



CNT RECORDS

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| Community : | SEDRA | Project/Phase : | 00103-Phase 3 |
| From : | Branch of China Harbour Engineering Co Ltd. | To : | East Consulting Engineering Center |
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| Revision | 1 | | |
| Subject : | Traffic Management Plan (TMP) for PHASE-3 | | |

| DOCUMENTS ATTACHED | | | | | |
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| SR.# | ATTACHED BY | DOCUMENT NAME | DESCRIPTION | NOTES/REMARKS | In PMWeb Viewer |
| 1 | CHE - Branch of China Harbour Engineering Co Ltd. | 00103_CHE_PLN_HSE_000009_240525_R00 Traffic Management Plan (TMP) for PHASE-3.pdf | 00103_CHE_PLN_HSE_000009_240525_R00 Traffic Management Plan (TMP) for PHASE-3 | | Nil |

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| Signature : | | Signature : | |
| Submitted By: | Mohammed Hamraz | Submission Date : | 25-MAY-2024 |
| Received By : | | Date : | |



Workflow Comments Log

| Step # | Role Name | Action Date | Action Time | Action By | Action Type | Team Input Names | Comments | Pending Team Input From |
|--------|-----------------|-------------|-------------|---|--------------|------------------|--|-------------------------|
| 0 | | 25-MAY-2024 | 2:42 PM | Mohammed Hamraz (hamrazdc@hec.sa.com) | Submit | | | |
| 1 | ECEC-1-SEDRA345 | 26-MAY-2024 | 9:10 AM | Ahmed Moustafa (ahmed.mostafa@ecec.com.sa) | UserDelegate | | | |
| 1 | ECEC-1-SEDRA345 | 26-MAY-2024 | 3:20 PM | Ayaz Ahmed Mirza (ayaz.ahmed@ecec.com.sa) | UserDelegate | | | |
| 1 | ECEC-1-SEDRA345 | 27-MAY-2024 | 11:28 AM | Javeed Mohammed Gulmohamed (Javeed.mohammed@ecec.com.sa) | Comment | | <ol style="list-style-type: none"> 1. Mention Dimensions of main entry gate for both LMV&H MV 2. Mention site working time for both day and night shift 3. Mention the overall infrastructure work duration including planned completion date. 4. Check the alignment of tables. 5. Mention truck/equipment laydown area in the overall phase 3 layout. | |
| 1 | ECEC-1-SEDRA345 | 27-MAY-2024 | 2:17 PM | Javeed Mohammed Gulmohamed (Javeed.mohammed@ecec.com.sa) | Return | | <ol style="list-style-type: none"> 1. Mention Dimensions of main entry gate for both LMV&H MV 2. Mention site working time for both day and night shift 3. Mention the overall infrastructure work duration including planned completion date. 4. Check the alignment of tables. 5. Mention truck/equipment laydown area in the overall phase 3 layout. | |

Infrastructure works for Riyadh SEDRA Project Phase 3, 4 and 5.

Traffic Management Plan (TMP) for PHASE-3

00103-CHE-PLN-HSE-000009

REV. 01

07-July-2024






فرع شركة شاينا هاربور إنجنيرنج كمبني ليمتد
BRANCH OF CHINA HARBOUR ENGINEERING CO., LTD.
中国港湾工程有限责任公司沙特分公司

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| Document No. | Traffic Management Plan (TMP) for PHASE-3 | Revision | 01 |
| | 00103-CHE-PLN-HSE-000009 | | |

Infrastructure works for Riyadh SEDRA Project Phase 3, 4 and 5.

Traffic Management Plan (TMP) for PHASE-3

00103-CHE-PLN-HSE-000009

| | | | | | |
|-----|--------------|---|---|--|---------------------|
| 01 | 07-July-2024 | HSE M. Phase-3 | HSE.M | HSE.D | Issued for Approval |
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1. Purpose

The purpose of this traffic management (TMP) is to address regulatory compliance, traffic management practices and preventive measures to reduce impact related to construction activities.

The objective of this plan includes following:

- To compliance with ROSHN standards and legislation regulating traffic and transportation within KSA.
- To avoid incident and accident while vehicles are being driven and while transporting personnel, materials and equipment to and from the project.
- To raise grater safety awareness in each driver and to ensure the compliance of safety driving provision for all vehicles.
- To avoid deterioration of access roads and pollution produced by equipment and vehicles.

