to a continuous improvement plan.

EACC is fully committed to a strong Health and Safety Program that protects its staff, its property, stakeholders, and the public from accidents. Every employee is entitled to work under the safest conditions possible and, as such, every reasonable effort shall be made in the interest of accident prevention, fire protection, and health, safety, and environmental preservation. EACC will comply TMC requirement to its employees as well as consultants and EACC working on The TMC Project to adhere with the company's standards of practice for health and safety.

The Health and Safety Program is developed to protect valued human resources and reduce costs associated with accidents, including employee injuries, property damages, and accidents involving the public and the environment.
As per TMC requirement EACC recognizes and respects that workers have rights to Refuse, the Right to Know, the Right to participate, and the Right to Work, without being subjected to discriminatory action.
Compliance to the provisions of this document does not in any way relieve the EACC from their responsibility to comply with all other TMC policies, procedures, specific contractual health and safety requirements, and the governing laws and regulations in the Kingdom of Saudi Arabia (KSA). In the event of any conflict or inconsistency between these regulations and that of any other legally binding documents pertaining

to the same provision, the most stringent requirement shall prevail. Furthermore, where reference has been made in this Project Health and Safety Management Plan to another document, the latest approved version of that document shall apply. The EACC and their sub-contractor EACC shall be contractually required to deliver, as far as reasonably practicable, the requirements set out in this document and other associated standards.



4. Health and Safety Management System:

To maintain the primary responsibilities of H&S during the construction, installation, testing, commissioning, project handover or completion. To encourages and ensure the active participation and involvement of all of the project team members and other parties.
This H&S Plan establishes the H&S System that describes the detailed procedural requirements, ensure the reliability and project compliance as required by client engineers or consultants.

4.1. Control and Distribution

This Project Health and Safety Management Plan will be treated as a live document and will be updated through continual evaluation of performance and identification of opportunities for improvements. Subsequent updates to this plan shall be controlled, monitored and maintained by TMC.

4.2. Legal Requirement

HEALTH & SAFETY LAW IN KSA

KSA Labor Law PART VIII: PROTECTION AGAINST OCCUPATIONAL HAZARDS, MAJOR INDUSTRIAL ACCIDENTS AND WORK INJURIES, AND HEALTH AND SOCIAL SERVICES
Chapter One Protection Against Occupational Hazards
Article (121)
An employer shall maintain the firm in a clean and hygienic condition. He shall provide lighting, supply potable and washing water and comply with other rules, measures and standards of occupational protection, health and safety in accordance with what is specified in the Minister's decision.
Article (122)

An employer shall take the necessary precautions to protect the workers against hazards, occupational diseases, the machinery in use, and shall ensure work safety and protection. He shall post in a prominent place in the firm the instructions related to work and worker's safety in Arabic and, when necessary, in any other language that the workers understand. The employer may not charge the workers or deduct from their wages any amounts for the provision of such protection.

Article (123)

An employer shall inform the worker, prior to engaging in the work, of the hazards of his job and shall require him to use the prescribed protective equipment. The employer shall supply the workers with the appropriate Personal gear and train them on their use.

Article (124)

A worker shall use and preserve the personal protective equipment designated for each process and shall carry out the instructions established to protect his health against injuries and diseases. He shall refrain from any

action or omission that may lead to failure to implement the instructions, misuse or impair the devices provided to protect the workplace as well as the health and safety of fellow workers.

Article (125)

An employer shall take necessary precautions for protection against fire and provide the technical means to combat it, including safety exits which shall be maintained in working condition at all times. He shall post in a prominent location in the workplace detailed instructions for fire prevention devices.

Article (126)

An employer shall be responsible for emergencies and accidents which may affect persons, other than his workers, who enter the workplaces by virtue of their official duties or with the approval of the employer or his agents, if such emergencies and accidents are due to negligence in taking the technical precautions required by the nature of his work, and he shall compensate them for damage and harm they may sustain in accordance with the general laws.

Chapter Two - Protection Against Major Industrial Accidents

Article (127)

The provisions of this Chapter shall apply to high risk firms.

Article (128)

(1) The term "high risk firm" shall mean the firm which produces, prepares, disposes of, handles, uses or stores on a permanent or temporary basis, one or more hazardous substances, or categories of these substances in

quantities that exceed allowable limits the exceeding of which results in listing the firm among the high risk firms.

(2) The term "hazardous substance" shall mean any material or a mixture of substances that constitutes a hazard on account of its chemical, physical or toxic properties either alone or in combination with other substances.

(3) The term "major accident" shall mean any sudden occurrence such as a major leak, fire or explosion in the course of an activity within the high-risk firm and which involves one or more hazardous substances posing a great immediate or potential danger to the workers, the public or the environment.

Article (129)

The Ministry shall establish controls to identify the high-risk firms according to the hazardous materials list, their categories or both.

Article (130)

The employers shall coordinate with the Ministry to determine the status of their firms on the basis of the controls referred to in Article (129) of this Law.

Article (131)

The Minister shall issue the regulations and decisions embodying the necessary arrangements at firm level for protection against major hazards, related duties of the employers, arrangements for protecting the public and the environmental accidents, minimize the risks of their occurrence and mitigate their impacts.

Chapter Three - Work Injuries

Article (132)

The provisions of this Chapter shall not apply to the firm's subject to the Occupational Hazards Branch of the Social Insurance Law.

Article (133)

If a worker sustains a work injury or an occupational disease, the employer shall be required to treat him and assume directly or indirectly all necessary expenses, including hospitalization, medical examinations and tests, radiology, prosthetic devices and transportation expenses to treatment centers.

Article (134)

An injury shall be deemed a work injury in accordance with the provisions of the Social Insurance Law. Occupational diseases shall also be considered work injuries and the date of the first medical diagnosis of the disease shall be treated tantamount to the date of injury.

Article (135)

Any relapse or complication arising from an injury shall be deemed an injury and shall be treated as such in terms of aid and treatment.

Article (136)

Occupational diseases shall be determined in accordance with the Occupational Diseases Schedule provided for in the Social Insurance Law. Degree of total or partial disability shall be determined according to the Disability Percentage Guide provided for in the said Law.

Article (137)

In the case of temporary disability arising from work injury, the injured party shall be entitled to financial aid equal to his full wage for thirty days, then 75% of the wage for the entire duration of his treatment. If one-year elapses or it is medically determined that the injured party's chances of recovery are improbable or that he is not physically fit to work, his injury shall be deemed total disability. The contract shall be terminated and the worker shall be compensated for the injury. The employer may not recover the payments made to the injured worker during that year.

Article (138)

If an injury results in a permanent total disability or the death of the injured person, the injured person or his eligible beneficiaries shall be entitled to a compensation equal to his wages for three years, with a minimum of fifty-four thousand riyals. If the injury results in a permanent partial disability, the injured person shall be entitled to a compensation equal to the percentage of the estimated disability in accordance with the approved disability percentage guide schedule multiplied by the amount of compensation for the permanent total disability.

Article (139)

An employer shall not be required to comply with the provisions of Articles (133), (137) and (138) of this Law if any of the following is established:

(1) If a worker deliberately injures himself.

(2) If an injury is caused by intentional misconduct on the part of the worker.

(3) If a worker refuses to be examined by a physician or refuses to accept treatment by the physician designated by the employer without a valid reason.

Article (140)

Liability of previous employers of a worker suffering from an occupational disease shall be determined in light of the medical report of the attending physician. Previous employers shall be required to pay the compensation Provided for in Article (138) of this Law, each in proportion to the period such worker has spent in his service, provided that the industries or occupations they engage in cause the disease the worker suffers from.

Article (141)
The procedures for reporting work injuries shall be determined pursuant to a decision by the Minister.
Chapter Four: Medical and Social Services
Article (144)
An employer shall provide his workers with preventive and therapeutic health care in accordance with the standards set forth by the Minister, taking into consideration whatever is provided for by the Cooperative Health Insurance Law.
Article (145)
An employer may, subject to the Minister's approval, set up a saving and thrift fund provided that the workers' contribution is optional. The provisions regulating the operations of such funds shall be made public.
Article (147)
An employer operating in remote locations, mines, quarries and oil exploration centers shall provide his workers with accommodation, camps and meals. The Minister shall determine, pursuant to a decision by him, the conditions and specifications of the accommodations and camps as well as the charges for the accommodations, the number of meals, quantities and kinds of food and related conditions, cost of meals to the worker and any other requirements necessary for the workers' health.
Article (148)
An employer shall provide means for transporting his workers from their place of residence or from a certain gathering point to the places of work and bring them back daily, if the places of work are not served by regular means of transportation at times compatible with the working hours.

4.3. Health and Safety Management Approach

- The EACC will comply with TMC's Health and Safety Policy, Health and Safety Management Manual, and any other relevant requirements as seen fit by TMC.

- The EACC will implement all applicable measures required by the laws and regulations of KSA and other additional measures, as necessary, to ensure workplace safety.

- The EACC will and their Sub-contractors shall implement effective high standards of health, safety and environment management onsite and in connection with their operations.

- The EACC will adopt an Incident and Injury Free philosophy, promoting the fact that all work-related incidents, injuries and illnesses are preventable. The philosophy includes:

  - Elimination of human error as cause of accidents, irrespective of rank or position in the organization
  - Immediate identification and elimination of unsafe work practices and conditions in the workplace
  - Overall awareness of individual responsibility and increased supervisory attention to detail
  - Team building approach where each worker contributes to the effort and each supervisor is fully aware of the capabilities and limitations of their team. A culture in which everyone accepts responsibility and accountability for their own and each coworker's health and safety.

The EACC will adopt the Incident and Injury Free philosophy in performing all works under their contract ensuring that the philosophy is communicated to, and fully understood by, all levels of their organization. The EACC will

incorporate this philosophy into their health and safety plans, methods and strategies to eliminate work-related incidents, injuries and illnesses.

The EACC will prepare a Health and Safety Policy specific to their project and aligned with TMC's Health and Safety Policy. The policy shall be applicable to the EACC overall activities.

5. Health and Safety Leadership and Accountability

- ❖ The EACC will be committed to leading health and safety through working in partnership with the project wide stakeholders, Consultants, Sub-EACC and applicable authorities.
- ❖ The EACC will demonstrate commitment to the health and safety of all stakeholders and workforce working on or associated with TMC Project and, at the same time, demonstrate leadership in achieving the following objectives:

- A safe and healthy workplace
- Employees are consulted on their working conditions
- Employees are heard and influence their working conditions

- ❖ To ensure that everyone returns home from work unharmed at the end of each working day The EACC will conduct forums and meetings involving TMC and project stakeholders to:

- Raise health and safety issues
- Contribute in the development of health and safety leadership culture
- Share good health and safety practice
- Be recognized for good health and safety performance

- ❖ The EACC senior management shall visibly demonstrate support, commitment, leadership and accountability on all health and safety issues by:

- identifying risks to health and safety, developing mitigation/control plans and communicating these to the workers
- Reinforcing safe work practices
- Prioritizing health and safety on all meeting agendas
- Allocating adequate resources for health and safety management and implementation
- Developing health and safety targets and objectives, and measuring and reviewing performance
- Fostering positive health and safety culture and behavior through own actions
- Treating health and safety as a priority equal in importance with productivity, quality, environmental and ethical standards.

Participating in health and safety meetings and safety walks in a weekly basis or at frequencies defined by TMC

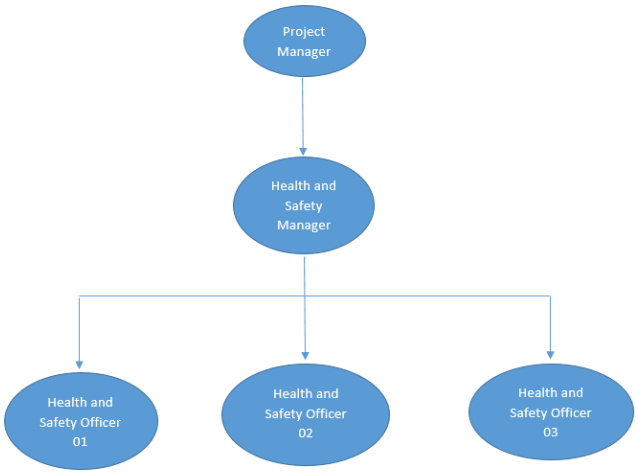
5.1 Safe Working Arrangement

- ❖ The EACC will have arrangements for empowering their staff to make sensible decisions about their own safety and the safety of others affected by what they do, and not put themselves or others at risk of harm.
- ❖ The EACC will have safe working arrangements that ensure:

- Health and safety concerns can be raised, and associated actions taken
- Employees can stop work immediately where they believe that they or others are at risk of harm
- No disciplinary action is taken against those who use the work safe arrangement to raise a genuine health and safety concern.
- The same process and site controls are cascaded to their Sub-contractor.
  - ❖ Where safety concerns are raised or a stop work process has been invoked, the EACC shall:

- Document the issue
- Ensure that an appropriate action is taken to resolve the issue
- Advise the concerned stakeholders on how the issue is likely to impact them.

5.2 Organization And Responsibilities



❖ Project Manager

The Project Manager, representing EACC has the ultimate responsibility for Health and Safety at the project site. His will also:

- Ensure that the H&S Policy is implemented and promoted
- Assign specific responsibilities to individuals within the organization for its implementation.
- Ensure that sufficient resources allocated to meet the requirements of the Policy.
- Participate and approve the audit and Inspection Program.
- Ensure that the applicable laws, regulations, ordinances, statutes, rules, codes and approvals governing H&S requirements complied.
- Regularly review the Policies for their effectiveness.
- Actively participate in H&S inspections and promotions.
- Make sure that the related H&S statements are available, aware and adhered by the project team.
- Establish the project H&S objectives in coordination and approval of the Corp. Management and ensure all resources work towards achieving them.
- Maintain the integrity of the H&S Management System when changes made to the system for the project.

- Ensure correct implementation of the project H&S Management System through the planning and performance of H&S audits and monitoring the progress of specific work processes.
- Ensure the implementation of any management review meeting action points.
- Determine a mechanism of how to ensure that project personnel understand the H&S requirements.
- Update the Corporate management on the progress of the project and needed H&S improvements.
- Furnish the H&S summary reports to projects' management and client as and when required.
- Chair the project management meeting and implement actions proposed.
- Meet with client on agreed intervals to understand concerns if required raise them to the management for awareness and needed support if required.
- Meet with client on frequent basis to understand his requirements and concerns.

❖ **Safety Engineer**

The safety engineer, reporting to the Project manager and H&S Manager is responsible for the following:

- Ensure that site conditions are safe for the personnel and the risks have been reduced to as Low as reasonably practicable.
- Ensure that all risks associated with the construction works are identified and properly Communicated to relevant site personnel.
- Develop detailed planning of site activities to ensure proper coordination of interfaces in Order to minimize and control potential hazards.
- Ensure that adequate welfare arrangements are in place for site personnel including Sanitation, office, first aid etc.
- Participate in safety audit and inspection programs at site.
- Ensure that all workers are properly informed and consulted on safety matters.
- Ensure the safety of the workforce made aware of the requirements of the safety Management system and the safety program through training and meetings.

❖ **Forman**

- Conduct regular site inspections to identify potential hazards and unsafe practices.
- Ensure that all safety protocols and regulations are being followed.
- Monitor work activities to ensure compliance with TMC safety guidelines.
- Be familiar with emergency response procedures and ensure that workers are trained on evacuation plans, first aid, and emergency contacts.
- Ensure that workers wear the required PPE and that it is in good condition.
- Monitor and enforce the use of safety gear.
- Intervene in unsafe practices and take corrective actions promptly.

❖ **Equipment Operator**

- All drivers are required to have a valid driving license and obey the Traffic regulations, and EACC / TMC's regulations.
- Responsible for adhering to the requirements of this plan, EACC/TMC traffic regulations, Project road safety policy and ensure all such necessary actions are in place for the safety of the vehicle/equipment, materials, passengers and third parties.
- Vehicle should have on board all items of "Survival checklist" and kit.

- Drivers should check their vehicle or equipment and sign the checklist prior to start. Notify the immediately for supervision of any difficulties or problems encountered during the daily inspection and enrooted.
- Never give a lift to unauthorized persons.
- Check the load constantly and properly secured in safe manner as per guideline.
- All permanent drivers/operators on the project shall be issued gate pass after safety induction.
- Visitors/Temporary drivers/operators will be issued with visitor's passes, and logged in and out. Applications for visitors' passes are to be made via TMC management requirements in advance.

❖ **Personnel Qualifications**

The EACC will appoint Health and Safety Manager for the Light Revamp Projects. The appointed Health and Safety Manager shall meet the following qualifications as a minimum:

❖ **Health and Safety Manager Qualification:**

- Shall hold a professional health and safety Bachelors or its equivalent Engineering Degree to an international recognized standard, with a minimum of 5-10 years of construction health and safety experience on projects of similar size and scope.
- Be certified by a body of internationally recognized safety professionals as a minimum.
- ISO 45001 Lead Auditor

❖ **Health and Safety Manager**

- Understand TMC's Health and Safety Policy and ensure that it is brought to the attention of their employees.
- Have adequate knowledge of the requirements of applicable regulations, legislation and codes of practice, and confirm that all statutory registers and records are maintained in the project.
- Ensure that the necessary risk assessments have been carried out and recorded.
- Ensure that adequate arrangements on fire precautions and emergency procedures are planned and implemented.
- Support and help deliver the Incident and Injury Free Philosophy
- Report incidents, injuries and near-misses using the protocols and systems
- Prohibit any work to start unless there is a safe system of work and approved Risk Assessment and Method Statement (RAMS)in place
- Ensure that an Emergency Management Plan is developed, approved, communicated and properly implemented on site.
- Cooperate with Client in all matters relating to health, safety and the environment Review and approve all issues related to health, safety and the environment.
- Ensure that abuse of alcohol and/or any drug (prescribed or otherwise) is not tolerated on site.
- Ensure that appropriate personal protective clothing and equipment is provided to all staff who require it.
- Advise employee responsibilities under the current legislation and polices, manuals, and procedures related to health and safety.

- Make regular visits to site and report performance and action plans as required.
- Ensure H&S training plan and programs in place to improve H&S awareness
- Suspend an operation or specific section of work where there is an imminent risk of personal injury, ill-health or affecting the environment.
- Monitor health and safety performance to determine compliance with the relevant policies and processes.
- Advise the Management team on areas of noncompliance and agree on actions and timescales.
- Promote a safety culture of excellence across the Project.
- Appointing a Deputy Health and Safety Manager who will perform the duties of the Health and Safety Manager in the event of the Manager absence.

❖ **Health and Safety Officer**

- Familiarize themselves with the provisions of the H&S Policy, and any specific procedures relating to health and safety at their place of work
- Report any accident, incident or dangerous occurrence involving personnel or environment & equipment to their manager.
- Cooperate and assist in the investigation of accidents or incidents
- Identify employee's safety and health training requirements
- Carry out regular assessment of their project of responsibilities to identify safety and health hazards.
- Raise-up observations about safety violations, Near Miss, Misbehaviors, Shortage, quality or non-abidance to PPEs…etc.
- Ensure that notices and posters displayed at strategic locations.
- Ensure that Safety is a line responsibility and that everyone on the job-site understands the safety concept and show commitment and encourage workers to participate
- Arrange for and attend continuous training to cultivate a good and efficient safety culture for all workers
- Be a good role model to each and every worker's in regards to safety policy
- Ensure that equipment issued are correctly used and properly maintained so that it presents no threat to health and safety.
- Ensure equipment and tools well calibrated as per the manufacturer's recommendations.

❖ **Employees**

It is the responsibility of all employees to take reasonable care of the safety and health of themselves and of other persons who may be affected by their acts or omission at work. It is the responsibility of all employees to have regard for the environment in which they live and work. All employees are therefore required to:

- Understand the relevant H&S Policies and Procedures and abide with them.
- Abide with H&S roles and Guidelines to avoid the possibility of accident.

- Act and work in a safe manner to avoid harm to self or others.
- Report any Hazard, unsafe working conditions Near Miss, Misbehavior, accidents and incidents to their immediate supervisor and H&S In-charge immediate.
- Cooperate with management at all times on matters relating to health and safety.
- Wear protective clothing/equipment whenever instructed or when circumstances required its use
- Maintain a good standard of housekeeping in the areas in which they work.
- Carry out their duties in such a manner as to ensure compliance with all legislation relating to individual job responsibilities, Policies and supporting procedures
- Comply with all Safety requirements when working on the job-site.

❖ **Temporary Works Coordinator**

The EACC will appoint a Temporary Works Coordinator to facilitate and coordinate all matters related to temporary works. The Temporary Works Coordinator Shall Prepare company procedures for the design, checking, erection, inspection, use and dismantling of temporary works.

❖ **Site Supervisor**

- Ensuring the safety of workers and maintaining a secure work environment. This involves implementing and enforcing safety protocols, conducting regular inspections, promptly addressing any safety concerns or violations.
- Leading and managing a team of workers and subcontractors, assigning tasks, providing clear instructions, and overseeing their work. Effective communication, conflict resolution, and motivation are essential for fostering a productive and cohesive team.
- Coordinating and facilitating effective communication among all parties. This includes relaying information, resolving conflicts, managing expectations, and ensuring that everyone is working towards a common goal.

6 RISK MANAGEMENT

6.1 Hazard Identification & Risk Assessment

The process for hazard identification and risk assessment will be utilized to determine areas where the project site is classified as hazardous. Once the potential for accident has been identified and assessed, the appropriate control measures will be implemented.

Work place hazards will be identified through:

- Detailed study prior to the activity
- Audit and inspections
- Specific review (e.g. noise, air H&S, equipment guarding, etc.)
- Review of incident/accidents reports
- Issues identified and raised by personnel
- Government related regulations and legislations

All identified potential hazards, unsafe conditions or unsafe acts must be reported promptly to the H&S Manager and safety officer who will ensure that the appropriate actions are taken for their elimination or mitigation. Where necessary the advice of the H&S Manager can be obtained to ensure that the appropriate measures for health and safety of personnel are implemented. Regular inspections are carried

out to identify potential hazards, unsafe conditions or unsafe acts and appropriate remedial actions are taken.

Risk assessment will be carried out prior to any changes and/or modifications. Assessment will be carried out on all identified hazards. This will consist of assessing the probable frequency and severity of each hazard. Hazard control measures will be implemented to ensure that the risk is eliminated or reduced to an acceptable level.