2. Traffic Control

CHEC shall ensure that effective communication shall be established for all traffic related permissions. Project Manager shall notify ECEC for any change in the traffic plan. All control measures at site roads shall be implemented as per ECEC requirements. If work demands to change direction of any public road, CHEC shall notify ECEC with proposed changes. Once approved by ECEC work can proceed on the access roads.

3. Roles and Responsibilities

3.1 Project Manager

Has the overall responsibility for this procedure and is responsible for implementation of this plan at SEDRA-3. Project manager shall ensure that enough resources (Barricades, LED Lights and Tower Lights) are available at site. Project Manager shall support Safety Team in implementation of this plan.

Daily Working Hours:

Morning shift: 06-18

Night Shift: 18-06

Project Duration: 36 Months, starting from 1st of November, 2023.

3.2 Construction Manager

In conjunction with the PM, is responsible for implementing and administering this procedure. Responsible for organizing, directing, and coordinating any available resources that will help to be more effective in the implementation of this project.

3.3 Project Safety Manager

CHEC Safety Manager will assist in monitoring the effectiveness of this procedure and its compliance. Safety Manager shall be responsible for the training of drivers, operators, and workers. Safety Manager shall assess and deliver trainings in accordance with project Safety Training Matrix. Safety Manager shall be responsible to report and investigate accidents. Safety Manager shall assess

the effectiveness of control measures implemented and shall review the document if any changes required.

3.4 Environmental Manager

CHEC Environmental Manager shall assist and help to monitor and implement Project TMP. Environment Manager to identify the environmental hazards (Spillage, Dust, emission etc.,) involved with vehicles movement that can cause harm to people and environment.

3.5 Equipment Supervisor

Shall ensure that all CHEC equipment, plant, or vehicles that will be used at project are in good operation. All equipment that will be used shall be inspected and are compliance with MOT, ROSHN, ECEC and Project requirement. Equipment Supervisor shall be responsible for the maintenance of equipment's. Equipment supervisor is also responsible for clearing access routes in case vehicle breakdown.

3.6 Foreman / Supervisor

All Foremen/ Supervisors will be thoroughly familiar with this procedure and with their individual responsibilities regarding its implementation and enforcement. Supervisor/ Foreman shall brief their working team regarding traffic volume and its hazards prior to start activity. Workers shall also be briefed regarding safety of public users of the roads or access where CHEC will work. Responsible to conduct inspection and assessment on site and determine the possible high-risk area that will be affected by the traffic.

4. Traffic Volume

Traffic volume will be assessed for each section of the project namely earthwork, grading and laydown area. This assessment will initially be conducted hourly to determine the baseline peak flow rate of onsite traffic. After the peak traffic volume per hour have been determined, controls will be implemented to mitigate excessive traffic volumes on site that could lead to violation factors.

5. Approach speed

The traffic approaching a construction area will often be required to be slowed or stopped intermittently. It is important; therefore, in planning the job to know what approach speed will be encountered. It should not be assumed that the existing speed limit will be the maximum speed encountered. 30kph is inside the project. The speed limit on all Jobsite access roads shall be 30Kph for light vehicles and 20Kph for all heavy equipment and truck and trailers, and inside Site Office premises. The speed limits will be assessed for practicality and amended where necessary and as determined by the terrain and risk factor.

6. Traffic Control Measures

6.1 Approvals

CHEC shall take all necessary approvals from ECEC before starting any activity at site. Proposed traffic plan drawings shall be submitted to ECEC for approval. Drawings shall must contain details:

- Traffic will be regulated using Jersey barriers as per ECEC approval with lights for visibility during night time.

- All excavations more than 1.2 meter near to access road shall must be secured with hard concrete barriers.
- Reflective chevron tape on jersey barriers and cones, sufficient traffic signs.

6.2 Pedestrian Segregation

The Primary objectives of the segregation between the pedestrian and access of the equipment is to prevent any vehicular accident which is the most often exists incidents across to all projects. CHEC ensure adequate pedestrian access to prevent any unforeseen incident or accident. Physical barriers shall be used to segregate the vehicles access from people. Example attached below. The site office and layout area where there is more volume of pedestrian access will be used, heavy equipment shall be prohibited to enter apart from the mandatory heavy vehicles such as Toilet suction truck, water tanker and waste collection vehicle. Where CHEC will be working near worker force, apart from physical barriers, flagman shall be assigned to control and monitor all CHEC equipment and workers. Site construction and safety team shall ensure that control measures are implemented and people are following the protocols.