6.2 General

All Job hazards and risks must be properly evaluated. The following information includes procedures on how hazards and risks are to be assessed. These guidelines also include information on follow-up procedures for hazard and risk assessment register.

6.2.1 Risk Classification

This risk assessment tool is designed to address hazardous conditions or situations that have the potential to lead to injuries, damage to equipment. Properly used, this tool will assist in eliminating potential hazards.

Note: Personnel or any employees observing a situation they believe to be hazardous have the authority and responsibility to stop work and to bring the situation to their supervisor's attention. The Hazard and Risk Assessment Register is used to document unsafe conditions or situations that under slightly different circumstances could have resulted in injury to personnel or damage to equipment or harm to the environment.

The Project Manager in conjunction with the H&S Department is responsible for the implementation of this process and will review the Job Hazard and Risk Assessment Register and ensure that there are follow- up actions to prevent recurrence.

6.2.2 Risk Assessment Matrix

The Risk Assessment Matrix is a tool to assess the potential outcome of a hazard in a standardized qualitative manner. The vertical axis displays the potential consequences of an incident and the horizontal axis displays the probability (chance) of this consequence to happen. The combination of consequence and probability defines the risk classification.

Potential consequences are divided in levels running from "0" to "5" indicating increasing severity. A consequence should be credible – something that could have developed upon the release of the hazard.

In the matrix, the potential consequences are used rather than the actual ones. Probability is also divided into five levels estimated on the basis of evidence and experience. *(See appendix-B for Risk Assessment Form & Risk Assessment Rating & Matrix)*

6.2.3 Hazard and Risk Assessment Register

This register is a combination of Hazard Analysis and Risk Assessment whereby it identifies the basic job steps, tools or equipment to be used, potential hazards and risks, personnel at risk, action plans and mitigating systems and the risk assessment rating. During the assessment, representative from the H&S department, field supervisor, line supervision and operational employees are involved.

This document (Hazard & Risk Assessment Register) is completed whenever a formal hazard operability study is completed in conjunction with simultaneous operations, new plant construction or existing plant.

6.2.4 Preventive and Protective Measures

- Avoiding risks.
- Evaluating the risks, which is cannot be avoided.
- Combating the risks at source.
- Adapting the work to the individual, especially as regards:

    a. The design of workplaces
    b. The choice of work equipment
    c. The choice of working methods, with a view, in particular, to alleviating monotonous work.
    d. Working at a predetermined rate to reduce the effects on health.

- Adapting to technical progress.
- Replacing the dangerous by the non-dangerous or less dangerous.
- Developing a coherent overall prevention policy, which covers:

    a. Technology
    b. Organization of work
    c. Working conditions
    d. Social relationships
    e. The influence of factors relating to the working environment.
- Giving collective protective measures priority over individual protective measures.
- Giving appropriate instructions to employees.

6.2.5 Effective Risk Assessment

- Identify the significant risks arising out of work.

    a. Focusing on those risks that are liable to arise because of the work activity

b. Trivial risks may usually be ignored as can risks arising from routine activities associated with life in general, unless the work activity compounds those risks, or there is evidence of significant relevance to the particular work activity.

- Enable the employer to identify and prioritize the measures that need to be taken to comply with safety requirements.
- Ensure it is appropriate to the nature of the work, and where appropriate, it remains valid for a reasonable period.
- This will enable the risk assessment and the significant findings to be used positively by the management team to for example establish procedures and specific method statements.
- For relatively standard work operations, the risk assessment should be such that it can be used as a basic "Generic" assessment for risk assessments of general or repetitive tasks, such as grinding of all kinds of metals, and can in turn be incorporated into detailed method statements. They can also be used every time someone is exposed to identical hazards in comparable circumstances and locations.

6.3 Risk Assessment Review & Revision

Risk assessments must be reviewed and if necessary, modified. A risk assessment must not be a once-and for-all activity; it is a continuing activity, as the nature of work changes and the appreciation of hazards and risks develop.

Monitoring may reveal near misses, defects, that may no longer be valid, or that can be improved. Adverse events may take place even if a suitable and sufficient risk assessment has been made and appropriate preventive and protective measures taken.

It is prudent to plan to review risk assessments at regular intervals. The time between reviews should be dependent on the nature of the risks and the degree of change likely in the work activity. Such reviews should form part of standard procedures.

6.4 Risk Assessment Process

Five (5) Steps to Risk Assessment

1. Look for and identify the hazards.
2. Decide who might be harmed and in what circumstances.
3. Evaluate the risks arising from the hazards and decide whether the existing precautions are adequate or more should be done.
4. Record the significant findings
5. Review the assessment if there is a significant change or evidence that the original assessment was inadequate

6.5 Risk Assessments

Specific Risk Assessment should be produced for all potential hazards at TMC Projects.

Risk Assessment Method Statement (RAMS)

Client	TMC	**Date**	
Site Address / Site Location			
Permit / Work Order No.	n/a	**Department**	**EACC – H&S**

TASK DESCRIPTION:

EMERGENCY ACTION PLAN		
Address		
Emergency Contact Numbers	**Local Authority**	**Internal Emergency Contact No.**
	911	
Nearest Assembly Area	To be identified	
Action Plan	**Please refer to the emergency arrangement below**	

STOP WORK CONDITION			
☐ **Adjacent work hazards**	☐ **Chemical spills or releases**	☐ **Excessive noise**	☐ **Fires and explosions**
☐ **Change in conditions**	☐ **Fire/Toxic Gas Evacuation alarm**	☐ **Extreme weather**	☐ **Unusual odors**

Supervisor and worker comments / change in conditions:

RISK ASSESSMENT MATRIX

RISK LEVEL DETERMINATION 5x5 MATRIX		OUTCOME (SEVERITY)				
		Critical (5)	Very Serious (4)	Serious (3)	Marginal (2)	Negligible (1)
PROBABILITY (LIKELIHOOD)	Frequent (5)	25 Operation not permissible	20 Operation not permissible	15 High priority	10 Review at appropriate time	5 Risk acceptable
	Moderate (4)	20 Operation not permissible	16 Operation not permissible	12 High priority	8 Review at appropriate time	4 Risk acceptable
	Occasional (3)	15 High priority	12 High priority	9 Review at appropriate time	6 Risk acceptable	3 Risk acceptable
	Remote (2)	10 Review at appropriate time	8 Review at appropriate time	6 Risk acceptable	4 Risk acceptable	2 Risk acceptable
	Unlikely (1)	5 Risk acceptable	4 Risk acceptable	3 Risk acceptable	2 Risk acceptable	1 Risk acceptable

RISK = PROBABILITY x OUTCOME

Probability means the likelihood of something going wrong. Outcome means the result when something goes wrong. The simple Matrix below allows calculation of risk even for non-skilled operatives.

METHOD STATEMENT

A Method Statement is an agreement between the workforces, Service Provider and the Person or Organization requesting the work and that the work being undertaken is being managed and any risk is mitigated to an acceptable level. The method of work must be clearly communicated and understood by all parties involved. Operatives undertaking the works the works supervisor and line managers must sign the document as agreement with the method of works.

It must be noted that more than one method statement may be required for any sequence of works. Method statements and risk assessments go hand in hand, as the method of work is dictated by the risks identified, and the risk is identified by the proposed method of work.

When conducting risk assessments in the first instance all built in safety experience must be ignored. This will allow true identity of the risks associated with what work is proposed. Then methods of work can be developed to reduce risk to an acceptable level.

RISK ASSESSMENT

Task	HAZARD	Risk	Risk Evaluation				Control Measures	Risk Evaluation After Controls				Action by.
			RISK			Significant		Risk			Significant	
			S	L	R. R			S	L	R.R		
• **Preparation/arrangements of tools, equipment and materials at workplace**	• Manual handling • Sharp Edges • Vehicle movement • Obstacles in access	• Injury due to lifting heavy loads • Cut / Amputation • Hit by the moving vehicle. • Slips, trips and falls	**3**	**4**	**12**	**Medium priority**	• All personnel trained in manual handling techniques • Ensure sharp edges are well protected and covered • Work area to be cleared and removal of obstruction from the work place. • Follow all site traffic and deployment of flagman during the vehicle movement	**3**	**2**	6	**Risk acceptable**	EACC Team
• **Movement of staff ,material and Machinery at site**	• Transportation hazards • Unfamiliar with the site locations, Lack of communication. • Human error • Weather condition	• People coming into contact with the Moving Vehicle. • Unauthorized persons enter into workplace and get injured • Breach of site safety rules • Transpiration of Vehicle and	**3**	**4**	**12**	**Medium priority**	• Follow all site traffic or vehicle rules, as far as possible do not park on busy roads. • Induction training to be provided to crew before entering into Island. • Site ERP and Evacuation procedure to be briefed to Staff.	**3**	**2**	6	**Risk acceptable**	EACC Team

		Material during extreme • weather condition					• Staff must be given safety briefing with site safety rules inside the project. • Conducting a BBS (Behavioral Based Safety) Training to staff. • Check for the approaching change of weather.					
• **Use of Boom Lifts for task at height.**	• Falls from the basket (man-lift / boom lift) during operation • Falls from the work platform/basket • Objects falling from platform/basket • Collapse of the equipment • Overturn(toppling) of the equipment • Unintended movement of the equipment • Contact with live overheads • Overloading the equipment	• Fall from height could results to fatality and damage to property • Fractures • Multiple broken bones • Damaged to property • Slips, trips and falls	**4**	**4**	**16**	**High priority**	• Equipment used and operated by competent and authorized person. • When using equipment, it will be inspected and maintained checklist by the operator / inspector. • Adhere to Safe Working Load (SWL). Do not overload with materials or personnel. • Toolbox talks will be given by supervisor or competent person. • The area will be cordoned off to prevent unauthorized access by using suitable signs and barriers.	**4**	**1**	4	**Risk acceptable**	EACC Team

	• Over reaching while working at height. • Incorrect use of the equipment while ascending and descending						• Equipment must not be overloaded • Wheels should be locked when equipment is in used • Equipment must be sited on firm, level ground • Care should be taken to avoid overheads when the equipment is being moved. • Outriggers should be used where necessary to ensure stability • Good Housekeeping, Good storage practice and Proper tool handling will be followed to eliminate the risk due to falling of tools/objects. • Use of work specific PPE's.					
• **Use of ladder**	• Falls from height • Falling off the ladders • The ladder toppling side ways	• Bones Broken / fractured • Injuries and cuts, abrasions • Persons being hit by falling objects	**3**	**4**	**12**	**Medium priority**	• Site on a solid, flat base so that the feet do not sin in to the ground • Angle of the ladder should be ideally be 75 degree to the horizontal or at a ratio of 1:4	**3**	**2**	6	**Risk acceptable**	EACC Team

	• The ladder base slip out from the wall • Objects falling from height • Contact overhead wires and cables	• Persons falling from the ladder					distance away from the wall • Top of the ladder must rest against a solid support secured at the at the top • Top of the ladder should extend far enough above the level of the working position • Only a person should climb on the ladder at any time • Nothing should be carried in the hands while climbing, so that both hands are free to maintain three point contacts • Carry out daily inspection of the ladder before use. • Avoid overreaching • Avoid side on working						

• **Use of Power Tools and Hand tools.**	• Dust • Flying objects • Wet surface/floor • Use of defective or wrong tools • Incorrect use of hand tools • Slipping and breakage of hand tools • Human error • Trip and fall hazards • Heat stress/Heat stroke • Obstacles in access • Sharp Object • Exposure of rotating and moving parts • Electrical Hazard • Fire Hazard	• Eye injuries • Hand Injuries, cuts and abrasions • Muscle cramps/headache /fainting • Slip, trips and falls • Property damage • Fractures • Electric Shock • Explosion / Burn Injury	**3**	**4**	**12**	**Medium priority**	• All persons will be trained in the correct use of hand tools • Working procedures must be planned to avoid over stretching and reaching • Always use the right tools for the job and ensure those tools are in good condition • Avoid using tools with extreme force • When applying force (push or pull) be prepared for an unexpected slip or release • Faulty tools, equipment will not be used, and will be removed from workplace • Provide cool beverages • Provide frequent breaks and job rotation • Wear appropriate PPE (Hand gloves, Dust mask, Safety shoe)	**3**	**2**	6	**Risk acceptable**	EACC Team
• **Use of Chemicals and Flammable liquids for execution**	• Chemical splash • Chemical fumes	• Chemical burns,	**3**	**4**	**12**	**Medium priority**	• Ensure availability and understanding of SDS	**3**	**2**	6	**Risk acceptable**	EACC Team

	• Prolonged exposure to chemicals • Fire • Chemical / liquid spillage	• Chronic or acute respiratory problems, • Poisoning, • Eye injury (may cause temporary blindness) • Slip, trip and falls • Explosion					• Use of appropriate personal protective equipment such as safety google. Full face mask, protective clothing, safety shoes, safety gloves, etc. • Employees to perform task must be trained and competent to execute task. • Provide Toolbox talk appropriate for the task being carried out before task execution • Provide frequent break and job rotation if the task needs to be continuously perform. • Chemical Labeling must be done • Storage of chemical and liquid at designated location • Use of spill kit • Placement of fire extinguisher near the chemical storage area • Use of spill tray / Dip tray while storing of chemical					

• **Excavation of trenches**	• Vehicle Movement • Incompetent Operator • Obstacle in access • Vehicle collapse • Overturn(toppling) of the equipment • Underground Utilities	• Worker/ visitors • Vehicle hit to property causes Property damage • Electrocution due to striking with unidentified power line	**4**	**4**	**16**	**High priority**	• Applicable PTW system to be followed. • TBT to be conducted prior to start • Make sure relevant permit to work in work place and receiver must be in workplace • "Type of soil" Test before excavation. • Barricade the area of excavation and ensure the segregation from all other activities prior to start. • Provide Proper access and Egress to the Excavation in the form of approved ladders/steps at selected points. • Provide flag man along with excavator machine to isolate the other vehicles and activities. • Dewatering process by removing groundwater or surface water from the workplace. • Increase the workers awareness concerning	**4**	**1**	4	**Risk acceptable**	EACC Team

							the depth of water by means of training or tool box talk. • Continuous Monitoring. • Displaying the signage's					
• **Work at height**	• Scaffolding collapse. • Fall from height. • Material fall down	• Falling of worker • Material damage • Injury to worker working at height. • Injury to worker working at ground.	**2**	**4**	**8**	**Medium Priority**	• Ensure sufficient footing. • Ensure correct erection sequence. • Ensure the horizontality and verticality of elements. • Qualified scaffolders should erect. • Safety harness belt should be considered for all workers working at height. • Ensure all workers working at height are properly trained. • Isolate erecting area by proper barricading • Brace correctly elements to be installed. • Ensure a copy of MSDS for hazardous substances, in a readily understandable form, shall kept at the job site	**1**	**4**	4	**Risk acceptable**	

							• at all times for workers reference and use. • The safe work methods and hazards associated with task shall be covered in daily TBT					
• **Use of material**	• Using flammable material.	• Ignition and spread of fire. • Hazardous vapor or gases that can harm workers. • Explosion if exposed to heat or spark. • Poor handling and disposal of flammable material can lead to environmental contamination.	**2**	**3**	**6**	**Medium Priority**	• Fire extinguishers should be available while using flammable material. • Carefully read and follow the instructions exactly. • Wear proper PPEs • Proper handling and storage. • Containment and adherence to environmental regulations.	**1**	**3**	**3**	**Risk acceptable**	
• **Work completion /closure**	• Poor housekeeping • Paint waste/rubbish /debris • Environmental Hazard	• Slips, Trips & falls • Hygiene issues • Poor waste disposal	**3**	**4**	**12**	**Medium priority**	• Remove all debris from the worksite and dispose as per waste disposal management plan. • Remove all barricades, signage's, tools and equipment from worksite • General housekeeping must be maintained and workplace safe	**3**	**2**	6	**Risk acceptable**	EACC Team

							• Ensure the area for its safe and clear of equipment and debris					

7. METTHOD STATEMENT

1.0 PURPOSE

The purpose of this method statement is to set guidelines and methodology to be followed for the project "Light Revamp & Renovation for Fuel Services Station.

2.0 SCOPE

2.1 This procedure is applicable to all activities for the project "Light Revamp & Renovation for Fuel Services Station .

All works shall be conducted in conformance with relevant project drawings / specifications, and good industry practices.

3.0 REFERENCE DOCUMENTS

3.1 Tender Specification

3.2 Tender Drawings

3.3 Tender Construction Schedule

4.0 RESPONSIBILITY

4.1 **Project Manager (Contractor)** shall be responsible for overall project execution, he will coordinate with Employer / Engineer and Contractor head office, progress monitoring, attending review meeting, resource management, and overall he will be responsible for timely completion of project in accordance to all contractual requirements. He should ensure:

- Work progress is carried out according to the planned program and all the equipment required to execute the works are available as per the project planning and are in good condition.
- Specific attention is paid to all safety measures and quality control in coordination with EACC Safety Engineer and QC Engineer and in line with HSE plan and Quality plan.

Project Engineer (Contractor) shall be responsible for co-ordination, monitoring construction activities of contractor and Subcontractors to ensure that the work executed at site as per the specification and IFC (Issued For Construction) drawings. Allocation of manpower and machineries in consultation with the Contractor Project manager. He should ensure:

- Provision of all necessary information and distribution of responsibilities to his construction team.
- The work progress is monitored in accordance with the required program and reports the same to the Project Manager
- Coordination with the EACC Safety Engineer to ensure that the works are carried out in a safe working atmosphere.
- Coordination with the EACC QC Engineer for tests to be carried out and initiate for the inspection for the finished works.
- The implementation of any request that might be raised by the Consultant.
- Efficient daily progress has been obtained from all the equipment and manpower engaged in the work and check the same against the daily report received from the Foremen.
- The passage of all the revised information to the Foremen and ensure that it's being carried out properly.
- Coordination with the surveyor and plan the survey works in advance as per the work sequence.
-

4.3 **Surveyor (Contractor)** shall be responsible for checking & setting out alignments, levels of the foundations and all related structures. Coordination with the Engineer/municipal Authority during site inspections, etc.,

4.4 **Safety Engineer (Contractor)** shall be responsible for monitoring and implementation of HSE requirements of the Project, daily checking of work permit, supervising the workers are using necessary PPE (Personal Protective Equipment). Supervising that each worker is working in safe manner by following applicable safety rules and regulations.

4.5 **QA/QC Engineer (Contractor)** shall be responsible for carrying out the works as per specifications and related quality procedures. Inspection of the completed works and requesting for the Consultant's approval. Maintain all completed inspection and test records for any further reference. He shall responsible also for raising and closing of any NCR.

4.6 **Foreman (Contractor)** shall ensure the proper distribution of all the available resources in coordination with Project Engineer. He shall monitor for work productivity are achieved and coordinated as per planned and further planning with Project Engineer. He shall monitor with any type of unforeseen incident or requirement and report to Project Engineer.

5.0 MOBILIZATION AND SITE SET UP WORKS

Preparation:

- Ensure mobilization NOC, permissions and consents are obtained.
- Ensure mobilization plan and layout are obtained and approved prior to start the work.
- Ensure approval status of this method statement is “A” or “B
- Prepare any necessary tool box talks.
- Discuss the method statement and related responsibilities with the site team.
- Make sure all related materials are procured and expected deliveries are appropriate.
- Construction staff shall be gradually mobilized from other areas of operation.
- Ensure the availability of the needed machinery to be on site.
- Ensure the availability of valid third party certificate of equipment.

5.2 Lifting and Installation of the Project’s signboard with footings:

- Transport the signboard with footings to the site carefully prior to frame installation under strict.
- Crane to be stabilized as close as possible to the load for safe lifting.
- A specific lifting plan should be prepared and submitted for consultant's/client's approval on site for the lifting operations and it should be prepared by a certified competent person.
- The installation of the items will be witnessed by site in charge for the correct orientation/alignment and the lifting operations shall be performed in supervision with a competent lifting supervisor and rigger.
- All crane lifts must be in accordance with EACC lifting plan and third party certificate should be in place & valid.

5.3 Electrification:

- Electrical installation work will be covered by standard method as appropriate.
- Laying of cables sequenced in such a way that it will not interfere with other utilities at the site.
- External cables that crossing roads around existing buildings shall be laid underground through sleeves, and prior to start excavation for such sleeves, permit to dig should be obtained from consultant/client to dig trial pit/pits as suitable and once these pits are checked and approved by all parties then excavation for sleeves can commence carefully and manually by hand using hand shovels.

5.4 Plumbing and Sewerage

- To provide elevated water tanks for potable water connection and fill the water in it by means of water tanker with pump as required.
- To do the necessary plumbing works for the connections to porta cabins and other utilities.
- All the toilets to be connected to an underground/buried fiber tank with small manholes as necessary.

6.0 EXCAVATION AND LINING OUT WORKS

6.1 Preparation:

- Ensure approval status of this method statement is “A” or “B.
- Ensure all permits, NOC and consents are obtained and recorded at site.
- Ensure that Bench March is provided prior to start the work based on the approved demarcation certificate and coordinated with Client / Consultant for approval.
- Demarcation points and demarcation certificate shall be obtained from the competent municipal authorities and the same shall be checked along with the Consultant with respect to approved drawings layout.
- Ensure that soil test is done and test results are approved by consultant.

6.2 Pre-Construction (Site preparation and survey works):

- The allocated area shall be cleared and free from any pre-render hazard to the approval of the Consultant. Access to the work areas shall be kept unobstructed and clear at all times.
- Complete survey of the plot shall be carried out with respect to the level of the plot and the nearest road level and the benchmark shall be ascertained and fixed (the Consultant to check and verify).
- Ensure and conduct Trial pits shall be made manually across and around the project area to check for any cables or pipes running inside the plot (the Consultant and Client shall be notified of any plumbing or electrical encroachment into the plot).
- Temporary pegs shall be placed for building and excavation layout. This shall be checked and approved by the Consultant prior to excavation.
- Excavation depth shall be ascertained by referring to soil report and approved drawings and to the approval of the Consultant prior

to starting of excavation.

- Ensure all materials, equipment, machineries and resources are available at site.