6.3 Two Way Traffic

CHEC team will construct two ways traffic system depending upon the site circumstances. Two-way system is a good way to control reversing action. Reversing can be a contributor in site accidents related to vehicles. A median will be created in two-way traffic system either using empty drums, jersey barriers, rope and warning tape or used tires painted red and white for better visibility. Traffic system either using empty drums or used tires painted red and white for better visibility. U Turns will be provided at designated places. Drivers and operators shall be trained by safety team regarding two way system and reversing hazards.



6.4 Controlling Unauthorized use access road.

CHEC will provide a measure in place to stop unauthorized use for roads associated to site, as list below:

- Installing a physical barrier.
- A provision of warning system in place
- Regime petrol to monitor the effectiveness of the control measures.
- Update the access route and temporary road.
- Reporting system will be implemented to identify improvements.
- Adequate warning signage and hard barriers around the access roads.

7. Traffic signs:

Traffic signs are utilized as a method of warning and guiding drivers, helping to regulate the flow of traffic among vehicles, pedestrians, and others who travel the highways and other access roadways. The traffic signs must be placed in advance to give drivers enough time to slow down or apply break gradually depending on the indication of traffic sign. All necessary traffic sign as per KSA travel and transportation regulation will be posted on the access road and the service road. A sign survey will be conducted, and additional signs will be implemented and posted where required. Current drawings indicate sign placement made on the assumption of current site conditions and does not illustrate final sign positions and placement. Signage will be installing at each zone of the project; all of these is made from reflectorized materials. CHEC aware of this item which is dedicated to procuring immediately for further safety and security measures for company assets, everybody of the project and to others particularly to the drivers who were involved in the project.

| | | | | |
|--|---|---|---|--|
|  No right turn |  Clearance length limit |  Axle load limit |  Maximum weight |  No overtaking |
|  No overtaking by trucks |  No U-turn |  No right turn |  Priority to oncoming traffic |  Customs |
|  No buses |  No horns |  End of no overtaking |  End of no overtaking by trucks |  End of speed limit |
|  End of all restrictions |  Stop |  Yield |  No parking |  No standing |

8. Barricades:

CHEC ensure all obstructions and excavations will be adequately always guarded for the protection to all workers who use the roadway. This may be done by a line of double row of steel or nylon rope with warning tapes or sand berms, plastic jersey barriers at curves, warning flashlights at Zones access ramps, and plastic jersey barriers as protection for the existing trees, double warning tapes around the existing power supply poles.

- Effective procedures to Implements the Speed limit on site.
- CHEC will fully comply with ROSHN requirements.

- Install sufficient speed humps before each zone's access ramp on site to manage speed of approaching vehicles.
 - Install sufficient warning signage on and offsite.
 - Install sufficient lighting (warning flashlight) to provide effective warning at crossings.
 - A disciplinary code and procedure and penalty system will be enforced for any violation or transgression omitted by any operator or driver of equipment or vehicles.
- ❖ 1st Offense - Warning
 - ❖ 2nd Offense - Salary deduction with agreed amount per Violation.
 - ❖ 3rd Offense - Termination or removal from site. Depending on the seriousness of the offence, immediate removal from site could be enforced.

8.1 Temporary Concrete Barriers

Ensure when there is an excavation made along the access roads, temporary concrete barriers or plastic barriers will be installed to protect the work and road users when the excavation will be open. The use of concrete barricades must be approved by the client. Jersey barriers will be placed in strategic points/areas to ensure effective and proper control and regulation of traffic. Jersey/Concrete barriers should not be placed more than 50 meters apart on long and straight temporary access to ensure visual indication on the route of the temporary road. Rope and warning tape will be placed in between the gaps if jersey barriers are not placed against each other.



8.2 Temporary Barricades (Drums, steel warning tape, tires, sand berms)

All access roads will be barricaded using soft and temporary barriers to guide driver and to prevent them from going off the roads.