6.3 Excavation:

- From the date of commencement and approval of all parties, within (24 to 48 hrs), the mobilization all needed equipment's and machineries will be completed.
- Warning signs and adequate barricades shall be provided around the construction area. Safety barriers shall be erected around all deep excavations.
- During excavation for foundations / sub-structures, the bottom layer of excavation of Minimum (200 mm) in thickness shall be left undisturbed and subsequently removed manually only when the concrete blinding is about to be placed in order to avoid softening (or) deterioration of the structures of the excavations.
- Excavation shall be carried as shown in the approved drawings.
- Ensure all the formation levels are established and recorded in accordance with approved drawings.
- Formation levels to be checked and jointly inspected by the Contractor and consultant prior to start any activity.
- After excavation is complete, Surveyor will line out of the building pile and foundations shall be made accurately fixing firmly all the grid lines in the required angles as shown in the approved drawings and checked by the Consultant.
- Excavated materials will be stock pile to the allocated area and as per the approvals of Consultant and client.

7.0 BACKFILLING AND COMPACTION WORKS

7.1 Preparation:

- Ensure approval status of this method statement is "A" or "B.
- Ensure all permits, NOC and consents are obtained and recorded at site.
- Ensure that Bench March is provided prior to start the work based on the approved demarcation certificate and coordinated with Client / Consultant for approval.
- Demarcation points and demarcation certificate shall be obtained from the competent municipal authorities and the same shall be checked along with the Consultant with respect to approved drawings layout.
- Ensure that soil test is done and test results are approved by consultant.

7.2 Pre-Construction:

- The work area to be backfilled shall be cleared of all debris to the approval of the consultant.
- The excavated surface shall be watered, compacted and tested to check whether it attains the required compaction. Laboratory tests shall be done as required by the Engineer. If the results show inadequate compaction, that area shall be re-compacted and retested.
- Backfilling (free of organic vegetation) shall be done with approved materials and in layers as per Client / consultant approval. The material shall be non- plastic and free from organic materials.
- Ensure the construction program is established.
- Ensure all materials, equipment, machineries and resources are available at site.

7.3 Construction:

- Warning signs and adequate barricades shall be provided for all trenches, wells, pits and shafts. Safety barriers shall be erected around all deep excavations where access roads are passing by them to prevent vehicles and equipments from falling into them.
- Fill the excavated area, to reach bottom of P.C.C blinding level, with graded granular material of (1" maximum size) in layers not to exceed (250 mm) or as per soil report.
- Layers shall be properly watered and well-compacted using roller compactor. Field Density Tests shall then be carried out and backfilling can then resume upon obtaining satisfactory test results.
- The final layer shall be tested for compaction prior to anti-termite treatment and blinding concrete.
- Control points shall be established to maintain uniform layer thickness.
- Backfilling shall be carried as shown in the approved drawings.
- The final surface shall be completed within the tolerances of + 10 mm in level.
- The compaction of each layer shall continue until a minimum of (95 %) of maximum dry density MDD has been achieved.
- The final survey shall be carried out in order to confirm the final surfaces are in accordance with the contract specification.
- Frequency for backfilling shall be at least one test for every two hundred square meters (200m2) of compacted area for foundations, but in no case less than three tests.(Or as per specification).

8.0 ANTI-TERMITE TREATMENT WORKS

8.1 Preparation:

- Ensure previous work are approved and conformed by Consultant prior on Anti-Termite Treatment work.
- Ensure consent and permit are obtained from Consultant and Client.
- The work area shall be cleared of all debris.
- Ensure the compaction test for road base passed.
- Ensure relevant tool box talks and meeting are given to all operatives involved in the works.
- Ensure all underground sources are in place & protected.
- Ensure latest approved drawings issued to the site team.
- Ensure work will be carried out in accordance with the program.
- Ensure all the materials, equipment, tools and resources are available.

8.2 Pre-Construction:

- Ensure previous work are approved and conformed by Consultant prior on Anti-Termite Treatment work.
- Ensure consent and permit are obtained from Consultant and Client.
- The work area shall be cleared of all debris.
- Ensure the compaction test for road base passed.
- Ensure relevant tool box talks and meeting are given to all operatives involved in the works.
- Ensure all underground sources are in place & protected.
- Ensure latest approved drawings issued to the site team.
- Ensure work will be carried out in accordance with the program.
- Ensure all the materials, equipments, tools and resources are available.

8.3 Construction:

- Raised a site inspection with consultant prior to the treatment work.
- Remove the loose gravel from the soil surface prior to apply anti – termite.
- Mix the material as per manufacturer's recommendation which is 1 litter of treatment chemical is to 100 liters of water (Or as per specification).
- Spread and apply the anti-termite mixture using a power spray with adequate pressure as per the recommendation of the manufacturer's chemical.

- Apply as a coarse low – pressure spray at a rate of (5 liters) per square meter.
- Ensure that concrete will pour with maximum of (24 hours) after anti – termite treatment.
- Cover the applied area by polythene sheet (1000 gauge) immediately.
- Raised an inspection for consultant approval and acceptance of the treatment work prior to proceed with covering of PE sheet and casting of PCC.

9.0 RCC WORKS FOR SUBSTRUCTURE AND SUPERSTRUCTURE

9.1 Preparation:

- Ensure all permits, NOC, approvals, and consent are obtained and recorded at site.
- Ensure approval status of this method statement.
- Ensure all materials submittal in relation to this activity are approved.
- Ensure all related drawings are approved.
- Ensure proper access for construction area.
- Prepare any necessary tool box talks.
- Discuss the method statement and related responsibilities with the site team.
- Make sure all related materials are procured and expected deliveries are appropriate.

9.2 Pre-Construction:

- Survey the work area for any pre-existing safety hazards and render harmless if possible.
- Ensure relevant tool box talks are given to all operatives involved in the works.
- Ensure sufficient lights available if night working to be done.
- Ensure a sufficient number of trained labors for the job.
- Ensure work will be carried out in accordance with the program.
- Ensure latest approved drawings issued to the site team.
- Ensure all the materials, equipments, tools and resources are available.
- Ensure all preliminary work, testing and approval for the piling work are obtained and conformed.

9.3 Construction:

9.3.1 PCC Blinding Works

- Works shall be executed after post-trimming and pile head preparation inspection approvals. EACC surveyors will mark all boundaries and level of PCC based on the approved Benchmark and reference point given by the Authorities and as per the approved drawings.
- The specified Anti-termite treatment shall be applied to the compacted surface by the approved subcontractor. (Please refer to anti-termite MS for further details.)
- The working area will be covered by approved polythene (1000 gauge) sheet immediately after anti termite treatment
- All necessary shuttering / formworks will be installed as per the plan
- After the approval of the Consultant, PCC blinding (of the specified concrete mix) shall be cast to the specified thickness, levelled & finished.
- Quality Control measures required slump, temperature, grade, cubes etc. to be maintained.
- Wet Hessian covered with polythene sheet shall be placed immediately after finishing for horizontal surfaces and after final set has taken place, the wet Hessian covered with polythene shall be kept for curing and protection to prevent loss of moisture and minimize thermal stresses.

9.3.2 Neck Columns, Lift Pit & Tie Beams

- Ensure that all the Foundation and Solid Blocks work are completely finished as per the design and approved drawings.
- Mark the location of Neck Column on Pile Cap Foundation by chalk line.

- All necessary formwork shall be fabricated and placed according to dimensions shown on the approved drawings for the neck column. The internal surfaces of the formwork shall be treated with a release agent before concrete is cast.
- Reinforcement bars for column necks shall be cut to size, bent and placed according to the specified bar spacing and thicknesses.
- Sufficient cement block or PVC spacers (5cm thick or as specified in the drawings & specifications) shall be used for positioning of the reinforcement bars so that enough concrete cover to the bars is achieved
- Install the shutter and ensure it is in plumb and well supported.
- Install the anchor bolt as per approved drawing.
- Anchor bolt should be placed using a temporary plywood piece cut and perforated as per the anchor bolt spacing and diameter.

- After installing the anchor bolt, its level and alignment will be checked by surveyor.
- Surveyor shall fix the top level of columns necks as per approved drawings.
- Surveyor shall check all columns necks setting out & alignment.
- Cleaning and removal of binding wires and wood cut pieces etc. inside the formwork shall be done properly using compressor and magnetic bars before concrete casting.
- Before placing concrete, the formworks and reinforcement and anchor bolt (level and alignment) will be checked by QA/QC and then inspection will be offered to Consultant for approval.
- Before placing concrete, projected portion of anchor bolts above the Neck Column level should be covered and tighten properly with masking tape.
- After approval of QA/QC and Consultant. Placing of concrete will be taking place.
- Ensure the mix design of concrete is approved prior the placing of concrete
- Ensure the trial mix has been conducted in presence of Consultant as per approved mix design prior the placing of concrete.
- Place the concrete to final position without segregation or displacement of reinforcement & formwork.
- The approved mix of concrete shall be poured, compacted well with vibrators, leveled and the top surface troweled to obtain a uniform and smooth finish.
- Slump and temperature will be checked and recorded at site for every concrete truck.
- Minimum of (six numbers) concrete test cubes shall be cast on site and three cubes shall be tested for compressive strength after 7 days and the remaining three after 28 days.
- De-shuttering of formwork shall take place after (24 hours) of concreting.
- Upon removal of formwork the joint face shall be inspected.
- Curing of concrete will followed for (4 days) or as per specification.

- Wet Hessian covered with polythene sheet shall be placed immediately after finishing for horizontal surfaces and after final set has taken place, the wet Hessian covered with polythene shall be kept for curing and protection to prevent loss of moisture and minimize thermal stresses.
- Polythene over wet Hessian shall be secured to the vertical surfaces immediately after removal of the formwork. The Hessian shall be kept permanently damp.
- Upon completion of curing, an approved bitumen waterproofing paint shall be applied on the cleaned concrete surfaces, as specified by the manufacturer. After checking the first coat and reaching the necessary drying time a second coat will be applied.

9.3.3 Columns and Coping Beams

- Columns and beams Reinforcements shall be kept free from dirt, grease, organic matters and rust.
- Cloth reinforcement shall be bent accurately to the required shapes before the fabric is laid in position.
- All bending and cutting shall be done cold and no heating or welding is allowed.
- All the fabric shall be lapped and tied together on both the longitudinal and transverse wires by means of binding wire and all lapping shall be sufficient for the steel to develop its full strength.
- The number, size, from and positioning of bars shall be strictly in accordance with the drawings and bar bending schedules.
- Reinforcement shall be inspected/checked after being fixed and no concrete shall be placed around the reinforcement until such checking inspection has taken place and concrete permission has been signed by consultant engineer.
- The reinforcement shall be fixed in a way that vibrators can be inserted al all necessary points.
- The reinforcing bars shall be interconnected to form a rigid cage and shall be so secured in their specified position by means of spacers which do not impair corrosion protection that they are not displaced during the placing and compaction of concrete.
- Plastic spacers shall be fixed between form – work and reinforcement minimum four (4) per m2.
- The relevant concrete mix design shall be approved by the Client / Consultant representatives before commencing the work.
- The area to be concrete shall be cleaned with pressured air from compressors and all the bending wires/unused steel shall be removed using magnets.
- The concrete spacers to be placed in positions wherever required.
- An inspection by the consultant's representative will be requested before concrete placement.
- After approval by the consultant's representative concrete will be ordered.

- Concrete shall be placed and compacted in its final position within 90 minutes of the water being added to the mix by skips, truck, Chutes, barrows, down pipes or concrete pump in order to avoid segregation.
- The pumping shocks shall not be transferred from the pipeline to the form – work, previously laid concrete or the structure, the initial discharge of any pumped concrete shall be discarded completely.
- Placement will proceed in a continuous manner to avoid cold joints and adequate vibration will be utilized to ensure no voids or honey combs.
- Concrete shall be placed and compacted/vibrated in horizontal layers of not more than 300mm thickness each.

- For Concreting in hot weather, various means may be employed to lower the temperature of concrete such as:
  - Using Crushed ice in the mix.
  - Adequately watering of sub-grade, form-work and reinforcement.
  - Working only at cooler daytime.
  - Covering freshly poured concrete with polythene sheets.
  - Intensive moist-curing with potable water of the concrete placed.
  - Curing the concrete continuously with water at least for 7 days.
  - Maximum concrete temperature will be 30 degree C.

9.3.4 Grade Slab, Floor Slab & Roof Slab

9.3.4.1 Reinforcement

- Reinforcing steel shall be as shown on the approved workshop drawings. All reinforcing steel shall be free from loose mill scale, rust, oil, grease and other harmful substances and shall be within the limits of the relevant BS or ASTM standards.
- EACC shall obtain and submit the relevant test certificates for the Mill producing the reinforcing steel for the approval of the Engineer before placing orders. Tests shall be carried out on samples of reinforcing steel from stock reserved for the project and from bars delivered to the site as request by the Consultant.
- Reinforcement bars shall be stored at least 6 inches above ground level on wooden battens.
- Reinforcement bars shall be covered with appropriate plastic tarpaulin sheets while in storage to avoid any rusting.
- Rusted reinforcement bars shall be treated with rust remover with approval of Consultant prior to fixing at site.

- EACC shall submit workshop drawings and bar bending schedules of the steel bars reinforcement for the approval of the Consultant.

- Reinforcement bars shall be cut and bent as per municipality approved drawings taking into consideration the cover to the reinforcement as specified by consultant and shown in the municipality approved drawings.
- Reinforcing steel, ties, links, stirrups and couplers etc shall be positioned as shown in the approved workshop drawings. EACC shall ensure that bars in columns and beams are cranked for the entire length of the lap so that the minimum cover requirements are achieved and the true alignment of the reinforcing steel is maintained.
- Binding wire shall be of specified gauge of galvanized steel and shall be tied at every alternative joint for slabs and all joints for

beams.

- The concrete cover to the reinforcing steel shall be as specified. Purpose made and approved plastic, steel and concrete chairs of suitable sizes to hold the reinforcing steel in position shall be used. All reinforcing steel shall be securely held in position. If required, additional bars, stirrups and chairs to provide support for the reinforcing steel.
- Mesh reinforcing steel shall be of an approved type complying with the requirements of BS 4483 and the weights and dimension shown on the Construction drawings and will be supplied in flat sheets.
- Where necessary, mesh reinforcing steel shall be bent accurately to the required shapes before it is laid in position and all bending and cutting shall be done cold. All mesh reinforcing steel shall be lapped for a minimum length of (300 mm) unless otherwise stated on the drawings and tied together with the approved soft steel tying wire on both the longitudinal and transverse wires and all lapping shall be sufficient for the steel to develop its full strength.
- After the steel fixing has been completed, it will be subject to inspection by the Site Engineer. The inspection insofar as reinforcing steel is concerned will include but will not be limited to: evidence of compliance with the latest issue of the approved workshop drawings and bar bending schedules, reinforcing steel type, size, spacing, cover, tying, couplers, splices, laps, cleanliness and dowel/starter bars, etc.
- All construction joint, expansion joint and controlled joint shall be provided as per approved drawings.
- Cleaning and removal of binding wires and wood cut pieces etc. inside the formwork shall be done properly using compressor and magnetic bars before concrete casting.
- Reinforcement steel support shall be made of new steel of similar type and quality of the main reinforcement.
- Plastic spacers shall be fixed between from – work and reinforcement minimum four (4) per m2.

9.3.4.2 Sampling and Testing (Reinforcement)

- The manufacturer's test certificate with each consignment of reinforcement brought to the site shall be provided. Before the execution of works, and for every 100 T in each shipment, Two (2) samples of each bar size shall be tested as follows:
- Chemical composition to be tested to BS 4449.
- Mechanical properties test including tensile properties, elongation, bent test and re-bent test.
- Cross sectional area and mass test.
- For detailed curves, diagrams and tables shall be with referring to DIN 1045 or relevant BS standards.

9.3.4.3 Concreting

- The relevant concrete mix design shall be approved by the Client / Consultant representatives before commencing the work.
- The area to be concrete shall be cleaned with pressured air from compressors and all the bending wires/unused steel shall be removed using magnets.
- The concrete spacers to be placed in positions wherever required.
- An inspection by the consultant's representative will be requested before concrete placement.
- After approval by the consultant's representative concrete will be ordered.
- Concrete shall be placed and compacted in its final position within 90 minutes of the water being added to the mix by skips, truck, Chutes, barrows, down pipes or concrete pump in order to avoid segregation.
- The pumping shocks shall not be transferred from the pipeline to the form – work, previously laid concrete or the structure, the initial discharge of any pumped concrete shall be discarded completely.
- Placement will proceed in a continuous manner to avoid cold joints and adequate vibration will be utilized to ensure no voids or honey combs.
- Concrete shall be placed and compacted/vibrated in horizontal layers of not more than 300mm thickness each. For slab thicker then 900mm thermocouples shall be provided to control and record the temperature of the concrete during curing.
- For Concreting in hot weather in hot weather, various means may be employed to lower the temperature of concrete such as:
- Using Crushed ice in the mix.
- Adequately watering of sub-grade, form-work and reinforcement.
- Working only at cooler daytime.
- Covering freshly poured concrete with polythene sheets.
- Intensive moist-curing with potable water of the concrete placed.
- Curing the concrete continuously with water at least for 7 days.
- Maximum concrete temperature will be 30 degree C.

Delivered concrete shall be frequently slab height shall be placed at every 4m x 4m distances / grids to achieve the required thickness of slab evenly during concreting. Any slope required shall be achieved using the concrete bloc. Levels sizes and dimensions will be carried out using surveying instruments.

9.3.4.4 Construction Joints

- Necessary steps shall be taken to ensure that the lines produce do in the exposed face of the work due to horizontal or vertical joints are perfectly straight and regular.
- To ensure bond between old and new concrete at construction joints, surface of the old concrete shall be cleaned of all defective

concrete, latency, oil, grease, dirt, loose concrete, etc. and shall properly be roughened by chipping, hammering or other techniques to expose the aggregate and provided sufficient key for the two layers, before casting the new concrete, the old concrete surface shall be thoroughly wetted and saturated with water, commencing at least 12 hours prior to casting the new concrete.

- Old concrete shall be treated with approve bonding agent prior to casting the new concrete.

9.3.4.5 Expansion Joints

- Expansion joints shall be marked clearly in the drawings.
- Suitable water stoppers shall be installed and all the expansion joints shall be sealed with an approved durable sealing compound.
- After sealing the expansion joints, joints shall be protected by an approved durable cover (e.g. powder coated metal covers, aluminum strips, et.), Covers shall be applied at external elevations, internal floor joints, wall, etc.

9.3.4.6 Joint Filler Board

- For joints designed to operate as a separation and expansion/settlement joint in concrete, Fiber-boards, manufactured from high-grade fibers which are bitumen impregnated and compounded into compressible non-extruding boards, shall be used. Thickness of board shall be minimum 25mm.

9.3.4.7 Sampling and Testing (Concreting)

- A copy of the batching ticket for each truckload will be given to the consultant's representative.
- The concrete temperature and Slump will be checked on each truck at the arrival of concrete at site. Results will be recorded directly on the batch Slip along with the air temperature and time discharge is complete.
- One set of at least six (6) test cubes for every 100m3 or every daily pour of concrete.

The compression strength test shall be carried out after 7 days for the first two cubes of each set, and after 28 days for the second two cubes of the set, and – if requested- the last two cubes of each set may be tested in case of failure of a cube.

Bimonthly or for every 750 m3 of concrete cast, we shall prepare following for durability testing.

9.3.5 Lift/Core Wall Construction

- Prior to the commencement of the work, necessary & relevant clearances / RFI / Approvals will be obtained by the contractor as required.
- Rebar placing as per approved drawing will be done between the shuttering / formwork of the Lift/core wall. Concrete cover

provided will be as per "Approved Drawings".

- Reinforced Steel will be installed as per approved detailed drawings and Proper / Required cover will be maintained using required size of concrete cover blocks.
- Approved shutter / formwork releasing material will be applied to all the faces which come in contact with the concreting.
- Prior to start of the placing of steel and concreting activity the area to be concreted will be well cleaned with pressured air from compressors and all the binding wires / steel will be removed using magnets.
- Before placing of the one side shuttering the starter bars will be cleaned properly by means of wire brush and the top surface of the kickers will be cleaned and air blasted to remove any loose particles and other foreign substances. Also chipping works with Hilti jack hammer to remove all the concrete laitance, loose particles etc. will be done.
- Erection of the Formwork with grooves for termination of the water proofing membrane will be carried out up to construction joint locations. The Formwork and Tie Rod system will be as per the recommendation.
- The sleeves and openings will be provided at exact locations as per the Approved Drawings. Extra Reinforcement will be provided around the sleeve / openings as per approved drawings.
- After the inspection of the rebars and wall openings are cleared by the consultant the closing shuttering will be placed and the tie-rode inserted into the wall shuttering and then tightened to get the correct line and level of the wall Formwork.
- Clearance from Consultant shall be obtained prior to start of concreting activities.

- Concrete will be supplied to the site using transit mixers from approved concrete supplier, all concrete received at site will be accompanied by batch sheets from the batching plant, which will specify the Grade of Concrete, Time of Batching, Quantity of Concrete, Truck No. and all other details required as per specifications in the concrete mix design.

- On arrival of the truck at site & before using the concrete the QA/QC Engineer will inspect the concrete and take the slump test at site to determine its work ability, once the slump of concrete is as per requirement, the vehicle will be allowed to go for concreting. Also the concrete temperature will be checked by the QA/QC Engineer before sending the concrete truck for concreting. Concrete temperature, ambient temperature, discharge time of concrete etc., shall be as per project specification.
- Concrete cube samples will be taken as per specifications / requirements of the Engineer / Owner. Concrete cube taken as test samples will be sent to the approved laboratory to obtain the 7 days and 28 days compression test results.
- Records for concrete usage will be maintained by the QA/QC Engineer for slump, minimum and maximum temperature, ambient temperature etc., and these reports will be forwarded to Consultant as required.
- Formwork / Shuttering will be stripped / removed after the minimum stripping period as specified.

- De-shuttering will be done after 24 hours of the concrete completed time.
- Continuous curing period as per specification will be maintained by continuously pouring of the water over the walls and polythene sheet and or Hessian cloth.

10.0 SUBSTRUCTURE WATERPROOFING WORKS (BITUMIONOUS WATERPROOFING PAINT)

10.1 Preparation:

- Ensure previous work are approved and conformed by Consultant prior on Application of bituminous waterproofing paint to the concrete substructures.
- Ensure consent and permit are obtained from Consultant and Client.
- The work area shall be cleared of all debris.
- Ensure the compaction test for road base passed.
- Ensure relevant tool box talks and meeting are given to all operatives involved in the works.
- Ensure all underground sources are in place & protected.
- Ensure latest approved drawings issued to the site team.
- Ensure work will be carried out in accordance with the program.
- Ensure all the materials, equipments, tools and resources are available.