All straight temporary roads will be barricaded using steel or nylon rope and warning tape or just by sand berms along the side of the roads. Any intersection will be barricaded using jersey barriers. Empty drums painted red and white for visibility could be used to create any round about.

Any elevated access road having cliff or elevation deference more than 50 cm will be protected by traffic barriers.

8.3 Effective procedures to Implements the Speed limit on site.

- CHEC will fully comply with MOT requirements (on main roads) as well as ECEC requirements.
- Install sufficient speed limit sign boards at all access roads on site to manage speed of approaching vehicles.
- Install sufficient warning signage on and offsite.
- Install sufficient lighting (Tower lights) to provide effective visibility in low light conditions.
- A disciplinary code and procedure and penalty system will be enforced for any violation or transgression omitted by any operator or driver of equipment or vehicles.
 - 1st Offense - Warning
 - 2nd Offense - Salary deduction with agreed amount per Violation
 - 3rd Offense - Termination or removal from site.

Depending on the seriousness of the offence, immediate removal from site could be enforced.

9. FLAGMEN ANDHAND SIGNALLING DEVICES

Flagmen / Banks men will be used to control movement of equipment at intersection, near to access road of busy work area to avoid collision.

10. Training

CHEC shall ensure that training shall be provided to all drivers and workers in relation to traffic management plan. CHEC safety Manager/Deputy safety manager shall be responsible to prepare and provide training needs as per TMP requirements. Training shall include but not limited to:

Safe usage of access roads.

- Driver reversing awareness training.
- Man, Machine Interference.
- Drivers /Operators getting out in plant movement area.
- Pedestrian interface with live traffic and equipment.
- Pedestrian live road crossing.
- Flagman training

Project Manager and construction manager shall be responsible to provide resources to Safety manager to conduct those trainings. Drivers shall be provided with refresh trainings as required.

11. Interface

During the construction of the project CHEC will be using project roads for material delivery. CHEC shall ensure that risk associated with use of public roads have been assessed and documented through a risk assessment (see Attached Risk Assessment section). Control measures mentioned in the risk assessment shall be implemented.

All CHEC drivers/operators that will use public roads shall:

- Be trained regarding hazards associated with driving on public roads.
- Shall always ensure that if carrying any load shall must be secured and covered while driving on public roads.
- Always abide by the MOT speed limits of the road.
- Stay on the lane for heavy traffic.
- Don't use mobile phone while driving.
- Always fasten your seat belt.
- Immediately communicate with equipment supervisor in case of breakdown.
- Never leave vehicle switched on unattended, don't take shortcuts.

Apart from drivers and operators, worker working near access roads shall must:

- Only work in area which are safe to work and have safe distance.
- Ensure that physical barriers are available between site equipment and workers.
- Never remove barriers to cross access road.
- Flagman is available to guide public and workers.
- Never throw unwanted material (food, plastics) on access road used by vehicles.
- If working at night, ensure that enough lighting is available for incoming traffic for clear vision.

12. DUST CONTROL

Dust control on the access roads in the construction site is one of the most important concerns across all work phase/zones which is considered a potential hazard in site. Therefore, without these it can be caused of environmental issues, harmful to health and accidents. However, there are some techniques that we can apply to control the Dust on site.

12.1 Reduce the Speed

One of the most effective techniques to control the dust created by the vehicles on site, the drivers should be aware on the required speed limit in order to avoid creating more particles/dust around the site. These are the following procedure to limit the speed of the certain vehicles at site;

- Install sufficient signboard into a required speed limit (e.g., 20kph/30kph).
- Install sufficient humps across all access on site. Speed humps before each intersection.
- Assigned one (1) safety personnel with vehicle to monitor every movements of the vehicles who is working on the site.
- Give penalty to those commit a violation related on the speed limit;
- A disciplinary code and procedure and penalty system will be enforced for any violation or transgression omitted by any operator or driver of equipment or vehicles.
 - 1st offense - Warning for violations.
 - 2nd offense - Penalty of Salary deduction from the project.
 - 3rd offense - Termination from the project.

Depending on the seriousness of the offence, immediate removal from site could be enforced.

12.2 Dewatering on the Road

A water tanker must be appointed to driver throughout all access roads and spray water. The nozzles of water tanker spraying water must be fine just enough to sprinkle water to keep the road damp. If the nozzles are big water will flow at high volume and will make access road very slippery.