10.2 Pre-Construction:

- Ensure previous work are approved and conformed by Consultant prior on Application of bituminous waterproofing paint to the concrete substructures.
- Ensure consent and permit are obtained from Consultant and Client.
- The work area shall be cleared of all debris.
- Ensure the compaction test for road base passed.
- Ensure relevant tool box talks and meeting are given to all operatives involved in the works.

- Ensure all underground sources are in place & protected.
- Ensure latest approved drawings issued to the site team.
- Ensure work will be carried out in accordance with the program.
- Ensure all the materials, equipments, tools and resources are available.

10.3 Construction:

- Raised a site inspection with consultant prior to application of bituminous waterproofing paint to concrete substructures.
- Ensure that the Footings, column necks, walls and tie beams are properly cured (7 days or as per specification).
- The bitumen waterproofing paint can be applied the next day if curing compound is used.
- Ensure all shutters, nails, and tie rods are removed.
- After removing nails and tie rods, holes shall be filled with cement mortar or any other approved specified material.
- All sharp edges / corners to be rounded with the use of grinders.
- Repairs, if required, shall be done with approved repair material.
- All repaired surfaces shall be subjected to curing for a specified duration.
- All structural repairs / in fills shall be done based on approved method statements specified by the manufacturer or established at site.
- Brushes, buckets, paint roller, etc. used in carrying out the work shall be clean and free from foreign matter.
- Surface should be sound, clean and free of dust, oil or grease.
- Ensure that surface shall be scraped to remove waste concrete by using the metal scraper.
- Ensure that surface are dry prior to apply damp proof coating
- After completion of surface preparation it will be inspected by QA/QC and Client / Consultant.
- Mix the damp proof coating as per manufacturer's recommendation.
- Stir properly the bitumen drum without adding water.
- Apply the first coat of the cold bitumen at the rate of (0.5 liter/m^2).
- The first coat of bitumen waterproofing paint shall be applied and inspected / approved by QA/QC & the Client / Consultant.
- Apply second coat when first coat is completely dry. (Drying time 1 to 3 hrs.)
- Second coat should be applied at the right angle to the first one.
- Backfilling shall be carried out upon completion of drying period (1 – 3 hrs).

- After second coat completion activity will be inspected by EACC QA/QC and will be offer for inspection to the client / consultant in order to start the next activity.

11.0 SOLID BLOCK BELOW TIE BEAMS

11.1 Preparation:

- Ensure previous work are approved and conformed by Consultant prior to the laying of solid block below tie beams.
- Ensure consent and permit are obtained from Consultant and Client.
- The work area shall be cleared of all debris.
- Ensure the compaction test for road base passed.
- Ensure relevant tool box talks and meeting are given to all operatives involved in the works.
- Ensure all underground sources are in place & protected.
- Ensure latest approved drawings issued to the site team.
- Ensure work will be carried out in accordance with the program.
- Ensure all the materials, equipments, tools and resources are available.

11.2 Pre-Construction:

- Ensure previous work are approved and conformed by Consultant prior to the laying of solid block below tie beams.
- Ensure consent and permit are obtained from Consultant and Client.
- The work area shall be cleared of all debris.
- Ensure the compaction test for road base passed.
- Ensure relevant tool box talks and meeting are given to all operatives involved in the works.
- Ensure all underground sources are in place & protected.
- Ensure latest approved drawings issued to the site team.
- Ensure work will be carried out in accordance with the program.
- Ensure all the materials, equipments, tools and resources are available.

11.3 Construction:

- Ensure that all the blinding concrete is finished as per the design and contract requirements to form a surface for construction.
- Mix the Masonry mortar according to specifications using mechanical mixer. Mortar will consists of Cement and Sand with ratios (1:3) respectively. Only SRC cement will be use for this activity.
- Spread the mortar on the P.C.C where the masonry block wall is to be erected.
- Lay down the first line of solid blocks in the open area between the two footings & alignment to be done.
- Check the first line for plump and alignment.

- Proceed with the second row of solid blocks; ensure all joints area a minimum average thickness of 10mm. Also ensure all vertical joints and staggered.
- Rendered walls shall have the joints raked out to a depth of 15mm to form a key.
- Flush joints shall be similarly flushed up to ensure that the mortar surface is finished flush between blocks.
- Ensure to cover the Masonry blocks with Hessian cover at the end of a day work and cure with water as per specification
- Erect maximum of five rows per day between any two sections of walling and all joints shall be of consistent thickness (average 10 mm).
- Solid block will be placed up to the bottom of required level of tie beam.
- After erection of required level of solid block work, the inspection will be done by QA/QC & Consultant for alignment and verticality.
- The compressive strength of solid block should be min (10 N/mm²).
- Surveyor shall fix the top level of solid blocks as per approved drawings.
- Surveyor shall check setting out & alignment of solid blocks.

12.0 BLOCK WORK CONSTRUCTION

12.1 Preparation:

- Ensure previous work are approved and conformed by Consultant prior to the laying of all kind of blocks.
- Ensure consent and permit are obtained from Consultant and Client.
- The work area shall be cleared of all debris.
- Ensure the compaction test for road base passed.

- Ensure relevant tool box talks and meeting are given to all operatives involved in the works.
- Ensure all underground sources are in place & protected.
- Ensure latest approved drawings issued to the site team.
- Ensure work will be carried out in accordance with the program.
- Ensure all the materials, equipments, tools and resources are available.

12.2 Pre-Construction:

- Ensure previous work are approved and conformed by Consultant prior to the laying of all kinds of blocks.
- Ensure consent and permit are obtained from Consultant and Client.
- The work area shall be cleared of all debris.
- Ensure the compaction test for road base passed.
- Ensure relevant tool box talks and meeting are given to all operatives involved in the works.

- Ensure all underground sources are in place & protected.
- Ensure latest approved drawings issued to the site team.
- Ensure work will be carried out in accordance with the program.
- Ensure all the materials, equipments, tools and resources are available.

12.3 Construction:

- Raised a site inspection with consultant prior to laying of blocks for superstruture.
- Layout to be marked clearly on the floor, including doors, windows and other building services to ensure correct bonding, minimum cutting tolerances and the average thickness of vertical wall and horizontal joints.
- At ground level approved DPC shall be laid under the first course of the block work.
- Spread the mortar on the Damp proofed ground where the masonry block wall is to be erected.
- Reference blocks (solid) shall be laid to obtain the line and level of the block work to the approval of the consultant.
- Check the first line for plumb and alignment before proceeding with the second row of masonry blocks.
- The joints of block work shall be minimum (10 to maximum 20mm) in thickness.
- In a day's work, the maximum block work height laid shall be (1.20 meters). The block work shall be carried out in a uniform manner.

Block work shall be plumbed vertically.

- Control joints shall be provided in the form of reinforced concrete columns at mid EACC in all walls longer than (6m). Reinforced concrete bond beams will be provided in all walls more than (3.5m high) at mid wall height or at lintel level.
- Walls temporarily left at different levels shall not be stepped more then (1 m) in height. Any wall left at different levels must be raked back.
- The surface of the walls and partitions prepared for rendering shall have the joints raked out to a depth of (20mm) from the face of the wall to form a key to the plaster.
- Install expanded steel mesh joint reinforcement in every third layer.
- Partitions shall be bonded to main walls by toothing at every third course to a depth of not less than (100mm).
- Cavity walls shall be built by raising both skins of the block work at a similar rate and incorporating approved wall ties at (900 mm) horizontal centers and (600 mm) vertical centers spaced diagonally. Cavities shall be kept clean of mortar droppings.

  The top most courses of walls and partitions terminating against soffits of beams and slabs shall be built with solid blocks of appropriate size leaving a gap of (10 to 15 mm), which shall be packed with mortar/bitumen impregnated building board strips for normal walls.
- Fire rated concrete block wall construction shall be built in accordance with the relevant section of the Schedule of Architectural Finishes. Fire stop product details shall be as per the relevant clauses of the specifications.
- All door and window openings shall have solid block around their periphery.
- Curing by water to the faces of the clock work shall be applied for (3 days).
- All block walls shall be connected to the adjacent reinforced concrete structure by means of approved wall ties at every third course “Shot fixed” to the structure. The wall ties shall be (25mm x 2.5mm x 150mm) in size and of galvanized steel or equal specified and approved.
- Wall ties between steel columns should be done as follow:

For Side Walls

- Lay down the first line of Masonry blocks in the open area between the steel columns form the interior side of the building in respect to the steel columns. Ensure to leave the area in front of the steel columns empty of blocks to erect the stiffener column on a later stage.
- When the sub level of the concrete lintel has been reached, install flexible sheet in front of the steel column, overlap reinforcement steel bars with the existing vertical dowels according to specifications, erect a one side shutter for the stiffener column and pour the

concrete in the column according to specifications and construction drawings. Allow for curing as per specifications.

For End Walls

- Ensure to weld a U shape steel reinforcement bar to the steel column, and overlap it with the reinforcement of the lentils if any.

13.0 STEEL STRUCTURE ERECTION

13.1 Preparation:

- Ensure all permissions and consents are obtained.
- Ensure approval status of this method statement is “A” or “B”.
- Ensure all materials submittal in relation to this activity is status “A” or “B”.
- Ensure all related drawings are status “A” or “B”.
- Prepare any necessary tool box talks.
- Discuss the method statement and related responsibilities with the site team.
- Make sure all related materials are procured and expected deliveries are appropriate.
- Ensure the availability of the needed machinery to be on site when needed such mobile cranes, scaffolding, man lifting devices, boom lift and Telescopic forklift.
- Ensure the availability of all safety equipments is obtained.
- Since erection is done before the slab on grade, ensure the where lifting cranes will stand on is well compacted and ready to withstand the load bearing of the cranes and the steel parts.

13.2 Pre-Erection:

- Survey the work area for any pre-existing safety hazards and render harmless if possible.
- Ensure relevant tool box talks are given to all operatives involved in the works.
- Ensure work will be carried out in accordance with the program.
- Ensure latest approved drawings issued to the site team.
- Ensure all the materials, equipments, tools and resources are available.

- Ensure the post pour dimensional check for anchor bolts done to be within the tolerance measurement.
- The Engineer shall ensure that, before off-loading the supplied structural steel material, the lay-down area is as reflected on the approved site layout drawing. The lay-down area should be level and clear from any obstruction.
- Plane, level and compacted timber pieces of 50mm x 50mm in size shall be placed under the structural steel members.
- All supplied structural steel members shall be off-loaded 5m away from the building limits.
- Purchase Order documentation provided by the structural steel supplier shall be verified and off-loading safety precautions should be observed.
- Material Packing List shall be verified against items being off-loaded.
- Physical Inspection of the steel members shall be carried out to verify Quantity and Quality.
- Cases of Non-Conformance of the supplied structural steel members and accessories shall be reported to Project Engineer.
- A mobile crane and/or a forklift shall be used to off-load the supplied materials
- Stock the steel beam sections in respect to their priority usage to avoid double handling.
- Ensure that the cranes to be used for the job to be equal to or greater than the capacity load required.
- Determine the start point and the sufficient number of trained labors needed to meet the schedule.

13.3 Erection:

13.3.1 Staging and Ground Assembly

- Main frame columns shall be marked and moved to their respective locations.
- Main frame rafter pieces shall be laid on the ground along their respective grid line.
- Roof purlins related to each bay shall be laid along their respective rafters.

13.3.2 Erection Sequence

Note: Before the start of erection, adjust the bottom nut of the anchor bolts to ensure the levels are correct. Braced bay to be erected first to assure stability of the structure.

- Start erection of columns from the braced bay using guy wires and ratchet pullers for stability of frames during erection. Adjust the column using plumb. Shim plate will be installed under each column to ensure proper leveling. Support the standing columns using temporary cable brace stay for the independent standing column.

- Lift and connect the strut tubes and or cable bracings in between the two erected columns. Check the alignment of the installed members.
- In the same braced bay raise rafters into position at top of erected columns.
- Install permanent bracing as indicated in erection drawings.
- Assemble the two rafters in between the nearest bay to braced bay as near as possible to their lifting positions. Hold rafters in place with hoisting equipment while the required bolts are installed through the column connected connection plate, and tightened properly.
- One set of bolts in the rafter splices are installed and tensioned.
- Fix flange braces to the rafter using machine bolts. Flange braces are fitted on one side of the rafter only.
- Attach temporary guy wires to the two formed rafters
- The two rafters will be erected in pieces suitable to be handled by 2 cranes with 25T capacity. (Note that the two formed pieces erected at one time should rest on two columns at a minimum).
- Commence lifting the rafter. Attached wires will help to guide the rafter to its position. Raise rafter into position at top of columns. Lower the rafter to the column cap plates, and position it using spud wrenches.
- Hold rafters in place with hoisting equipment while the required high strength bolt nuts and washers are installed through the column connected splice place, and tightened properly. Fix other end of the rod wires attached to the rafters to a fixed point to avoid tilting or overturning.
- Using above procedure assemble second rafter and place it on top of second set of columns. Bolt-up to columns and continue to hold second rafter until both rafters are braced by roof purlins.

- Connect the previously attached flange braces to the purlins with mild steel bolts.
- Install eave strut with strength bolts.
- Install all of the required purlins and then install permanent bracings between rafters.
- Adjust the tension of the bracing, and at the same time adjust the rafter alignment.
- Before proceeding further, a Theodolite shall be used to check if the structure is plumb and square. Temporary braces shall be used to align and plumb the columns if further alignment is required.
- Using above procedure assemble second rafter and place it on top of second set of columns. Bolt-up to columns and continue to hold second rafter until both rafters are braced by roof purlins.
- Connect the previously attached flange braces to the purlins with mild steel bolts.

- Install eave strut with strength bolts.
- Install all of the required purlins and then install permanent bracings between rafters.
- Adjust the tension of the bracing, and at the same time adjust the rafter alignment.
- Before proceeding further, a Theodolite shall be used to check if the structure is plumb and square. Temporary braces shall be used to align and plumb the columns if further alignment is required.
- Upon completion of the first bay, the high strength bolts at the knee connection should be fully tightened.
- Resume erection of columns, rafters and purlins in succeeding bays in the same manner as above.
- Check all connections to ensure that all bolts have been installed and that the high strength bolts are tensioned to the correct requirements.
- Sub level of the base plate is ready to receive the grouting material.
- Touch-up any damaged paint on the main frame prior to sheeting.
- Two ground assembly erection crews will precede the lifting erection crews. The ground assembly crews will align and bolt-up the rafter pieces together.
- Erection procedure shall be as per this sequence up to completion of building.
- Any structural damages that occur due to loading / unloading or erecting shall be rectified after steel erection takes place, right before cladding starts.
- Two mobile cranes of 25T capacity each shall be engaged in lifting the assembled rafter pieces.

13.3.3 Steel Mezzanine Floor

- Datum point and reference line to be established as per the approved drawings.
- Main frame columns for the mezzanine area shall be marked and moved to their respective locations.
- All columns to be erected and bolted prior to decking and main beams.
- Main beams line datum line to established and all main beam to be bolted and properly tightened to the erected columns.
- Decking beam are bolted to the main beams and ensuring a level surface.
- Any additional column, main and decking beams are added and fixed in a similar procedure as above.
- If there is bracing is to be fitted as soon as possible as the structure progresses.
- Once structure is completed, the steel structure is to be checked for major discrepancies in level, plumb, nor square of each part.

- Prior on the decking sheet installation, underside of the structure to be netted or a safety lifeline to be fixed serves as fall protection measures.
- Packs of decking sheet are lifted by forklift to the floor level.
- Decking sheet is laid on the top of decking beams with short joints falling on the centerline of the decking beams.
- Ensure decking sheet is squared and fixed down with self-drilling tapping screws.
- Once fixed, EACC team to checked and inspect the floor to ensure all the quality are achieved and on satisfactory level.

13.3.4 Final Checking Inspection

Engineer shall ensure after erection of the structural steel members and accessories are checked and inspected as mentioned here below:

- All bracings are in position and tightened.
- All bolts are in place and high strength bolts are tightened properly.
- All damaged paint is touched-upped and made good.
- Check that roof and gutters are clear of debris and ferrous metals.
- Check all roof penetrations for weather tightness.
- Engineer shall Issue Application for Inspection (AFI) for each of the above activities when it completed.

14.0 ROOF CLADDING ERECTION

14.1 Preparation:

- Ensure all permissions and consents are obtained.
- Ensure approval status of this method statement is “A” or “B”.

- Ensure all materials submittal in relation to this activity is status “A” or “B”.
- Ensure all related drawings are status “A” or “B”.
- Prepare any necessary tool box talks.

- Discuss the method statement and related responsibilities with the site team.
- Make sure all related materials are procured and expected deliveries are appropriate.
- Ensure the availability of the needed machinery to be on site when needed such scaffolding, man lifting devices, boom lift and forklift.
- Ensure the availability of all safety equipments is obtained.
- Since erection is done before the slab on grade, ensure the where lifting cranes will stand on is well compacted and ready to withstand the load bearing of the cranes and the steel parts.

14.2 Pre-Construction/Erection:

- Survey the work area for any pre-existing safety hazards and render harmless if possible.
- Ensure relevant tool box talks are given to all operatives involved in the works.
- Ensure work will be carried out in accordance with the program.
- Ensure latest approved drawings issued to the site team.
- Ensure all the materials, equipments, tools and resources are available.
- Ensure the post pour dimensional check for anchor bolts done to be within the tolerance measurement.
- The Engineer shall ensure that, before off-loading the supplied roof cladding material, the lay-down area is as reflected on the approved site layout drawing. The lay-down area should be level and clear from any obstruction.
- Plane, level and compacted timber pieces of 50mm x 50mm in size shall be placed under the roof cladding materials.
- All supplied roof cladding materials shall be off-loaded 5m away from the building limits.
- Purchase Order documentation provided by the cladding supplier shall be verified and off-loading safety precautions should be observed.
- Material Packing List shall be verified against items being off-loaded.
- Physical Inspection of the roof cladding materials shall be carried out to verify Quantity and Quality.
- Cases of Non-Conformance of the supplied roof cladding materials and accessories shall be reported to Project Engineer.
- A forklift shall be used to off-load the supplied materials
- Stock the roof cladding materials in respect to their priority usage to avoid double handling.
- Ensure that the boom lift to be used for the job to be equal to or greater than the capacity load required.

- Determine the start point and the sufficient number of trained labors needed to meet the schedule.

14.3 Construction/Erection:

- There should not be any activity below the roof while carrying the cladding work.
- Prepare the roof panels by segregating to the lengths of panels shown on the roof sheeting plan. Place the first sheet (with the given dimension) for the eave overhang.
- Use a string line projected away from the eave strut to establish the correct distance and line.
- The sequence of roofing is from eave to center ridge from both sides of the building and both slopes finishing with the center ridge panel. This will ensure the center panel to overlap its siding panels.
- Provide bead mastic over the panel corrugations along panel end laps.
- Temporarily fix one run of panels to walk on.
- Apply the PVC tape to the purlin.
- Adjust the line of the panel for squareness.
- Screw the panel and move progressively panel by panel up to the centre ridge panel.
- The eave panels will only be installed with partial screws. This is because the roof gutter will later be installed to them (eave panels).
- After completing several runs of panels, the temporary walkway can be lifted, and panels re-fixed.
- Check at regular intervals (measuring distance from reference point) shall be carried out to ensure sheets are perpendicular to the ridge line.
- Ensure that the panel ribs are kept in a straight line from eave to ridge. Use a chalk line to mark the purlin location and maintain a straight line of screw to avoid miss-drilling and possible leakage.
- The eave panels must be fully screwed. The panels will only have intermediate screws.
- The center Ridge panel will be fully screwed at both sides.
- Fixing shall be through the crown with saddle washers.
- Three rows of sealant to be applied to end laps and one tow to side laps.
- Install gable trims after completing the roofing.
- Locate exact location of smoke vents, extract fans and install according to specifications.
- Install an eave gutter as per approval with water proofing and suitable steel frame work according to drawings.
- Apply flashing to the top of the eave gutters side as shown on the drawing.
- Riveting must be applied to side laps upon completing the job.

- Eave gutters shall be spliced using two runs of mastic and pop-rivets. The gutter is then hung by means of gutter straps which are screwed through the roof panel.
- Down spouts connections are cut with aviation snips at locations shown on the roof plan.

14.4 Final Checking Inspection

Engineer shall ensure after installation of roof cladding and accessories are checked and inspected as mentioned here below:

- All roof cladding and accessories are in position and tightened.
- Ensure cleaning up the roof panels after each days work.
- All damaged paint is touched-upped and made good.
- Check that roof and gutters are clear of debris and ferrous metals.
- Check all roof penetrations for weather tightness.
- Engineer shall Issue Application for Inspection (AFI) for each of the above activities when it completed.

15.0 WALL CLADDING ERECTION

15.1 Preparation:

- Ensure all permissions and consents are obtained.
- Ensure approval status of this method statement is “A” or “B”.
- Ensure all materials submittal in relation to this activity is status “A” or “B”.
- Ensure all related drawings are status “A” or “B”.
- Prepare any necessary tool box talks.
- Discuss the method statement and related responsibilities with the site team.
- Make sure all related materials are procured and expected deliveries are appropriate.
- Ensure the availability of the needed machinery to be on site when needed such scaffolding, man lifting devices, boom lift and forklift.

- Ensure the availability of all safety equipments is obtained.
- Since erection is done before the slab on grade, ensure the where lifting cranes will stand on is well compacted and ready to withstand the load bearing of the cranes and the steel parts.

15.2 Pre-Construction/Erection:

- Survey the work area for any pre-existing safety hazards and render harmless if possible.
- Ensure relevant tool box talks are given to all operatives involved in the works.
- Ensure work will be carried out in accordance with the program.
- Ensure latest approved drawings issued to the site team.
- Ensure all the materials, equipments, tools and resources are available.
- Ensure the post pour dimensional check for anchor bolts done to be within the tolerance measurement.
- The Engineer shall ensure that, before off-loading the supplied Wall cladding material, the lay-down area is as reflected on the approved site layout drawing. The lay-down area should be level and clear from any obstruction.
- Plane, level and compacted timber pieces of 50mm x 50mm in size shall be placed under the Wall cladding materials.
- All supplied Wall cladding materials shall be off-loaded 5m away from the building limits.
- Purchase Order documentation provided by the cladding supplier shall be verified and off-loading safety precautions should be observed.
- Material Packing List shall be verified against items being off-loaded.
- Physical Inspection of the Wall cladding materials shall be carried out to verify Quantity and Quality.
- Cases of Non-Conformance of the supplied Wall cladding materials and accessories shall be reported to Project Engineer.
- A forklift shall be used to off-load the supplied materials
- Stock the Wall cladding materials in respect to their priority usage to avoid double handling.
- Ensure that the boom lift to be used for the job to be equal to or greater than the capacity load required.
- Determine the start point and the sufficient number of trained labors needed to meet the schedule.

15.3 Construction/Erection:

Wall cladding erection and installation shall be carried out in the following order:

6.3.1 External Cladding

- "Z" spacer shall be fixed on the wall girts as per the approved wall cladding shop drawings using self-tapping screws.
- "Stick Pins" shall be fixed on the girts between the "Z" to hold the wall cladding in place.Wall cladding shall be placed on the "Stick Pins" and between "Z" spacers.

- PVC tape shall be fixed on all "Z" spacers as a barrier between "Z" spacers and exterior cladding.
- External cladding which is installed horizontally shall be fixed to "Z" spacers using self-tapping screws.
- Valley of the external cladding shall be facing outside as shown in the approved shop drawings.
- External cladding erection shall start from bottom and to continue upwards.
- At first bottom panels shall be kept in position, checked for proper alignment and fixed to "Z" spacers using S.T.S.
- Similar way one by one panel shall be installed in upward direction by side lapping the same.
- After completing one row of panels from bottom to top, second row shall follow the same procedure, and continue row by row.
- Panels at the end (junction of rows) shall be overlapped one above the other.

6.3.1 Internal (Liner) Cladding

- PVC tape shall be fixed on all wall girts as a barrier between girts and internal cladding.
- Internal cladding which is installed vertically shall be fixed to wall girts using self-tapping screws.
- Crown of the internal cladding shall be facing outside.
- Internal cladding erection shall start from one end to the other, bay by bay.

6.3.3 Final Checking Inspection

- Engineer shall ensure after installation of Wall cladding and accessories are checked and inspected as mentioned here below:
-
- All Wall cladding and accessories are in position and tightened.
- Ensure cleaning up the Wall panels after each days work.

- All damaged paint is touched-upped and made good.
- Check that Wall and gutters are clear of debris and ferrous metals.
- Check all Wall penetrations for weather tightness.
- Engineer shall Issue Application for Inspection (AFI) for each of the above activities when it completed.

16.0 SAFETY REQUIREMENTS:

16.1 Appropriate work permit to be obtained prior to start of work.

16.2 Toolbox talks to be conducted prior to commencement of works.

16.3 All necessary barriers, signage, lighting etc. to be provided and maintained.

16.4 Appropriate PPE to be worn / used.

16.5 Close supervision on safety requirement shall be provided.

Safety Tools & Materials	☐ Safety Signage ☐ Hard or Soft Barrier	☐ Warning tape. (Red/white) ☐ Beacon Lights	☐ Safety Cone ☐ Full Body Harness	☐ Other Specify _____
Personal Protective Equipment	☐ Hard hat, ☐ Safety Footwear	☐ Hand Protection, ☐ Eye Protection,	☐ Ear protection ☐ Protective Clothing	☐ Other Specify _____
Control measures from site-specific risk assessment:	*Summary of measures to prevent accidents during this work* • All workers to wear standard PPE always i.e. hard hat, safety shoes, hand gloves and eye protection. • All workers to wear safety harness and lanyard when working at height and in any other situation where they are working above ground level with no handrail Protection. • All workers to keep the work area clean and tidy, removing all waste material immediately. • Any defects in working equipment to be reported immediately to supervisor.			

	• Lifting equipment to be certified for safe use. • All slings and chains are to be checked prior to use for any damage. *(if required in the job)*
Emergency arrangements:	• In the event of accident call 911 or Call Emergency Response Team or Responsible Person in the Project and make necessary arrangements
Operative Must not: (Don'ts)	• **Attend reckless or dangerous practices e.g. dropping equipment to colleagues on the ground, taking friend's joy riding.** • **Horse playing and joking.** • **Work without reading and understanding the SWMS/SDS/Safety procedures** • **Work alone without necessary safety measures** • **Operate or use an equipment without authorization. *(importantly if you don't have knowledge to operate)***
Operatives Must: (Do's)	• **Notify the Supervisor immediately if you are unable to carry out the task.** • **Inform the Supervisor for any unsafe condition in the work site.** • **Wear issued PPE and clothing specific to the task.** • **Use only approved equipment and materials specific to the task.** • **Follow the Safe System of Work.** • **Always look for their own safety and the safety of their co-workers**

Tools and Equipment				
ITEM NAME	**SERIAL NUMBER**	**DATE OF LAST MAINTENANCE**	**TEST CERTIFICATE ATTACHED**	**REMARKS**

List of Safety Equipment and PPE				
ITEM NAME	**SERIAL NUMBER**	**DATE OF LAST MAINTENANCE**	**TEST CERTIFICATE ATTACHED**	**REMARKS**

Acknowledgement Sheet

I acknowledge receiving and understanding these instructions, I will fully comply with the assigned task requirements

NAME (PRINT)	COMPANY/Dept.	Position / Trade / Skills	BADGE/ID NO.	SIGNATURE

(Supervisor will ensure completed SAFE WORK METHOD STATEMENT forms are forwarded to the necessary offices)				

PREPARED BY:

Name	Signature	Date

REVIEWED AND APPROVED BY:

Name	Signature	Date

8. IMPLEMENTATION AND OPERATION

In developing the arrangements for implementing the H&S Policy, the requirements to comply with good working practices are paramount. The Management Team will fully comply with the Project requirements and in order to achieve a completely safe working environment, will make compulsory the following general procedures:

- Develop an overall job-site safety program, including subcontractors.
- Hold weekly safety meetings, keep required records and coordinate periodic safety inspections.
- Employ qualified safety personnel who will be responsible for all safety issues.
- EACC employees shall be aware of the safety policy and shall read the safety program.
- EACC's safety team will conduct regular safety and health inspections on site.
- EACC's H&S team will conduct regular safety seminars and toolbox talks for all employees.
- Safety Induction and safety training must be provided for all personnel who is working on site.

8.1. H&S Awareness (Communication & Consultation with Employees)

Information is relayed to personnel through training programs, safety meetings, safety notice boards, etc. Copies of all pertinent document, procedures, etc. relating to health and safety will be freely available.

Nominated H&S representatives will be consulted on measures designed to ensure health and safety at work. Consultations will include matters such as H&S objectives, changes and modifications, implementation of control measures, introduction of Personal Protective Equipment (PPE), and any other H&S matters which directly affect employees. Appropriate facilities and assistance will be provided as may be required for the employees to carry out their function. In addition to the H&S representatives, other employees shall be directly consulted on matters and changes which directly affect that group.

The Project Manager or his designee will chair the H&S Committee Meeting. This meeting is devoted to the communication of and Discussion on H&S matters. The H&S meetings will be held once per month. Attendance is compulsory for all H&S representatives. The H&S Lead will facilitate the meeting. The meeting shall include Discussion and interaction by all attendees. This is called the Monthly Safety Committee Meeting and shall be attended by various representatives from across the project workforce.

The following issues, among others will be discussed in the meeting:

- Policy changes
- Safety & Health performance statistics
- Audit & Inspection results
- Unsafe acts, infringement and non-compliances to safety and health requirements
- Corrective & preventive actions (CAPA)
- Training & promotion activities
- People Based Safety (PBS) observations

8.2. H&S Education and Training

All employees shall attend the H&S Induction Course, conducted by the H&S Department, prior to receiving their Identification Badge.

All employees will attend the project New Employee H&S Orientation program before the commencement of work. The program will provide the basic training on requirements for safe work on site, safety rules & regulations, and the Employer H&S Management Plan.

Project manager and H&S team are required to identify the training needs of the project team and to plan and allocate time and other resources to ensure the fulfillment.

The frequency of training will be determined by the project management and approved by the TMC.

The following are the criteria that would be considered when respective team set the training topics needs:

- Accident/Incident Records
- Employees/ Client Concerns
- Audit/ Inspection Results
- Employees inputs

Specialized training will be arranged with external facilitators. Experienced internal staff such as the H&S Officer will facilitate the in-house training.

On-site toolbox talk briefings will be conducted on a daily basis. This will be a part of the pre-task briefing for employees to communicate the hazards, risks, and impacts associated with the specific work, prior to the start of that work activity.

H&S project team and operations supervisors will be responsible to conduct toolbox talk on the site.

All drivers, including Light and Heavy Vehicles and Minibuses, shall attend the Defensive Driving Training. The performance of drivers in the course of work will be tracked and any non-compliance to company's rule & regulations or any regulatory laws or project requirements will be dealt with in accordance with company procedures.

- **Contractor Pre-Mobilization Meeting**

  The EACC will be required to attend a site pre-mobilization meeting, chaired by TMC prior to commencing operations onsite. This meeting shall cover finalization specific site requirements including health and safety issues, and any other requirements. TMC will ensure all H&S deliverables are submitted and approved prior commencing the work.

- **Health and Safety Pre-Task Briefing**

  The EACC will implement a pre-task/pre-work briefing process to communicate hazards, risks and impacts associated with the specific work activity before any employee starts work. A pre-task briefing shall be conducted independent of toolbox meetings and before commencement of any new works.

  The EACC will ensure that regular pre-task briefings are conducted with all employees ensuring that the task information is current and specific to the work being undertaken.

  The EACC will ensure that the pre-task briefing record is displayed at the specific work location along with the approved RAMS.

- **Safety and Job Skills Training**

  The EACC will develop a Health and Safety Training Matrix based on the training needs analysis of all personnel working on The TMC Project. The matrix shall detail positions against the training courses required from the analysis.

The EACC will bear the cost of all training courses provided to employees.

The EACC will ensure that the training topics provided to employees are based on a number of factors, such as but not limited to:

- Trends in monthly statistics
- Objectives that have been set
- Recurring issues on site
- Accident/accidents on site

The EACC will ensure that the courses designed to meet the needs of specific operatives involved in specialized trades including their roles and responsibilities are provided through training. Specialist training include but not limited to:

- Safe entry into confined spaces
- Hot work
- Lifting operations
- Scaffolding/false work
- Work at height
- Electrical safety
- Excavation support equipment
- First aid
- Fire Fighting
- Accident investigation

❖ **Re-fresher Safety Training and Drills**

The EACC will conduct emergency drills to thoroughly test its emergency preparedness and response in projects from commencement of work throughout the duration of the work.

8.3. H&S Meeting & Communication

❖ **H&S Meetings**

H&S matters shall be discussed at all project meetings in addition to specific H&S meetings

- **Monthly Project Management Meeting**

A general H&S meeting will be scheduled monthly with the EACC representatives. During this meeting, among other topics, all H&S issues will be Discussed to ensure the program is being followed as required. Subcontractors shall attend as directed and all EACC managerial level at the project.

- **Weekly H&S Department Meeting**

Weekly site meetings will be held as directed by the Project Manager. Participants at the meeting include Subcontractor's H&S Representatives as required.

❖ **Communications, Consultations and Participation**

The EACC will ensure that communication arrangements are in place to appropriately cascade and disseminate health and safety information to all site personnel. Health and safety information include new policies and procedures, general awareness, lessons learned, sharing of good practice and health and safety campaigns and initiatives.

I. The EACC will include the following methods in their communication arrangement, as a minimum:
II. Meetings: Health and Safety meetings shall be conducted on a weekly basis separate from other meetings that have safety on the agenda.
III. Safety Alerts: Safety alerts shall be produced after a major accident or when appropriate.
IV. Notice Boards: Notice boards shall include relevant emergency procedures, policy statement, safety alerts or updates, as a minimum.
V. Posters and Signs: Posters and signs shall focus on themes relevant to site-specific work activities/hazards.
VI. Safety Awards: A safety awards scheme shall be initiated to recognize and reward the individuals who have achieved positive performance in health and safety. The scheme shall be on a monthly basis and communicated throughout the project.
VII. The EACC will ensure employees are consulted on H&S matters and seek their feedback in reducing work-related injuries and or health impacts. This may include, but are not limited to the following:
   - The communication procedure for raising health and safety issues within the company hazard identification, risk and opportunities assessment and determination of controls; incident investigation.

VIII. participation in the development and review of the H&S Policy, objectives, targets and programs;

IX. Implementation of the H&S program and supporting procedures.

❖ **Health and Safety Incentive Program**

The EACC will actively participate in the Project Health and Safety Incentive Scheme. TMC may implement health and safety initiatives, promotions, awards or similar schemes at any time throughout the Project.

❖ **Language Barriers and Communication Issues**

The EACC will ensure that their workforce fully understand the site health and safety requirements, including emergency arrangements and site rules in place. The language needs of personnel shall be addressed during induction and through training. Emphasis shall be placed on ensuring proper supervision of all staff and those who may have difficulties in understanding verbal or written communications. Where practicable, pictorial signage shall be used.

The EACC will ensure that those who have responsibility for managing personnel on the Project are able to communicate in English, both written and oral. To a standard appropriate to the tasks being performed. The Contractor may allow personnel who are not competent in the English language only if they can demonstrate that:

- Such team members can give oral instructions and warnings to others

- Such team members shall receive the required health and safety training/briefing (including any emergency procedures) before commencing work in a form that they understand
- Appropriate arrangements are in place to ensure that instructions are effectively communicated to and understood by all team members
- Particular attention is given to the communication requirements of personnel conducting critical works, ensuring that a translator is available who can instruct the non-English speaking personnel in safe practices and other operational matters.
- A reasonable ratio of non-English speaking personnel to each translator is maintained at all times

The EACC will ensure that special provisions for critical work instructions conveyed by the translator are recorded as being received and clearly understood by each non-English speaking personnel. Such records shall include those for safety induction, emergency procedures, safety method statements and safety awareness talks.

- **Tool Box Meetings**

As part of the projects site requirements and H&S Education Program, H&S Site Representatives (Engineers & Supervisors) will conduct regular toolbox meetings with the site employees. Meetings will be held on daily basis and topics for Discussion will include those related to the safety of the employees as well as materials (if applicable) as supplied by the Project Manager. Typical topics to be Discussed include the proper use of PPE and the, handling of heavy materials.

It will be the responsibility of the H&S Site Representatives to ensure that all employees attend the toolbox meetings. Forms will be available to record topics covered, date performed, and personnel attending.

- **Weekly - Tour (Safety Walk through)**

The H&S management will review each week an area or a location of the work site. This tour shall be recorded and Discussed in the H&S and staff meetings with all H&S deficiencies observed. Corrective action items will be assigned to the respective parties. The site walk through will be conducted before the weekly meetings.

8.4. Rewards and Recognition

The key to the incentive plan is recognition. Recognition is most simply defined as appreciation. Since everyone likes to win something, award programs must include the one important ingredient to success recognition.

The savings in terms of impact on a company's bottom line through days of lost work, decreased injuries and decreased insurance costs - and of course the safety of workers is very attractive.

Rewards and Recognition Plans is divided in to two (2) categories:

1. Best Worker of the Project.
2. Best Worker of the Month.

❖ **CRITERIA**

1. Best Worker of the Project

    a. Demonstrated commitment to health and safety in the workplace. Commitment goes beyond the requirements of the employee(s) role, it is proactive and preventative.
    b. Works towards continuous improvement of health and safety in the workplace. For example, activities/actions taken to prevent injuries or illnesses, prevention of unsafe conditions or practices.
    c. Promote a work and service environment that is respectful, collegial and supportive

2. Best Worker of the Month

    a. Works towards continuous improvement of health and safety in the workplace. For example, activities/actions taken to prevent injuries or illnesses, prevention of unsafe conditions or practices.
    b. Promote a work and service environment that is respectful, collegial and supportive

❖ **SELECTION PROCESS**

- Projects Managers to distribute the form (**SAFETY AWARD NOMINATION FORM – EACC-H&S-FRM-20** (see Annex-A) to his team who want to nominate a qualified staff.

- The Project Manager must sign the submitted form for all submissions to demonstrate the emphasis that each team has place on the employee recognition program and to indicate his support of the nominations.

- The project manager will forward the list of nominated staff to Health and Safety Manager for selection process.

❖ **Record Keeping**

- Award nominations and suggestion formats are initiated by project managers; safety suggestion is recorded by supervisors on behalf of staff who cannot write English. (Arabic submission is translated).
- Nominations reviewed by Health and Safety Engineer and forwarded to HSE Dept. for confidential filing.
- Copy of the certificate will be displayed at project locations with photographs.

Annex-A

EXCELLENCE APPROACH CONTRACTING COMPANY		
Document name:	`SAFETY AWARD NOMINATION FORM	
Document ID:	EACC-H&S-FRM-20	Rev: 00
Effective Date:	13/05/2024	

Purpose of the program:

Purpose of the safety award program is to recognize employee's/project management who have demonstrated safety in an exceptional manner in the performance of the job/duties to TMC projects.

Eligibility for safety award:

All EACC employees regardless of salary scale. Excluding persons who have received award with in the past year. Nominees must have been employed by EACC for minimum of six months.

Criteria for selection:

Using the following criteria, please explain why this employee should be considered for the EACC safety award:

- The nominee must abide by all safety regulations.
- The nominee must not have reprimanded, suspended, etc for repeatedly violating safety regulations.
- The nominee must exhibit continuing commitment to safety in the work place.

FOR EMPLOYEE OF THE QUARTER			
Department:		Position:	
Nos: of years working with EACC:			
Name of nominated employee:			

REASON FOR NOMINATION

FOR SAFE QUARTER OF THE PROJECT	
Department:	
Project name:	
Project manager's name:	

REASON FOR NOMINATION

NOMINATED BY			
Name:		Signature:	
Date:			

REVIEWED/CONFIRMED BY			
Name:		Signature:	
Date:			

8.5. Housekeeping

Housekeeping plays an important role in assessing the safety performance of the project. Special attention must be given to housekeeping.

- During the course of construction works, all debris and scrap material shall be kept away from the work area. Work areas shall be maintained clean throughout the duration of work.
- Trash containers shall be provided for the collection and segregation of waste, trash, oily and used rags and other debris. Skips (Dumpster Type) must be positioned nearby and emptied promptly when full.
- EACC shall notify the Client of any hazardous waste they will generate during performance of the work.
- EACC shall not pour, bury, burn, or dispose of in any way a chemical in the work site.
- EACC shall clear all combustible debris to a solid waste disposal site. Burning of debris or rubbish at site is strictly forbidden.
- Materials and supplies shall be stored properly at designated areas so as not to obstruct access ways and to allow easy cleaning of the area.
- In areas where equipment might drip oil or cause other damage to the floor surface, a protective cover of heavy gauge, flame resistant oil-proof sheeting shall be provided between the equipment and the floor surface sheeting so that no oil or grease contacts the concrete. (This requirement is applicable to both finished and unfinished floors.)
- All hoses, cables, extension cords, and similar materials shall be arranged and grouped so that they will not block access ways and will permit easy cleaning and maintenance.

- **Orderliness**

- Store trash, waste, and scrap in proper containers.
- Keep small items in boxes or bins.
- Keep the floor clear of tools, rod ends, metal shavings and other construction tools and materials.
- Ensure that worktables are occupied only by work at hand and the tools required for the work.
- Do not leave aerosol cans on work areas.
- Work areas shall be in an orderly manner as work progresses.
- Keep cords and hoses two (2) meters overhead or lay them flat out of walkways.
- Keep all material, tools and equipment in a stable position (tied, stacked or choked) to prevent rolling or falling.
- Maintain clear access to all work areas.
- Clean up liquid spills immediately.
- Keep barricades orderly and in good condition.
- Never throw tools, material or scrap below when performing housekeeping on an elevated area.
- Always maintain proper illumination of working areas.

- Inspection of tools is part of good housekeeping. Worn or broken tools should be reported to immediate supervisor and returned to tool room immediately.

- **Material Stocking**

All materials should be piled at designated areas and properly secured. Each kind of material has its own characteristic.

Before stocking material, due consideration to fast and slow- moving items shall be made. Proper spacing shall also be considered to ensure safety of the materials and the personnel assigned to the area. Other issues to consider are:

- The stability of the floor or platform.
- The stability of the ground.
- The height of the stockpiled materials.
- The use and accessibility of proper equipment to lift heavy material.

- **Access**

- Walkways, stairways and emergency exits must be free of obstruction at all times.
- Do not block emergency equipment, firefighting equipment and electric disconnect switch/ box
- Stockpile material so that workers and material-handling equipment can reach readily.

NOTE: In general, all trash and scrap materials should be placed in designated trashcans and routes leading to and from work areas must be free of obstructions and well lit.
Daily housekeeping shall be performed fifteen (15) minutes before the start of each work shift and fifteen (15) Minutes before quitting time.

9. Project Safety Field Procedures (Safe System of Work & Procedures)

In all area of work, the responsible Manager ensures that a safe system of work is operated. Where potentially hazardous situations exist, then they need to ensure proper procedure are used.

This H&S plan has provided the general guidelines on the key issues in the implementation of a safe and healthy environment for the site. Where applicable, EACC will develop project specific procedures to control potential safety and health hazards.

9.1 Safety rules are set to be obeyed; failure to obey safety rules may result in disciplinary actions.

1. Personal safety equipment must be worn as prescribed for each job, such as: safety glasses for eye protection, hard hats at all times within the confines of the site area, gloves when handling materials, and safety shoes are necessary for protection against foot injuries.
2. Precautions are necessary to prevent sunburn and to protect against burns from hot materials.
3. If any part of your body should come in contact with an acid or caustic substance, rush to the nearest available water and flush the affected part. Seek medical aid immediately.