Note, when dirt particles are wet they stick together making it less likely turns into dust. A single watering can last either for hours or days, depending on the weather conditions on site.

12.3 Increase Moisture Content

Another way besides watering a dirt road to increase the amount of moisture it contains. Adding deliquescent salt such as calcium chloride or magnesium chloride will absorb water from the air so the dirt particles are able to stick together, reducing the amount of dust. This method will work for about a year without reapplying salt.

13. BREAKDOWN PROCEDURE

CHEC will be conducting equipment daily checklist before starting activity and make sure that all equipment be assigned are all in good and working conditions. In case of major breakdown, such equipment shall be taken out of the project and replace by others.

13.1 Breakdown Procedure on site

- Stop the Equipment.
- Park on safe area where it can't disrupt the traffic and work flow.
- There should be a barricade and triangular device have been installed at least 15 meters apart from the equipment.
- Asses the actual condition of the equipment's / Vehicle with complete PPE(s) as per required standard.
- Call the Maintenance Supervisor or Safety officer about the equipment's breakdown.
- Supervisor/Safety Officer will coordinate with maintenance department for immediate rectification.
- Bring the equipment to the workshop for repair if not possible to be repaired them, eliminate and substitute.
- Only a Competent Mechanic is authorized to repair the equipment

13.2 In case of Oil / Fuel leak on site

- Stop the Equipment.
- Park on safe area where it can't disrupt the work activity.
- Inform the Supervisor and environment manager about equipment's oil leakage.
- Supervisor/environment manager shall coordinate with the maintenance department for the immediate action.

- Equipment shall be isolated with a barricade and steel spill tray shall be installed under equipment. Spill kit shall be also available.
- The Spill to be controlled and rectify as per ROSHN Standard procedures.
- CHEC will determine how many liters of spillage oil or chemical if more than 50 liters it should be requires the assistance from external organization.
- CHEC will immediate remove the contaminated soil it must be segregate and put in a proper disposal area.

14. Motor Vehicle Accident

In case of motor vehicle accidents driver shall report accident to the CHEC Construction Safety Supervisor or Construction/HSE Manager.

This shall be done by telephone, radio, or by sending a message with a passing driver.

A full list of emergency contact phone numbers shall be prepared and communicated throughout the project. Emergency contact numbers. All the drivers will carry card with Saudi Arab Government law states that a driver shall not leave the scene of an accident or move his vehicle after an accident unless he needs to take an injured person to a hospital. A Traffic Department investigating officer is the only one delegated with the authority to release vehicles involved in accidents.

If a damaged vehicle is blocking traffic or is stopped on the highway, driver shall use the reflective triangle to warn approaching traffic of the vehicle's presence.

14.1 Reporting an Accident

If you are involved in, or become aware of a traffic accident, contact the HSE Manager, and for first Aid, contact first aider in the site office.

Do not leave the scene of the accident. If you must take someone to the hospital, return as soon as possible. Also, do not move your vehicle until you have been told to do so by the investigating traffic officer.

14.2 Emergency Arrangements

Emergency Contact Numbers (CHEC CONSTRUCTION)

| SN | Name | Designation | Office | Mobile |
|----|-----------------|----------------------|--------|------------|
| 1 | Ding Dapeng | Project Manager | CHEC | 0597945573 |
| 2 | Liu Yiqiang | Construction Manager | CHEC | 0508137465 |
| 3 | Xia Nian Yang | HSE Director | CHEC | 0533247933 |
| 4 | Javeed Muhammad | Logistics Manager | ECEC | 0536690869 |
| 5 | He Haoxiang | HSSE Manager | CHEC | 0597681269 |
| 6 | Talal Akram | HSE Manager | CHEC | 5593071680 |
| 7 | Muhammad Riaz | HSE Supervisor | CHEC | 0570541367 |

Emergency Service Numbers

| SERVICES | AGENCY | CONTA CT |
|--------------------------|--------------------|----------|
| Police | KSA Police | 999 |
| Ambulance | KSA Civil Defense | 997 |
| Fire Department / Rescue | KSA Civil Defense | 998 |
| Road Security | KSA Police | 996 |
| Traffic | KSA Traffic Police | 993 |

Project emergency contact numbers area distributed throughout the project in offices as well as on the construction site. These numbers will be updated on a monthly basis or when new key personnel join or leave. The emergency contact numbers sheet will also include the relevant outside emergency services which can be called on if needed.