4. Watch where you are walking. Don't run.
5. The use of illegal drugs or alcohol or being under the influence of the same on the project shall be cause for termination. Inform your supervisor if taking strong prescription drugs that warn against driving or using machinery.
6. Do not distract the attention of fellow workers. Do not engage in any act which would endanger another employee.
7. Sanitation facilities will be provided for your use. Defacing or damaging these facilities is forbidden.
8. A good job is a clean job, and a clean job is the start of a safe job. So keep your working area free from rubbish and debris.
9. Do not use a compressor to blow dust or dirt from your clothes, hair, or hands.
10. Never move an injured person unless it is absolutely necessary. Further injury may result. Keep the injured as comfortable as possible and utilize job site first-aid equipment until an ambulance arrives.
11. Only certified first aiders are allowed to deal with an injured person.
12. Always locate the nearest firefighting equipment and be trained on how to use it.
13. Do not use power tools and equipment until you have been properly instructed on how to use such equipment. Authorization is required.
14. Be sure that all safety guards are in place. Do not remove, displace, damage, or destroy any safety device or safeguard furnished or provided for use on the job, nor interfere with the use thereof.
15. Never adjust or repair any equipment while it is connected to a power source. Always disconnect the equipment before repair.
16. Use the "3 point contact" rule when using a ladder.
17. Portable ladders in use shall be equipped with safety feet unless ladder is tied, blocked or otherwise secured. Step ladders shall not be used as a straight ladder.
18. Ladders must be extended three feet above landing on roof for proper usage.
19. Defective ladders must be properly tagged and removed from service.
20. Keep ladder bases free of debris, hoses, wires, materials, etc.
21. Build scaffolds according to manufacturers' recommendations and Construction Safety Standard.
22. Scaffold planks shall be properly lapped, cleared or otherwise secured to prevent shifting.
23. Use only extension cords of the three-prong type. Use ground fault circuit interrupters at all times and when using tools in wet atmosphere (e.g. outdoors) or with any temporary power supply and check the electrical grounding system daily.
24. Safety Harness and Safety Life Line must be used for working at height. Safety harness must be full body harness. Always keep your line as tight as possible.
25. Never throw anything "overboard." Someone passing below may be seriously injured.
26. Open fires /Smoking Cigarettes are prohibited.
27. Know what emergency procedures have been established for your job site. (Location of emergency phone, first aid kit, fire extinguisher locations, evacuation plan, etc.)
28. As per the EACC Emergency Response Procedure, never enter a manhole, well, shaft, tunnel or other confined space that could possibly have an irrespirable atmosphere because of lack of oxygen, or presence of toxic or flammable gas, or has a possibility of engulfment by solids or liquids.
29. As per the EACC Confined Space Procedure, Make certain a qualified person tests the confined area with an appropriate detector before entry. This is necessary safety equipment is worn. Standby person may be required to be stationed at the entrance.

9.2. Personal Protective Equipment

The Project Management team provides where it is assessed that the hazards relating to the employees' job require it, personal protective clothing and equipment. All equipment will conform to international standard.

- The EACC will provide their personnel with safety helmets, eye protection and foot protection. EACC will provide their personnel with the following PPE:
- The PPE to be provided shall depend on the nature of work that their personnel are performing and the working environment The EACC will ensure that their personnel always wear high visibility clothing as the outer layer of clothing when working on the Project in accordance with international best standards. Shorts, sleeveless shirts and any loose clothes i.e. Shalwar kamiz, Thoub are prohibited on the Project.
- The EACC will ensure that their personnel always wear the required PPE on site at all times.
- The EACC will identify their personnel's need for other types of PPE as part of their job hazard analysis or risk assessment process.
- The EACC will display signage detailing the requirements for mandatory PPE throughout the Project. Signage shall be in a format that is easily recognizable to all persons on site regardless of their preferred language

Mandatory PPEs for all employees and visitors.

- Safety Helmet
- Safety Goggles
- Safety Gloves
- High Visibility Vest
- Safety Shoes

9.3. Hazardous Materials (Written Hazardous Communication Program)

General: The following hazard communication program has been established, which will be available for review by all employees.

- **Hazard Determination**

1. A list of hazardous substances used in the workplace is maintained and readily available at the worksite.
2. There is a written hazard communication program addressing Safety Data Sheet (SDS), labeling, and employee training.
3. Each container of a hazardous substance (vats, bottles, storage tanks) is labeled with product identity and a hazard warning(s) (communicating the specific health hazards and physical hazards)
4. Material Safety Data Sheets are readily available at all times for each hazardous substance used.

EACC H&S Manager will rely on Safety Data Sheets from suppliers to meet determination requirements.

- **Labeling**

Supervisor/Staff/Personnel shall be aware that all containers must be properly labeled; unlabeled containers must be reported to the H&S Engineer or in-charge.

All labels shall be checked for:

1. Identity
2. Hazard
3. Name and address of responsible party

Supervisors shall be responsible for seeing that all portable containers used in their work areas are labeled with identity and hazard warning.

➢ **Safety Data Sheet (SDS)**

The SDS are the primary means that the safety engineer will use to convey the necessary information about the hazards of the substances used. The manufacturers and importers are responsible for providing the H&S Lead with the SDS. The manufacturer must provide the H&S Lead with adequate information to use the substance safely.

COSHH Assessment

Project	**Total Station**	**Department**	**EACC**
Location		**Client**	**TMC**

1. EACC-QSHE-COSHH-001

Product Name:				**Supplier / Manufacturer Name:**	
Identifies Uses :				**Dilution Rate:**	
Location of process being carried out?					
Identify the persons at risk:	Operatives ☐ Applicators		Staff ☐		Public ☐
Classification *(state the category of danger)*					
	☐ Toxic		☐ Oxidizing		☐ Gas Under Pressure
	☐ Harmful/ Irritant		☐ Flammable		☐ Carcinogen
	☐ Corrosive		☐ Explosives		☐ Dangerous for the environment
Hazard Type					
☐ Gas ☐ vapor ☐ Mist ☐ Fume ☐ Dust ☐ Liquid ☐ Solid ☐ Other (State)					
Route of Exposure					

☐ Inhalation	☐ Skin	☐ Eyes	☐ Ingestion	☐ Other	(State)	.....

State the Risks to Health from Identified Hazards

Control Measures:

Personal Protective Equipment *(state type and standard)*

☐ Dust mask		☐ Visor	
☐ Respirator		☐ Goggles	
☐ Gloves		☐ Overalls	
☐ Footwear		☐ Other	

First Aid Measures

General Advice Have the product container, label or Safety Data Sheet with you when calling the emergency number, a poison control center or physician, or going for treatment.

Eye contact :

1. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
2. Remove contact lenses, Immediate medical attention is required.

Skin contact :

1- Take off all contaminated clothing immediately. Wash off immediately with plenty of water.
2- Wash contaminated clothing before re-use.

Inhalation:

1- Move the victim to fresh air. If breathing is irregular or stopped, administer artificial respiration.
2- Keep patient warm and at rest. Call a physician or poison control center immediately.

Ingestion:

- If swallowed, seek medical advice immediately and show this container or label.
- Do NOT induce vomiting.

Storage

No special storage conditions required. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep away from food, drink and animal feeding stuffs.

Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

Personal precautions:

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Stop leak if you can do it without risk.

Environmental precautions:

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and material for containment and cleaning up

Methods for cleaning up :

1- Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).
2- Clean contaminated surface thoroughly.
3- Retain and dispose of contaminated wash water.

Disposal of Substances & Contaminated Containers

Hazardous Waste ☐ Skip ☐ Return to Depot ☐ Return to Supplier ☐ Other

(If Other Please State):

Is exposure adequately controlled?	**Yes** ☐ No ☐

Risk Rating Following Control Measures

High ☐ Medium ☐ **Low** ☐

- **Physical and Health Hazards of the Hazardous Substance**

Employees are to be trained specifically about the hazards of the substances in their work areas. This may be done by specific hazardous substances or by categories of hazards, but in any case, the employee is to be aware that information is available on the specific hazards of individual hazardous substances through SDS.

Employees may be trained using common types or generic chemical groups which they will encounter or by reviewing the specific SDS for each material.

- **Employee Information Training**

1. Measures to protect employee from the hazards (i.e., work practices, engineering controls and the use of personal protective equipment).
2. Measures to ensure that all employees know the physical and health hazards of the hazardous substances.
3. Measures to teach all employees the Emergency and first-aid procedures.

- **Hazardous Unusual Task**

On occasion, employees are required to do work in hazardous areas (such as confined spaces). Prior to starting work in such areas, each employee will be given information about the hazards involved in these areas, including:

- Specific chemical hazards.
- Protection/safety measures the employee is required to take to reduce risks.
- Measures the company has taken to lessen the hazards, including ventilation, respirators, the presence of another employee, and emergency procedures.

It is the policy of EACC that no employee will begin work in a confined space, or any non-routine task, without first receiving a safety briefing.

9.4. Scaffold Safety

Standard Safety Procedure

1. Scaffold must be sound, rigid and sufficient to carry its own weight plus two times the maximum intended load without settling or displacement. It must be erected on solid footing.
2. Unstable objects, such as barrels, boxes, loose bricks or concrete blocks must not be used to support scaffolds or planks.
3. Scaffold must not be erected, moved, dismantled or altered except under the supervision of a competent person (supervisor).
4. Scaffold must be equipped with guardrails, mid-rails and toe boards.
5. Scaffold accessories such as braces, brackets, trusses, screw legs or ladders that are damaged or weakened from any cause must be immediately repaired or replaced.
6. Scaffold platforms must be tightly planked with scaffold plank grade material or equivalent.
7. Rigging on suspension scaffolds must be inspected by competent person (supervisor) before each shift and after any occurrence that could affect structural integrity to ensure that all connections are tight and that no damage to the rigging has occurred since its last use.
8. Synthetic and natural rope used in suspension scaffolding must be protected from heat-producing sources.
9. Employees must be instructed about the hazards of using diagonal braces as fall protection.

10. Scaffold can be accessed by using ladders and stairwells.

- **Ladder Specification and Inspection**

General: Ladders and stepladders shall be maintained in good condition at all times. Joints shall be tight, all hardware and fittings shall be securely attached, and movable parts shall operate freely without binding. Ladders and stepladders shall not be painted. Where a ladder is carried by one man, the front end should be kept high enough to clear men's heads and special care shall be taken at corners and blind spots.

a) Selection

- A ladder must be of the proper length for the job to be done. If it is to be used for access or as working place, it shall extend from 36 inches to 42 inches from the landing or above the highest rung.
- Aluminum ladders shall not be used where there is a likelihood of contact with materials harmful to aluminum such as caustic liquids.
- Do not use metal ladders around electrical services or welding. Such ladder shall have a warning notice attached to guard against use near electrical equipment.

b) Position

- The side rails of a ladder shall be equally supported on equally firm ground surface.
- Ladders shall not be used in horizontal position as platforms, runways or scaffolds.
- Ladders shall not be supported on their rungs or cleat. Rungs or cleats shall not be used to support planks.
- Ladders shall always be used at an angle of 75%.
- Metal reinforcing shall be on the underside of the rung.
- Both side rails of a ladder shall be evenly supported at the upper resting place. Side rails must be securely tied off to prevent movement.
- Ladder landing places shall be provided at least every 9 meters (30 feet) of height and shall be fitted with a guard rail system and toe boards.
- Where ladders have to be suspended, both side rails shall be lashed top and bottom to provide equal support. Should the ladder is very long, it shall be lashed also on the middle section to prevent lateral movement.

c) Safe Work Practices

- Two or more people are not permitted to work from the same ladder unless it is specifically designed for two people. Safety instructions shall be given before employees use a two-person steps ladder.
- Splice a 13 mm (1/2-inch) rope to the top back rung of stepladders or to the third rung from the top of straight and extension ladders to provide a tie-off rope when the ladder is set up.
- Climbing trestle ladders is not permitted. Many employees use trestle ladders and extension trestle ladders as a tool of their trade; however, trestle ladders are not designed for climbing. Trestle ladders support planks or scaffold boards. When using trestle ladders for scaffold board supports, a separate ladder is to be used to access the scaffold deck.

- When not secured at the top, ladders shall be properly anchored at the base to prevent the footings from slipping and a second person shall hold the ladder firm in place while being used.
- Makeshift wooden ladders and painted wooden ladders shall not be used.
- When ladders are being used for accessing at the same point more than once, it shall be properly secured at the top and extend at least one meter above the landing or work surface.
- Men ascending or descending from the ladder shall not carry tools and materials ion their hands.
- A man working on or from a ladder must always have a secured handhold and both feet on the same rung or cleat. If the work to be done requires both hands, a full body harness shall be used.
- Only one person shall be on a ladder at a time.

d) Ladder Specifications

- Straight ladders must not be longer than 6 meters (20 feet).
- Extension ladders must not be longer than 11 meters (36 feet) when fully extended.
- All straight and extension ladders must have non-slip feet.
- Stepladders and platform ladders must not be longer than 3.6 meters (12 feet) as determined by the front rail.
- Wooden ladders may not be painted, except for the platform and top step, which should be painted to indicate not to step there. Clear preservatives may be used so defects will not be hidden.
- Ladders may be constructed of wood, metal or fiberglass.

e) Inspecting Ladders

Ladders must be in good condition at all times. The user shall inspect the ladder before each use. After quarterly inspecting and certifying all ladders, a qualified person shall attach an inspection sticker that includes the inspection date, color code for the month, serial number, supervisor and inspector's name and their signature.

Bends, dents, cracks, lose or missing rivets, disconnected braces and corrosion weaken a ladder seriously. Carefully inspect the area around rivet points on fiberglass ladders for hairline stress cracks. Destroy any defective ladders immediately or remove them from site immediately.

Rungs shall be properly mortised into side rails. Cleats shall be inset by 2.25 cm (7/8 in) or filler blocks used on the side rails between the cleats. Cleats shall be uniformly spaced 30.5 cm (1 foot) between centers.

f) Storing and Transporting Ladders

Ladders are to be stored on racks protected from the elements with good ventilation and away from excessive heat. Storage racks shall have sufficient supporting points to avoid sagging.

Long ladders need support every 1.8 meters (6 feet). Do not put materials on stored ladders. Properly support ladders being transported on road, street and highway motor vehicles. Supporting points should be made of material such as wood to minimize chafing and the effects of road shock.

9.5. Permit to Work Procedure

The EACC will develop and implement Work Permit System shall cover the following:

- Cold work permit
- Confined Space Permit
- Hot Works Permit
- Excavation Permit
- Lifting Permit

a) Issuance of Permits

Work permits authorizations shall be issued only by client or owner personnel.

b) Acceptance of Permits

Permits shall be received only by authorized EACC personnel who have successfully completed the training program on work permits. It is the responsibility of the permit receiver to do the following:

- The receiver shall review with issuing personnel the hazards associated with the job and any specific instructions listed on the work permit dealing with the type of work to be done.
- The receiver shall ensure that all the requirements and precautions stated in the work permit and Job Safety Analysis are complied with.
- The receiver shall ensure that the issuer understands JSA, what, where and how work is to be performed.
- The receiver shall ensure that appropriate actions and communication are taken for the safety of the personnel doing the job.
- The receiver shall ensure that the work permit is displayed at a visible location near the worksite until the work is completed.
- The receiver of the work permit shall communicate to the issuer of any change in the JSA/permit condition or any abnormality observed which would make the permit invalid and stop work. Then JSA had to be rewritten to reassess the situation.
- The receiver shall remain in the area as part of the workgroup, so that he is readily available to the issuer and the workmen on the job.
- Permit receiver shall act as a group leader in case of alarm/emergency.
- The receiver shall ensure that housekeeping is carried out on completion of the job and that the work permit is returned to the issuer after completion of the job, or if it is not to be continued in the next shift.
- The receiver shall visit the job site with issuer to sign off the work permit.

- The receiver shall ensure that the fire watch/stand-by man shall be an employee who is authorized by EACC to carry out the activities of fire watch/ stand-by man.
- Receiver shall ensure that the materials, equipment, etc. received are properly decontaminated before taking to storage.

c) Duration of Permits

- EACC shall follow the client PTW procedure in this regard otherwise the below procedure will be adopted.
- Work permits shall be valid only for the job for which they are issued. Permits are valid for to seven (7) days, if work is not finished in seven (7) days a new permit will be issued. Permits are to be extended only when the job is continuing and conditions are not changed and new issuers and receivers shall sign the extended permit. Should conditions change, operations shall notify the work crew and an evaluation be made as to withdrawing, revising, or reissuing the permit. Issuer shall specify the validity of the work permit to a maximum of one hour after end of his shift to facilitate endorsement by incoming shift, if the work is to continue to the next shift. During this one hour period or before endorsement of new shift, Supervisor of the work group shall be responsible for the safety and work.
- Permits shall be invalidated or cancelled under any of the following conditions:
    - If the conditions on the permit are not complied with.
    - If the area or unit conditions change, for example venting, spillage or severe weather conditions occur, etc.
    - If an incident took place.
- Permit Suspension
    - Any person is authorized to stop work, which is being done under a work permit, if he believes conditions under which the permit was issued have changed or are about to change. The person shall immediately inform work permit issuer after stopping the job.
    - It is the responsibility of both issuer and receiver of the work permit to ensure that all permit conditions and JSA are complied with in full at all times. Any deviation without appropriate authorization shall result in immediate

9.6. Welding Cutting & Other Hot Works

Method of welding

EACC will follow the following method for welding activity

- **Butt Fusion**
  Butt fusion uses a heated tool to melt the squared ends of two HDPE pipes. Once they reach a specific temperature and holding time the tool is removed and the pipe ends are pressed together to form a weld. **No naked flames and sparks produced during the butt welding work.**
- **Electric fusion**
  It heat up melting the fitting and the surrounding pipe surface with the help of electrode.

Competency: Certified and competent plumber will carry out the butt welding activates.

Safety tools: Fire extinguisher, lather hand glove and mandatory PPE's.

General: Only employees that have been trained and certified in the use of cutting and welding equipment are allowed to use the equipment.

Operators of equipment should report any equipment defect or safety hazards and shall immediately discontinue the use of equipment until necessary repairs have been made. Only qualified personnel shall make repairs.

i. Areas where welding or burning operation is performed shall be properly enclosed with fire resistant blankets to contain ignition sources such as sparks in order to prevent occurrence of fire.
II- Remove any flammable material from the area, including aerosol cans.
III- Assign a firewatcher wearing an orange reflective vest.
IV- Remove or protect combustible materials with flame resistant blanket from sparks and slag.
V- A 6-kilogram or larger dry chemical fire extinguisher shall be within 6 meters (20 feet) from any hot work activity.
VI- Proper barriers or screens must be erected to protect others from the arc rays (flash burn).
VII- Inspect welding machine and its apparatus such as grounding cables, clamps, etc., before each use and as frequently as possible.
VIII- Inspect hoses, gauges, torches and cylinders each day before use. Keep hoses out of walkways or lay overhead.
IX- Avoid breathing fumes. Use exhaust systems such as blowers or use approved respirators.
X- No welding or burning shall be performed on a closed vessel or tank such as drums, barrels and the like that has not been decontaminated.
XI- All hot work equipment must be inspected and must bear the current color-coding before use at site
XII- A firewatcher is required when hot work is to be performed:

a. When doing hot work in a classified or restricted area.
b. Where combustible material stored within 11 meters (35 ft.) of Hot Work;
c. In all locations where fire may occur;
d. Combustibles are greater than 11 meters (35 ft.) away but are easily ignited;

- **Protective Clothing**

Protective clothing required for welding and burning varies with the size, nature and location of the work to be performed.

I- Only fire resistant clothing must be worn.
II- All welders shall use flameproof gloves.
III- Clothes should be free from oil and grease.
IV- Flameproof leather (or suitable material) aprons should be considered if long-term exposure to radiant heat or sparks.

- **Respiratory Protection**

Proper ventilation and or respiratory protection shall be provided whenever there is the potential for the build-up of hazardous fumes or vapors generated from burning, cutting or welding of lead base metals, exotic metals such as zinc, cadmium, mercury, beryllium or exotic paints.

Hot Work involving exotic metals and or paints to be performed inside confined space requires the approval of the H&S Manager or his authorized representative.

9.7. Power Lockout Procedure

The purpose of this procedure is to assure that employees are protected from unintended machine motion or unintended release of energy which could cause injury.

Supervision Team Responsibilities

I- Each supervisor, shall train new employees and periodically instruct all of their employees regarding provisions and requirements of this lockout procedure.
II- Each supervisor/foreman shall effectively enforce compliance of this lockout procedure including the use of corrective disciplinary action where necessary.
III- Each supervisor/foreman shall assure that the locks and devices required for compliance with the lockout procedure provided to their employees.
IV- Prior to setting up, adjusting, repairing, servicing, installing, or performing maintenance work on equipment, machinery, tools, or processes, the supervisor shall determine and instruct the employees of the steps to be taken to assure they are not exposed to injury due to unintended machine motion or release of energy.

Employees Responsibilities

I- Employees shall comply with the lockout procedure.
II- Employees shall consult with their supervisor or other appropriate knowledgeable management personnel whenever there are any questions regarding their protection.
III- Employees shall obtain and care for the locks and other devices required complying with the lockout procedure.

Equipment Machine and Hand Tools

- **Machine Guarding**

I. The EACC will conduct a job hazard analysis for each item of machinery and equipment used on site. Sufficient and suitable standby plant shall be immediately available in cases where the safety of the works or of personnel depends on mechanical plant. Machine guards shall not be removed.
II. The EACC will make arrangements for all mobile plant and vehicles that enter the site to be EACC checked by a third party approved by TMC to ensure that the following items are provided and in good working order prior to entering the site:

- Operating controls
- Braking systems
- Steering systems
- 360-vision capabilities for operators.
- Gauges and warning lights
- Windscreens and wipers
- Reversing alarms
- Rear view mirrors

- Roll over protection devices
- Wheels, tires and track
- Pneumatic and hydraulic hoses
- Seat belts and anchors
- Fuel lines and tanks
- Electrical control systems
- Suspension and stabilization systems
- Bodywork, covers and panels

III. The EACC will remove all defective mobile plant and vehicles from work areas. Repair work shall only be carried out by trained and authorized person. Whenever maintenance work is ongoing, the machinery or equipment shall be isolated and de-energized.

IV. The EACC will ensure that all the operators hold relevant KSA driving licenses for the category of vehicle that they operate. In addition, operators and heavy equipment shall possess relevant licenses and third parties inspection certificate. Operators shall use heavy equipment and vehicles only in accordance with the manufacturers' operating manuals.

- All electrical equipment must be maintained as per manufacturer requirements.

I. All the portable electrical equipment, portable GFCI's, extension leads, and cords must be tested, inspected every month.
II. The inspections must be conducted by an electrical worker and recorded.
III. Portable electrical equipment, extension leads, and cords will be tagged after inspection. The following color coding will be used for electrical equipment testing:

- January to March **Red**
- April to June **Green**
- July to September **Blue.**
- October to December **Yellow**

The responsible person to issue the permit will be the Project manager or his equivalent.

I. The permit issuer will ensure that all the requirements have been implemented accordance with the activity.
II. Permit issuer ensure that the TMC team has been informed.

Permits shall be received only by authorized person.
EACC personnel (Site Engineer) or who have successfully completed the training program on work permits. It is the responsibility of the permit receiver to do the following:

I. The permit receiver should Discuss hazards and precautions with the Issuer
II. The receiver shall review with issuing personnel the hazards associated with the job and any specific instructions listed on the work permit dealing with the type of work to be done.
III. The receiver shall ensure that all the requirements and precautions stated in the work permit and Job Safety Analysis are complied with.
IV. The permit receiver should physically confirms all isolations.
V. Types of Permits

1. Cold work Permit
2. Hot Work Permit

3. Excavation permit
4. Lifting Permit
5. Confined space permit

I- The power source of any equipment, machine, tool, or process to be set-up, adjusted, repaired, serviced, installed, or where maintenance works is to be performed and unintended motion or release of energy could cause personal injury,

II- Each employee doing the work shall lock out such a power source. Sources of energy, such as springs, air, hydraulic and steam shall be evaluated in advance to determine whether to retain or relieve the pressure prior to starting the work.

III- Safety locks are for the personal protection of the employees and are only to be used for locking out equipment.

IV- Safety locks, adapters, and "Danger Tags" can be obtained from a supervisor.

V- Equipment locks and adapters can be obtained from a supervisor. The sole purpose of the "Equipment" lock and adaptor is to protect the equipment during periods of time when work has been suspended or interrupted. The locks are not to be used as a substitute for the employee's personal safety lock.

VI- The employee to whom it was issued and the superintendent shall retain the only other key to the lock shall retain one key of every lock issued.

VII- Employees shall request assistance from their supervisor if they are unsure of where or how to lockout equipment.

VIII- Any questions concerning the lockout procedure should be directed to the employee's supervisor.

- **Locking out and isolating the Power Source**

I. The EACC will establish a program consisting of energy control measures, procedures, training and periodic inspections to control energy sours. The EACC will ensure that Lockout-Tag out Requirements are implemented before an employee performs any inspection, repair maintenance or cleaning on machinery/equipment, where unexpected energizing, start up or release of stored energy could occur. The machinery/equipment shall be isolated for the energy source and rendered inoperative.

II. If an energy-isolating device is capable of being locked out, then The EACC energy control measures shall utilize lockout. If an energy-isolating device is not capable of being locked out, then The EACC will ensure that measures are put in place to circumvent any possibility of accidental energization/start-up of the system.

III. When a tag out system/device is used on an energy-isolating device which is capable of being locked out, the tag out device shall be attached at the same location that the lockout device would have been attached, and the employer shall demonstrate that the tag out program will provide a level of safety equivalent to that obtained by using a lockout program.

IV. The EACC will ensure that their energy control procedures clearly and specifically:

- Outline the scope, purpose, authorization, rules and technique to be used for the control of hazardous energy.
- Detail the specific steps for shutting down, isolating, blocking and securing machines or equipment to control hazardous energy.
- Detail the means to enforce compliance to the procedures.

V. The EACC will ensure that lockout and tag out devices are singularly identified and the only devices to be used for controlling energy. These devices shall not be used for other purposes and shall meet the following requirements:

VI. The EACC will maintain a record that the periodic inspections have been performed. The record shall contain:

- Training records
- The list of authorized persons
- The type of machine or equipment on which the energy control procedure was being utilized
- The date of the inspection
- The name of the employees included in the inspection
- The name of the person performing the inspection
- The manufacturer's catalogue with all necessary information.

➢ **Performing Test and Adjustments during Lockout**

I- Power is to be turned on when it is required to perform tests or adjustments. All of the rules pertaining to removing locks and restoring power shall be followed. The equipment or process shall again be locked out if it is necessary to continue work after completing the test or adjustments.

II- If the employee leaves the job before its completion, such as job reassignment, the employee shall remove his/her personal lock and adaptor and replace it with an "Equipment" lock and adaptor. In addition, the employee will prepare and attach a "Danger Tag" indicating the reason the equipment is locked out (should more than one employee be assigned to the job, the last employee removing his/her lock will be responsible for affixing the "Equipment" lock, adaptor and the "Danger Tag").

III- Upon completion of the work, each employee will remove his/her lock, rendering the machine operable when the last lock removed.

IV- The employee responsible for removing the last lock, before doing so, shall assure that all guards was replaced, the equipment, machine, or process is cleared for operation, and appropriate personnel notified that power is being restored.

➢ **Emergency Safety Lock Removal**

The supervisor, or other designated management person, will be authorized to remove an employee's lock under the following conditions:

I- Receipt of a written request signed by the appropriate supervisor that shall state the reason the employee is not able to remove the lock.

II- The supervisor is responsible for making certain all the requirements for restoring power followed.

9.8. Confined Space Entry Procedure

I- The EACC will appoint a competent person to directly supervise the works in confined spaces. The competent person shall hold a certificate of training.

II- The EACC will ensure that any person that enters a confined space have received formal training in the safe methods of entry and working in a confined space. Such training shall include the arrangements all TMC requirements for emergency communication and response. In addition, every person that enters a confined space shall be given a briefing by appointed competent person relating to the specific hazards of the work and the control measures that have been identified.

III- The EACC will ensure that any person that acts as an attendant for confined space work have received training in the safe methods of rescue from a confined space and the arrangements for emergency communications with external emergency services.

IV- The EACC will only permit trained workers, under the direct supervision of an authorized competent person, with confined space attendants present, to enter a confined space.

V- The EACC will ensure that internal combustion engines are not taken into a confined space or operated in a position where their exhaust gasses may be drawn into the confined space.

VI- The EACC will implement a safe working procedure for confined space entry that includes the following:

Detailed rescue plan identifying the method of evacuation, the equipment to be used, the personnel who will rescue, and the critical times to perform the rescue applicable to the condition of the confined space

- Preparation of a Confined Space Entry Permit
- Provision of all equipment necessary for entering and working in the confined space including access
- Lighting equipment
- Mechanical ventilation equipment
- Gas detectors (certified and calibrated)
- Communication equipment
- Personal protective equipment.
- Provision of warning signs and barriers around the confined space entry point
- Setup of emergency communication and rescue equipment
- Issue of a Confined Space Entry Permit
- checking of the atmosphere inside the confined space and installation of ventilation equipment
- Installation of lighting (incandescent) equipment
- Safe access into and work in the confined space
- Monitoring of conditions in the confined space
- Continuous checking and recording of all persons entering and exiting from the confined space by the confined space attendant
- Completion of work and removal of all equipment from the confined space accounting for all persons and equipment that entered the space
- Securing of the entry point to the confined space
- Closing of the Confined Space Entry Permit

The EACC will ensure that all equipment necessary for entering and working in the confined space are manufactured in accordance with internationally recognized standards and carry valid testing certification.

9.9 Power Industrial Equipment Safety Procedure

I- Power Industrial operators shall be competent to operate these vehicles safety as demonstrated by their successful completion of training and evaluation.
II- No employee under 18 years old allowed operating any type of equipment.
III- Power Industrial Equipment shall be inspected weekly for proper condition of breaks, horns, steering, forks and tires.
IV- Power Industrial Equipment shall meet the design and construction requirements established in American National Standard (ANSI) for Powered Industrial Trucks.
V- Written approval from the truck manufacturer shall be obtained for any modification or additions that affect capacity and safe operation of the vehicle.
VI- Smoking is prohibited on all Power Industrial Equipment.

9.10 Barricades, Manhole Covers, Signs and Signals

Barricade

Use of barricades: Required around most excavations, holes or openings in floor or roof areas, edges of roofs and elevated platforms, around certain types of overhead work, and wherever necessary to warn people against falling in, falling through, or falling off.

Erection of barricades

The EACC will appoint a competent excavation supervisor for all excavation work. The level of training and experience required to determine competence of the supervisor shall vary depending on the complexity of the excavation. The EACC will ensure that the supervisor has previous experience of the type of excavation work to be undertaken and has formal health and safety training that is related to the safety of excavation work.

I- The EACC will use temporary safety barriers to protect workers from excavations that are more than 300 mm deep.
II- The EACC will ensure that continuous adequate solid barriers are placed around all excavations over 1.2 m deep and that all solid barriers are fitted with warning signs.
III- To prevent the risk associated with falling objects, The EACC will ensure that excavated materials and other materials and equipment are not stored at the edge of any excavation. A clear distance of 2m shall be maintained around all excavations.
IV- Erect before the hole is cut and extend as the excavation progresses.
V- Numerous excavations in one area may be barricaded effectively by erecting a barricade around the general area.
VI- Must be constantly maintained.

Types

I- **WARNING** - these call your attention to a hazard but offer no physical protection. Example: yellow synthetic tape strung along posts or lathe.
II- **PROTECTIVE** - these warn as well as provide physical protection from falling. Example: wood post and rail, cable and wood post chain. These form a rigid standard 42-inch high top rail and 21-inch high mid-rail.

Manhole Covers

1. Use of Hole-Covers: All holes or openings through floors or decking at all elevations must be provided with Hole-Covers or barricades immediately. Do not store or even set temporarily, material or equipment on Hole-Covers.
2. Placement of the holes covers: Places where holes shall be covered with cover, signs showing the following shall be placed: “Warning-Temporary Hole Cover-Do Not Remove Unless Authorized”.
3. Material: When foot traffic is the only load expected on the cover, three-quarter inch plywood may be used, provided one dimension of the opening is less than 18 inches; otherwise, 2-inch lumber or double 3/4" plywood is required. When equipment loads are expected, one inch steel plate or even greater may be required to furnish the necessary strength of material (four times the heaviest possible load).

Signs & Signals

Visibility

The EACC will set up and maintain warning signage for all excavations in accordance with international standards.
The warning signs shall:

- Clearly state the nature of the hazard
- Instruct people of the correct actions to take
- Be manufactured in accordance with internationally recognized standards
- Be in English, Arabic and the languages preferred (or can be understood) by the workers on the Site

All warning signs and lighted signals shall be placed where they can be seen and easily read. Colors are important; red backgrounds are intended to relay high danger messages, yellow backgrounds are to warn people that exposure to the hazard is possible if entry into the area is necessary, green backgrounds indicate that maximum safety for the area has been created and only normal precautions are necessary, blue letters on White backgrounds are intended to inform people of the safety requirements for that area. Letters must be large enough to be legible from a safe distance.
The EACC will ensure that all safety barriers and barricades comply with the international standards.

Illustration (A)

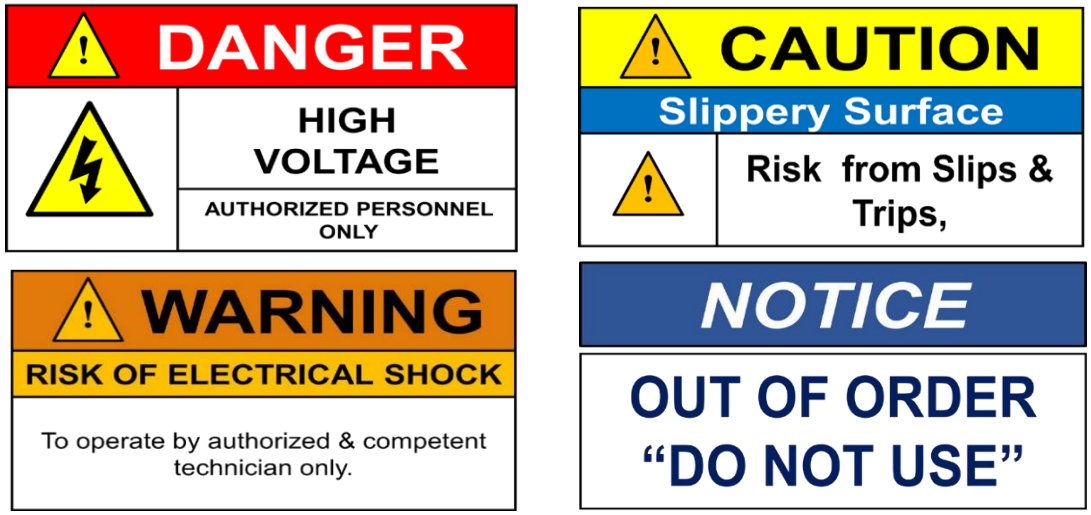


Illustration (B)

WORKING AREA RECOMMENDED TO USE PERSONAL PROTECTIVE EQUIPMENT

- **Site Facilities and Equipment**

The Project Manager will ensure that facilities and equipment are designed, operated and maintained in accordance with standard and applicable legislation and comply with approved work practices.

The Safety Engineer will cooperate with the Project Manager to ensure as far as practicable that the facilities and equipment are safe and without risk to health and safety.

- **Equipment**

Before the introduction of new equipment, a full technical appraisal is carried out. This is to ensure that when in normal use, the machinery are within the limit of risks to health and safety required by legislation and to comply with Project standards.

The Management team will ensure that the required permits and approval for the equipment is available and valid. The equipment that requires competency certificate includes (but not limited to):

- All Lifting Equipment
- All Mobile elevated working platform equipment
- All other work equipment deemed to require additional training

The Management team will ensure that only operators who are competent and properly qualified will be employed to operate the equipment they are assigned to. Operators will be selected based on their experience, and evidence of competencies (certificates)

All Equipment shall have periodic inspections and check list performed using the relevant EACC check list.

9.11. Fire Protection

General: The program of firefighting applies to the entire project and shall be abided by EACC's employees and all the employees of any Sub Contractors. EACC's safety manager/in-charge will set the rules and regulations. EACC's health & safety department will organize regular firefighting training sessions for all employees on and off site.
EACC will take all necessary precautions against fire as required by TMC and local authority requirements.

Firefighting Equipment

I- The EACC will provide firefighting equipment in the site offices, the stores and about the Works, where applicable. This equipment shall be regularly check, maintained and approved by the local authorities. The type, amount and location of the firefighting equipment shall be the requirements of the local authorities.
II- The EACC will ensure that a fire watch person remains at the site of hot work activity for at least 30 minutes after the hot works are completed.
III- The safety manager/in-charge shall be responsible for the development of a fire protection program as it applies to each specific job site. Each phase of the project shall be provided for.
IV- The EACC will provide training in the correct selection and use of portable fire extinguishers for all hot works on the Project.
V- Access to all firefighting equipment shall be mandatory at all times.
VI- Operational capability and control of firefighting equipment shall be managed at all times.
VII- All firefighting equipment shall be regularly inspected and maintained. Monthly or weekly inspections are to be done. Defective or discharged equipment shall be immediately replaced and tagged "out of service."
VIII- During welding, cutting or grinding operations, there shall be a fire extinguisher with at least a 10 B rating in close proximity.

IX- Fire extinguishers used to protect areas involving welding, cutting, or grinding shall be EACC checked daily prior to start of operation.

X- Unless a temporary or permanent water supply of sufficient volume, duration and pressure to properly operate the firefighting equipment is available, fire extinguishers will be used as noted above.

XI- A portable fire extinguisher, rated at not less than 2A, shall be provided for each 1000 square feet of the protected area. Travel distance from any point of the protected area to the nearest fire extinguisher shall not exceed 100 feet.

XII- One or more fire extinguishers rated at not less than 2A shall be provided on each floor. As a minimum, fire extinguishers shall be located next to stairways.

XIII- Portable fire extinguishers shall be inspected and maintained in accordance with the local authority having jurisdiction.

XIV- As soon as a fire hazard becomes apparent or when an operation is planned with a known risk associated, proper equipment must be put into place.

XV- The EACC will provide portable fire extinguishers at the following locations:

- Mobile equipment
- Storage areas of flammable materials
- Areas of hot work activity
- Temporary structure
- Work areas where combustible materials are present
- Laydown area.

Fire Prevention

All employees shall be made familiar with the use of fire extinguishers. Weekly safety meetings may be used to accomplish this.

I- Smoking shall be prohibited in the vicinity of operations that constitute a fire hazard.

II- Areas where cutting and welding are performed shall be kept clean, and any accumulation of trash or rags shall be removed. Consideration should be given to the distance that sparks may travel.

III- When practical, objects to be welded, cut or heated should be moved to a safe location. If this cannot be accomplished and if not all the fire hazards can be removed, appropriate steps shall be taken to confine the heat, sparks, and slag.

IV- When welding, cutting or grinding operations are to be performed above gratings, decks, or near floor or wall openings, a non-combustible covering shall be placed over deck or openings. Care shall be taken to direct the stream of slag or cutting away from any opening in floor or wall. Do not allow large pieces of hot slag to remain on surfaces long enough to cause combustion or damage.

V- Sparks and slag must be contained in congested work areas. When it is impossible to contain sparks and slag, the danger area must be surrounded with barrier warning tape.

VI- A knowledgeable person must always attend equipment that has an open flame. Furthermore, Open fires are prohibited.

VII- Flammable liquids will be stored in approved safety containers (not plastic).

VIII- Keep such containers in properly managed storage areas.

IX- Fuel, oil, grease, and any flammable material spill should be cleaned up immediately.

X- Accumulations of trash, scrap lumber, packing and other debris are to be cleaned up regularly. Provisions are to be made for the removal and disposal of garbage and debris from the job site.

Fire Extinguisher Schedule

Location	Fire Type	Number Required
Service vehicles	ABC	At least One each
Field offices	ABC	One each
Other buildings or structures	ABC	One per 1000sf (but no more than 100 feet of travel to reach any spot)
Flammable liquid storage areas or bulk storage tanks	ABC	One per area (25 to 75 feet)
Work operation involving flammable liquid or gas	ABC	One each (within 30 feet)

10. MANAGEMENT OF OCCUPATIONAL HEALTH (MEDICAL & HEALTH PROGRAM)

The EACC will ensure that all their personnel are medically fit to carry out their assigned task before starting work on site, and do not present a risk of injury to themselves or others.

The EACC will ensure that adequate control measures and procedures for the following occupational health requirements are developed as part of their Health and Safety Management System:

- Medical Services and Management
- Medical/Health Surveillance
- Health and Hygiene
- Medical Emergency Evacuation
- Health Records Maintenance System
- Blood-Borne Pathogens
- Occupational Exposure to Benzene
- Occupational Exposure to Lead
- Radiation Protection Program
- Working at High Altitude
- Heat Stress Management Plan

H&S Manager, in coordination with other projects heads, will be responsible for implementing EACC's Health & Safety program. The EACC's will comply with TMC's Health and Safety Policy, Health and Safety Management Manual, and any other relevant requirements as seen fit by TMC. The EACC, will implement all applicable measures required by the laws and regulations of KSA and other additional measures, as necessary, to ensure workplace safety. The EACC, will and their Sub-contractors shall implement effective high standards of health, safety and welfare management onsite and in connection with their operations.

They EACC, will assure the compliance of all employees on site and will adopt the following safety procedures throughout the term of the project:

- Minimize/ eliminate potential risks of occupational injuries and illnesses using recommended loss prevention and control systems.
- Immediate identification and elimination of unsafe work practices and conditions in the workplace.
- Assure conformity with the national safety and health standard requirements.
- Assure awareness of individual responsibility and increased supervisory attention to detail
- Elimination of human error as cause of accidents, irrespective of rank or position in the organization
- Create performance standards and objectives for supervisors to reduce occupational injuries and illnesses, and to enhance safety health care at workplaces.
- Provide safety and health orientation and training programs to supervisors and new employees.
- Keep safety and health records of all employees.

The Management team will ensure that only medically fit personnel are employed. A surveillance program will be implemented where applicable, to assess employees' suitability, health conditions and the health protection required for specific work.
The EACC will demonstrate commitment to the health and safety of all workforce working on the TMC Projects and, demonstrate achieving the following objectives:

- A safe and healthy workplace
- Employees are consulted on their working conditions
- Employees are heard and influence their working conditions

To ensure that everyone returns home from work unharmed at the end of each working day. The EACC senior management shall visibly demonstrate and support on all health and safety issues by:

- Reinforcing safe work practices
- identifying risks to health and safety and communicate these to the workers
- Prioritizing health and safety on all meeting agendas
- Developing health and safety targets and objectives, and measuring and reviewing performance
- Through behavior and actions fostering positive health and safety culture.
- Treating health and safety as a priority.

The H&S Manager/ In-charge will identify suitable candidates to be selected as referral physicians. These physicians will be consulted for the establishment of health requirements, medical & first aid facilities associated for the type of work. The H&S Manager/ In-charge will implement the recommended immunization programs for the project based on consultations with medical authorities.
Health education will be a part of the toolbox briefings. All medical records will be maintained and tracked.

10.1 First Aid Provision

Appropriate trained first aid personnel are employed/ appointed to ensure proper levels of medical care and attention are available. All trained first aiders are required to complete a first aid course, and re-qualify every three years. The name and telephone numbers of first aid personnel are listed and posted on notice boards.
First aid facilities will be provided for medical treatment of employees and sub-contractors. To ensure that the health and welfare of the employees and that their basic health needs must be met at the highest level in order for them to perform and execute their assigned tasks safely and efficiently. The Project also

recognizes that immediate treatment of injuries and illnesses directly benefit the employees and the project. There shall be at least one first aider for every Station Project.

The objectives of having a First Aider on the project are as follows:

- To provide and meet the basic health care needs of project employees.
- To attend to all First Aid Cases, injuries requiring medical treatment and other medical emergencies and notify the Project Site Safety Manager and the Employers HSE Manager immediately.
- To maintain an acceptable level of health and hygiene within the site.
- To conduct health education programs where necessary.
- To conduct and participate actively in health care promotion and coordinate with the HSE Manager for the implementation of the No Accidents Program.
- To conduct hospital visits to admitted patients and make daily progresses notes and report them to the HSE Manager.
- To conduct basic CPR/First Aid Training as directed by the HSE Manager.

The project shall have an onsite first aid facilities for the treatment of injuries and illnesses. All employees shall be notified where the medical facility are located.

The HSE Manager is responsible for visiting the first aid facility and establishing protocols for treatment, return to work policies, etc.

10.2 First Aid Box

Sufficient number of first aid kits based on the number of workforce and size of first aid kit.
The first Aid box maintain the following items:

- **Adhesive bandages (band-aids) in various sizes and shapes**: These are used to cover and protect minor cuts, scrapes, and blisters.
- **Sterile gauze pads in various sizes**: These are used to apply pressure to bleeding wounds, clean wounds, and absorb drainage.
- **Triangular bandages:** These can be used to create slings, immobilize fractures, and apply pressure to wounds.
- **Crepe rolled bandages:** These are used to provide support and compression to sprains, strains, and wounds.
- **Safety pins:** These can be used to secure bandages and splints.
- **Tweezers:** These can be used to remove splinters, thorns, and other foreign objects from the skin.
- **Scissors:** These can be used to cut bandages and tape.
- **Wipes or antiseptic solution:** These are used to clean wounds and prevent infection.
- **Antibiotic ointment:** This can be used to help prevent infection in minor wounds.
- **Pain relievers:** These can be used to help relieve pain from headaches, fever, and other conditions.