14.3 Action Taken After a Motor Vehicle Accident

All motor vehicle accidents on ROSHN property, shall be reported to the project safety supervisor. ROSHN safety, closest main gate or security control center. This must be done by telephone, radio, or by sending a message with a passing driver.

Post-incident procedures cover four phases:

- Initial incident report.
- Making the scene safe.
- Treatment of injured.
- Vehicle recovery.

The main points relevant to each of the four phases that will be dealt with in the Traffic Management plan are summarized below.

- The initial incident report will contain the following information:
 - Location, cause, time, urgency and if anyone is injured.
 - Details of vehicle damage and its situation.
 - How far from road and route to location.
 - Weather conditions.
 - How many people available to assist.
 - Whether radio/mobile phone contact with the location is possible.
 - Any additional support required for personnel at the scene.

The following will also be considered, in order to ensure that the scene of the incident is made safe (note: some actions should only be undertaken by trained medical personnel):

- Additional hazards such as traffic, weather, and time of day.
- Hazard warning signs and traffic control (positioning of vehicles).
- Initial communication from scene preliminary assessment of incident with location, time and date.
- Making the scene safe for both bystanders and uninjured people involved in the incident.
- Maintenance of access for emergency services (crowd control).
- Firefighting (e.g., use of correct extinguisher for vehicle fuel fires).
- Location and condition of injured.
- Follow-up communication from scene and support needed. Of the incident giving details of the
- Issues that will be considered include:
 - treatment of the injured
 - Safety of self and injured
 - Remove the danger if possible.
 - Do not move injured unless they are under threat.
 - Identify injured with life threatening conditions (e.g., airways closed, heart stopped, major bleeding).
 - Stabilize vehicle to prevent further injury from vehicle movement.
 - If access to injured people is difficult move the vehicle carefully, otherwise gain access through windscreen or windows.
 - Be prepared for spinal injuries and, where required, fit cervical collars.

- Never leave the unconscious unattended.
- Leave the minor injuries to last and reassure people.
- Record vital signs.
- Ensure that everyone is accounted for.

Training of drivers or other personnel involved in land transport will be given in advanced procedures for the maintenance of life, how to take charge in a medical emergency and how to record vital signs and patient history until superior medical support arrives. Drivers will also have valid medical First Aid training records.

When recovering vehicles, time spent on assessment is never wasted, so the recovery team should carefully consider the state in which the vehicle is left including:

- Condition of vehicle (e.g., on wheels or rolled over).
- Damage to vehicle such as brakes locked or gears seized.
- Position of vehicle in relation to terrain.
- Danger from vehicle.
- Danger from remaining cargo or from spillage.
- Obstructions both natural and otherwise.

Features of vehicles or natural features including terrain that can be used to advantage in the recovery process.

Once the situation has been fully assessed recovery plan that takes account of:

- The pull to overcome due to resistance from the vehicle mass and vehicle damage
- A suitable safety factor on the required pull.
- Monitoring for safety at commencement of recovery.
- Making secure when the vehicle is on firm ground.
- Recovery and stow of equipment when vehicle are on firm ground.
- Check vehicle for damage and prepare for towing.
- Leaving area of incident safe and clear of debris.

Vehicle recovery is hazardous and should only be undertaken by trained specialists using dedicated vehicle recovery equipment that is suitable for the purpose and conditions.

15. Project Driving Rule

A Guide to Keep You Safe on Road

Distraction occurs any time you take your eyes off the road, your hands off the wheel, and your mind off your primary task: driving safely. Any non-driving activity you engage in is a potential distraction and increases your risk of crashing. Distracted driving is any activity that could divert a person's attention away from the primary task of driving.

There are three main types of distraction:

- Visual — taking your eyes off the road
- Manual— taking your hands off the wheel
- Cognitive— taking your mind off what you're doing

Texting is the most alarming distraction because it involves manual, visual, and cognitive distraction simultaneously. A disciplinary code and procedure and penalty system will be enforced for any violation or transgression omitted by any operator or driver of equipment or vehicles.