10.3. Substance Abuse

In all cases where any employee misuses or whose performance is impaired by the abuse of substances such as alcohol or any other substances whilst on company business or premises, will be subject to disciplinary procedures up to and including immediate dismissal. Anyone found operating any vehicle, or machinery while under the influence of alcohol will be immediately removed from the project.

10.4. Provision for Healthcare

I. The EACC will retain detailed records of all medical treatment carried out onsite. Records shall be retained for all instances of personnel being transported for offsite medical attention. Such records shall include, as a minimum, the name, age and nationality of the treated party. These records shall be used to identify medical trends and implement proactive treatment to reduce absenteeism.

II. The EACC will provide a facility to transport those requiring medical attention from the site to and from appropriate offsite medical facilities, free-of-charge and in a timely manner.

III. The EACC will provide medical insurance for all workers in accordance with KSA Labor Law.

IV. The EACC will include a Public Health Training module as part of induction training for all new personnel that will address:

- Awareness of communicable diseases their transmission and prevention
- Practical information regarding workers' rights and means of access to medical facilities
- Food safety and hygiene standards
- Littering, safe disposal of waste and related hygiene standards

11. General Requirement on Project Safety

- **Emergency Response and Planning**

I. The EACC will prepare an Emergency Response Plan for the project, The Emergency Response Plan shall be revised, whenever necessary, and updated every 1 Year. The plan shall be audited periodically to ensure compliance with the standards. The plan shall address the following, as a minimum: Responsibilities

- Risk assessment and hazard identification and controls for potential emergencies
- Coordination with outside emergency response organizations
- Arrival of outside emergency response groups
- Emergency response equipment
- Emergency drills including emergency rescue
- Tests of emergency preparedness and response program
- Crisis Management Plan (Major Events Emergency Response Plan)
- Evacuation procedure
- Site fire prevention and response reporting
- Environmental spills and releases
- Malicious threats
- Severe weather conditions

II. The EACC will ensure that their employees are aware and understand what actions to take and when to take them in the event of an emergency situation. The EACC will provide such information, instruction and training as may be required to assist their employees to respond appropriately, in the event of an emergency.

III. The EACC will ensure that a schedule is produced to conduct emergency drills and exercises on a regular basis at the site under its control.

IV. EACC will appoint qualified and competent safety engineer for each station to ensure the safety of the following activities:

- Temporary work
- Temporary and permanent electrical installation
- Crane and lifting appliance operations
- Scaffolding erection, alteration and dismantling
- Confined space entry
- Excavation
- Working at height
- Hot work

11.1. Health and Safety Performance

Examples of reactive KPI is:

- Zero fatalities
- Zero lost time injuries
- 100 percent closeout of non-conformances identified during audit and inspections
- Examples of proactive KPI is:
- 100 percent attendance at inductions
- 100 percent construction trades to hold relevant competency cards
- 1 00 percent of site operatives to have a daily activity briefing
- All construction supervisors to have health and safety training applicable to role
- Active targeting of key accident causes - Construction

1. The identified KPI will be monitored by the TMC Safety team through reporting mechanisms, audit, and inspections. The information will be provided to the Senior Management. The Senior Management will use this information for setting priorities and actions for continual improvement under the Safety First- Zero Harm program.
2. Health and safety key performance indicators (KPI's) will be monitored and reported against targets, and met by The EACC and Sub-contractor across all works undertaken.
3. Further indicators may be added, as appropriate, to achieve the overall program aims and objectives.
4. The EACC will ensure that the required monitoring is carried out, that all data is reviewed for quality assurance and collated in a health and safety performance and report, and the report is submitted to TMC on a monthly basis.

5. KPI shall be defined by the TMC H&S team. The health and safety KPI shall be incorporated in a program performance monitoring system.
6. Progress toward the achievement of performance targets will be assessed monthly as part of the monthly progress review.

The EACC will produce and submit monthly Health and Safety performance reports to TMC. The reports shall be in the format prescribed by TMC and shall contain the following contents as a minimum:

Health and Safety Performance	Target	Definition
MANPOWER AND TIME		
Average number of contractor and sub-contractor workers	NA	The number of contractor and sub-contractor workers working in the project
Average number of Health and Safety Personnel	NA	The number of contractor's workforce working in H&S department.
New joiners per month	NA	The number of contractor's workforce joining the project.
Total man-hours worked	NA	A man-hour is the amount of work performed by the average worker in a period of time
Total man-hours since last LTI	NA	
NUMBE ROF REPORTABLE INCIDENTS		
Fatality	0	Work related fatality is a death resulting from a work-related injury or illness of the time intervening between injury and death
Major injuries	0	Major injuries are an injury to person at work resulting 1. Any fracture other than to the finger, thumb or toes. 2. Any amputation 3. Dislocation of the shoulder, hip, keen or spine. 4. Los of sight (temporary or permanent) 5. A chemical or hot metal burn to the eye or any penetrating injury the eye. 6. Any injury resulting from an electric shock or electrical burn (including any electrical burn caused by arcing or arcing products) 7. Any other injury (a) leading to hypothermia, heat-induced illness or to unconsciousness (b) requiring resuscitation (c) requiring admittance to hospital for more than 24 hours 8. Loss of consciousness caused by asphyxia or by exposure to a harmful substance or biological agent. 9. Either of the following conditions which result from the absorption of any substance by inhalation, ingestion or through the skin (a) acute illness requiring medical treatment (b) loss of consciousness 10. Acute illness which requires medical treatment where there is reason to believe that this resulted from exposure to a biological agent or its toxins or infected mate.

LTI over 3 days	0	Any absence from work for more than 3 days resulting from Permanent Total Disabilities, Permanent Partial Disabilities and Lost Workday Cases
Dangerous Occurrence	0	A significant incident arising out of or in the course of work that did not result in serious Injuries/and or fatalities but has the potential to have done so
Specified / occupational diseases	0	The occupational disease is the one developed as a result of working in a profession that causes such disease, provided that the disease is included in the Schedule of Occupational Diseases. The date of the first medical diagnosis of the disease is regarded as the date on which the injury is sustained
Injury to member of the public		An incident to a member of the general population
NUMBER OF OTHER INCIDENT CATEGORIES		
Non-work related fatalities	0	A non-work-related death which occurs outside of the organization's facilities and not on company time
Heat Stress	0	Heat Stress Case is a work-related incident resulting an individual suffering from the effects of heat stress.
LTI/Restricted work case (below 3 days)	0	Any absence from work between 1 to 3 days resulting from Permanent Total Disabilities, Permanent Partial Disabilities and Lost Workday Cases. Restricted workday case (RWC) is a work- related injury or illness that results in limitations on work activity that prevent an individual from doing any task of his/her normal job or from doing all of the job for any part of the day.
First Aid	0	An incident that results in first aid being administered
Number of ill health (non-occupational / work related)	0	The Non occupational disease is the one developed as a result of non-working in a profession that causes.
Cable or utilities strikes cases	0	A damage to any utility service such as gas, electric or water, or any pipeline which transfers a substance above atmospheric pressure, or cable used for the transmission of electricity or data. It is normally below the adjacent ground level, but may emerge into the open or above ground for short sections of its length. It does not include drains, sewers, unsealed pipes or tunnels,
Fire Incident	0	
Traffic incident	0	A road traffic accident resulting in minor injury and/or damage
Property damage	0	An incident that has occurred as a result of entity activities that has resulted in damage to property, buildings, vehicles, plant and equipment.

Near Miss cases	Report all near misses	An unplanned event or series of events that occurred at the workplace which, although not resulting in any injury, illness or equipment/property damage, had the potential to result in a significant incident.
Security Breach	0	An incident that results in unauthorized access of sites, data, applications, services, networks and/or devices by bypassing their underlying security mechanisms
Significant Environmental incident	0	A spill o foil and / or a hazardous substance greater than 200 liters
NUMBER OF LEADING INDICATORS		
Health and Safety Meeting	1/Week	A Project-specific Health and Safety meetings chaired by The **EACC** Project Director on a weekly basis throughout the duration of the work.
Health and Safety Inspection	1/Week	Physical inspections of site H&S standards. Undertaken by the H&S Team.
Health and Safety New Joiners Induction Ratio	100%	The percentage of new hire or new joiners who have been inducted
Health and Safety-House Training	100%	The number of H&S training undertaken by EACC in house.
Health and Safety In-house Training Attendances Count	100%	The number of employees attending H&S training undertaken by EACC in house
Health and Safety Third-Party Training	All as per requirement	The number of H&S training undertaken by contractor by third party.
Health and Safety Third-Party Training Attendances Count	All as per requirement	The number of attendees of H&S training undertaken by third party.
Toolbox Talks	1/activity	Toolbox talks help to ensure workers understand the risks and precautions, and are a good opportunity to inform workers of site rules or any special risks relating to the project
Toolbox Talks Attendances Count	100%	Actual
Health and Safety Leadership Tours	2/month	Physical inspection of site H&S standards undertaken by The **EACC** Senior Leadership Team and Project Leadership Teams
Health and Safety Management System Audits	1/Quarter	Audit review of procedural compliance.
Positive Observations/Good	100%	Actual

Health and Safety Drills	2/year	A safety drill is a drill that is practiced to prepare people for an emergency
NUMBER OF HEALTH AND SAFETY FINDINGS		
Safety Violation Reports	100% Closeout	A safety violation refers to the violation of a particular workplace safety standard, regulation, policy, or rule. Safety Violations include both the violations of safety policies crated by TMC and violations of the regulatory standards that are enforced within KSA
Nonconformance Reports	100% Closeout	Non-fulfilment of a requirement related to requirements in ISO 45001;2018 Standards and additional OH&S management system requirements that an organization establishes for itself or signed on. has been added to clarify the relationship of nonconformities to the requirements of this document and to the organization's own requirements for its OH&S management system.
Unsafe Acts/Conditions (Safety Observation)	100% Close out	An unsafe act is an observed unsafe practice (or the consequences of an unsafe practice) for which responsibility can definitely be assigned. It has the following characteristics: fers injury potential to the employee involved and may expose other people to injury. uld be a violation of either an established safety rule, procedure, or of an unwritten rule of common sense or good judgment.
HEALTH AND SAFETY SCORE		
Site Health and Safety Audit Score	100	A systematic, independent and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which the H&S requirement are fulfilled.
Lost Time Injury Rate	0.	LTIR = (Total No of Lost Time Incident during the period) X 200,000 / Total Man-hours worked during the period.

- **Compensation for Damage**

I. The EACC will be solely responsible for compensation claims arising from damage or injury caused by their failure to provide adequate health and safety measures.
II. The EACC will notify TMC of any claim made against them which is in any way connected to the Contract.
III. The EACC will ensure that all formal health and safety related communications they sent to enforcing authorities or government organizations are copied to TMC.

12. SUBCONTRACTOR MANAGEMENT

- **Subcontractor HSE qualified**

All companies contracted to carry out work by EACC for the Project are obliged to comply with all applicable health and safety laws and regulations, as well as all project and contract specific guidelines and any others as detailed in this plan. Sub-contractors shall cooperate with EACC on all matters relating to the implementation of Health and safety EACC will be in strict compliance with national and local regulations and TMC Requirement, select project subcontractors including labor service team. And qualifications of the subcontractors should also meet the local legal and regulatory requirements. All subcontractor's HSE qualified will be strictly inspected and reviewed.
EACC will review the HSE qualification and qualified construction qualification of the subcontractor carefully. If the subcontractor qualification reviewed failed or has no review, this project is not allowed to be outsourcing.

- Understand and endorse the H&S Plan of the Project.
- Ensure that H&S information is properly communicated to all their supervisors and workers.
- Ensure that all work is carried out in accordance with the above directive both for their direct hire employees and subcontractors.
- Carry out site visits and attend H&S meetings as directed.
- Determine during planning stage:
    - Fire precautions
    - Any special training or instructions required for site personnel (e.g. Scaffolding Supervisor, etc.)
    - EACC over execution plans and JSA's with site management and Contractor's personnel before work starts in accordance with the applicable H&S procedures.
    - Actively engage and undertake H&S activities including participation in toolbox meetings, JSA development, etc.
- Execution of Work
    - Provide written instructions in unusual situations where not covered by H&S procedures to establish working methods and sequences, outline potential hazards at each stage and indicate precautions to be adopted. Obtain execution plans with risk analysis from other subcontractors carrying out high risk activities such as heavy lifting, work at heights, transport of materials and equipment.
    - Ensure that work once started is carried out as planned and that account is taken for changing or unforeseen conditions as work progresses.
    - Is carried out in accordance with applicable H&S procedures and other appropriate rules.
    - Take appropriate action when notified of disregard of H&S procedures
    - Carry out any necessary notifications to Contractor as required by the H&S Plan.

EACC will be in strict compliance with national and local regulations and TMC Requirement, select project subcontractors including labor service team. And qualifications of the subcontractors should also meet the local legal and regulatory requirements. All subcontractor's HSE qualified will be strictly inspected and reviewed.
EACC will review the HSE qualification and qualified construction qualification of the subcontractor carefully. If the subcontractor qualification reviewed failed or has no review, this project is not allowed to be outsourcing.

- **Requirement of subcontractor management**

EACC is responsible the safety planning, activity safety training, and line management control, get necessary work permits and prepare all required method statements and job safety analysis related to this project. Site Safety orientation will be provided to all sub-contractors prior to the mobilization by EACC.
All sub-contractors will be monitored throughout the duration of their activities related to this project. The sub-contractors will be controlled and monitored through regular site inspections and weekly/monthly reports.

All subcontract employees shall:

- Participate in Risk assessment to ensure adequate understanding of the task to be performed.
- Participate in pre-job meetings to ensure adequate understanding of the HSE Plan.

- Utilize assigned safety equipment as needed.
- Report unsafe conditions to the appropriate supervisor.
- Correct unsafe acts observation.
- Assist with the training/ monitoring of co-workers.
- Comply with the requirements of this HSE Plan.
- Report all incidents, regardless of severity to contractor or supervisor immediately.
- Wear their personal protective equipment at all times.
- Take every measure to ensure their safety and of those around them.

EACC sub-contractors and vendor's management have the following responsibilities, accountabilities and activities concerning health, safety & environmental management:

- Agree to comply with all Company project HSE philosophies and procedures.
- To proactively manage injuries and illnesses.
- Establish project goals for health, safety and environmental performance.
- Ensure reporting near miss incidents and damage.
- Determination of hazard reviews and RAs for each specific work phase / task.
- Pre-mobilization inspection of all equipment.
- Ensure safety of all employees.
- Conduct professional incident and hazard investigation.
- Conduct regular site inspections and audits.
- Involve employees to participate in the HSE management process.
- Promote proactive and supportive health and safety at all levels.
- Participate at the daily and weekly HSE meetings.

13. INSPECTION AND WALK ABOUT

The H&S Manager/In-charge will initiate safety and health inspections and audit programs in conjunction with other safety & health representatives.

Their frequency is governed by the level of activity on the site. Any serious hazards identified during an inspection which represents an immediate risk to safety and health will be remedied immediately.

As soon as practical, an inspection report will be prepared detailing any specific safety and health hazards identified, and actions taken or recommendations made to mitigate them.

Further inspections of any reported hazards must be undertaken, after appropriate action has been taken, to confirm the hazard has been mitigated

The H&S Manager/In-charge will initiate a “safety tour” on an agreed schedule. In this program, project managers and supervisors will join the H&S Manager/In-charge on a “walk-about” to observe the implementation of the safety & health program, and behavior demonstrated by the employees. Unsafe behaviors will be corrected with immediate effects, whenever and where they are seen.

Behavior observations will be recorded, reports prepared and the observations will be Discussed and reviewed for continuous improvements. Consequence analysis will be used to identify the consequences influencing a behavior. It will be the basic tool used for analyzing problem behavior in order to provide positive consequences for the safe behavior.

- **Audit and Inspection**

I. The EACC will conduct a self-audit of their worksite and Health and Safety Management System, and continually evaluate the level of their compliance with the health and safety standards, regulatory requirements, trends, results of previous inspections, management visits, incident management, review of corrective action trends and progress on health and safety goals.
The EACC will conduct the following inspections and audits as a minimum:

- Site health & safety inspections on a daily, weekly and monthly basis
- Site health & safety tour with TMC or the appointed Consultant and EACC Senior Management on a monthly basis
- Third-party audit on Health and Safety Management System on an annual basis
- Other inspections and audits at intervals deemed necessary by TMC

II. Auditing shall be performed with the use of standards and specific checklist agreed with TMC.
III. The EACC will provide TMC with their self-audit report and the associated inspection/close-out reports.
IV. The audit report shall define the corrective actions needed depending on nonconformities and deviations highlighted during the inspection of the project. Deficiencies identified during the audit shall be reviewed and analyzed to determine potential shortfalls in the Health and Safety Management System and to develop

Appropriate corrective actions to continuously improve the health and safety performance of the project

Procedure	Description	Frequency
Accident Trend Analysis	Accident are analyzed to identify if any specific trends are evident (e.g.by contractor , by work area , and by injury)	Monthly minimum
Observation Trend Analysis	Observation raised ,reporting system are analyzed to identity trends	Monthly minimum
H&S Tours	Physical inspection of site H&S standards	Daily
H&S inspection	Physical inspection of site H&S standards Undertaken by the EACC H&S Manager	One per weak minimum
H&S Audits	Audits review of procedure compliance. Undertaken by H&S manager	Quarterly minimum
H&S Leadership Tours	Physical inspection of site H&S standards undertaken by the EACC Senior Leadership Team and project Leadership Teams	Biweekly minimum
Behavioral Observation	Observations are analyzed to identify the behavioral evident trends	Monthly minimum
Monthly Assessment League Table	League table illustrating current H&S ratings of contractors	Monthly minimum

14. ACCIDENT REPORTING AND INVESTIGATION

All accidents, incidents and dangerous occurrences, no matter how seemingly trivial must be reported to the responsible Manager and the H&S Manager/In-charge. An EACC investigation will be carried out by the line management.

The H&S Manager/In-charge will ensure that the accident/incidents are recorded and that the accident/incident is thoroughly investigated, to identify root cause and prevent recurrence.
A standard format for the investigation report will be prepared which will include in all the required information, such as full description, the time and location, source, witness statement, photo, police/medical report of the accident/incident. The accident/incident report will include the immediate, corrective and preventive actions which will be implemented. Such improvement actions will be Discussed in H&S meetings and communicated to employees via toolbox briefings, notice boards or other forms.

14.1. Incident Reporting

All employees are required to promptly report any emergency or health and safety incidents to the designated Health and Safety Manager.

- In the event of an emergency, individuals shall follow the established reporting procedures to ensure immediate assistance.
- Each location/site will have a designated hotline number for reporting emergencies, and all parties must be familiar with this number and follow the appropriate reporting protocols.

Emergency/Incident Classification and Severity Levels

- All incidents, including near misses, will be classified and assessed based on their severity following the predetermined criteria.
- The severity of the actual or potential impact of an incident will be evaluated according to the established severity levels.

EVALUATION CRITERIA		
Severity	**People**	**Equipment / Property**
4 Critical	Fatality(ies)	Expensive losses of high value equipment / property, or Major unplanned impact on budget and schedule.
3 Major	Long-term, life-altering injury or illness resulting in permanent total or partial disability. Examples: amputation including bone, severe disfigurement, paralysis, loss of limb / organ / vision / hearing.	Losses of equipment that cannot be readily replaced, or Significant unplanned impact on budget and schedule.
2 Moderate	Injury or illness that requires medical treatment or results in temporary disability or loss of function. Examples: deep laceration, object embedded in eye, bone, fracture, concussion, dislocation, injury requiring surgery.	Loss of equipment that can be readily replaced, or Minor impact on budget.
1 Minor	Injury or illness requiring first aid treatment only. Examples: minor cuts, bruises, sprains, strains, abrasions, irritation, inflammation, object in eye removed by flushing.	No impact on equipment functionality. Minor, cosmetic damage, or Repair costs easily covered by normal operating budget.
0 Insignificant	No impact / Near Misses	No impact / Near Misses

Table 1. H&S Incident Severity Levels

15. H&S REVIEW

The Project Manager will chair the review of the H&S Management System. Review of the H&S System will be initiated by the H&S Manager/In-charge. The scope of the review will include but not limited to the following:

- Result of H&S audits
- Extent of compliance with objectives and targets
- Number and nature of H&S incidents
- Corrective and preventive action implemented as a result of any incidents

The review of the H&S system will be the base for continual improvement to the H&S system implemented for the project.

Health & Safety Policy

	HEALTH AND SAFETY POLICY	Doc. Code:	EACC-H&S-POL-01
		Revision:	01
		Issue Date:	12-05-2024

At Excellence Assurance Contracting Co (EACC), we prioritize the health and safety of our employees, contractors, and visitors. Our commitment to maintaining a safe and healthy work environment is unwavering. Our policy is as follows:

- Ensuring the well-being and safety of all individuals associated with our organization by implementing effective health and safety practices.
- Complying with all applicable legal and regulatory requirements related to occupational health and safety.
- Continually improving our health and safety performance by setting clear objectives and targets.
- Identifying and assessing potential hazards and risks associated with our activities, and implementing appropriate controls to prevent accidents, injuries, and illnesses.
- Providing necessary resources, including training and education, to empower employees to work safely and responsibly.
- Establishing and maintaining effective operational procedures and protocols to ensure a safe working environment.
- Conducting regular inspections and audits to identify areas for improvement and ensure compliance with health and safety standards.
- Communicating our health and safety policy to all employees, contractors, and interested parties, ensuring its understanding and implementation throughout the organization.
- Encouraging employee participation and involvement in health and safety initiatives, fostering a collaborative approach to continuous improvement.
- Striving for the prevention of occupational injuries, illnesses, and incidents through proactive measures and the promotion of a safety-conscious culture.
- Regularly reviewing our health and safety policies, objectives, and targets to ensure their effectiveness and alignment with best practices.

This policy represents our commitment to maintaining a safe and healthy work environment and serves as the foundation for our health and safety efforts. All members of the Excellence Assurance Contracting Co (EACC) team share the responsibility for adhering to this policy and actively contributing to the achievement of our health and safety objectives

Mohammad Abu Dawood
C.T.O

12 April 2024

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