DO Stay Safe:

- Drive defensively.
- Wear seat belts all the time, Drivers and passenger.
- Adjust your driving for the conditions, including weather, pedestrians, traffic and degree of light.
- Use a hands-free device for phone use if you have to use the phone while driving.
- Be well-rested before driving.
- Avoid taking medication that makes you drowsy before driving, including prescription and over-the-counter drugs.
- Set a realistic goal for the number of miles that you can drive safely each day.

DO - Stay Focused:

- Driving requires your full attention. Avoid distractions, such as adjusting the radio or other controls, eating or drinking, and talking or texting on the phone.
- Continually search the roadway to be alert to situations requiring quick action.
- Stop about every two hours for a break. Get out of the vehicle to stretch, take a walk, and get refreshed.
- Be patient and courteous to other drivers.
- Reduce your stress by planning your route ahead of time (bring the maps and directions), allowing plenty of travel time, and avoiding crowded roadways and busy driving times.
- Adjust your speed and increase your following distance when carrying heavier than normal loads and when you are towing.

DON'T:

- Drive under the influence of drugs and or alcohol.
- Drive aggressively.
- Tailgate or speed.
- Take other drivers' actions personally.
- Text and drive.
- Enter data in your GPS while driving.

GENERAL DRIVING RULES:

- Driver must not drive under influence of drugs/alcohol.
- Driver must always wear seatbelt and ensure also passenger on board.
- Driver must NOT use mobile phone while driving
- Driver must follow site traffic rules and speed limit (20 KPH)
- Driver must follow posted speed limit signs on site
- Driver must inspect his equipment/vehicle and document it before use, report any damage found.
- Driver must wear his PPE when he leaves the cab of his Equipment/Vehicle
- Driver must never operate/drive any equipment or vehicle if he don't have certificates, license or authorization.

- Driver must not leave his vehicle running unattended and will park it in a designated area.
- Driver must follow safe distance (10meter for trucks) or safe procedure while tipping.
- Driver must lower his dump truck bed before he moves □ Driver must turn off his vehicle/equipment while refueling.
- Driver must report all accident/incident.
- Driver must not put any sunshade on his equipment windshield that cause distraction on his visibility.
- Driver must not overtake another vehicle on site.
- Driver must yield to pedestrians at dedicated crossing points or other areas as indicated by signs.
- Drivers must set a parking brake when leaving a vehicle unattended. Engine should be switched off, and keys removed from ignition.

APPENDIX- A

RISK ASSESSMENT

| | |
|---------------------------|---|
| Task Description | TRAFFIC MANAGEMENT AT SITE RISK ASSESSMENT |
| Task Site Location | SEDRA 3 |
| TOOLS & EQUIPMENT IN USE: | Boom truck/mobile crane/Bulldozer / Loader / Backhoe loader / Dump Truck/Excavator/Shovel |

| RISK SCORE CALCULATOR | | | | | | | |
|---|---|----------------|-------------|---------|----------|---------------|---|
| Use the Risk Score Calculator to Determine the Level of Risk of Each Hazard | | | | | | | |
| What would the SEVERITY Of an occurrence, be? | What is the LIKELIHOOD of an occurrence? | | | | | | Hierarchy of Controls |
| | Severity Rating | Almost Certain | Very Likely | Likely | Unlikely | Very Unlikely | |
| Catastrophic Multiple Fatalities / Environmental release with detrimental effects requiring external emergency services | 5 | High 25 | High 20 | High 15 | Med 10 | Med 5 | Can the hazard be Eliminated or removed from the work place? |
| Major Major Illness or Injury, disability/ Environmental release with minimal off site impact | 4 | High 20 | High 16 | High 12 | Med 8 | Low 4 | Can the hazard be engineered away with guards or barriers? |
| Moderate | | | | | | | |

| | | | | | | | |
|--|---|---------|---------|-------|-------|-------|--|
| <p>Serious but non-permanent injury or ill health Work days lost/ On site release requiring environmental emergency plan to be activated</p> | 3 | High 15 | High 12 | Med 9 | Med 6 | Low 3 | <p>Can Administrative Controls be adopted i.e. procedures, job rotation etc.</p> |
| <p>Minor Medical attention needed. No work restrictions. / Local onsite environmental release treated locally</p> | 2 | Med 10 | Med 8 | Med 6 | Low 4 | Low 2 | |
| <p>Negligible Minor cuts & bruises or sickness/ Nuisance release with no adverse impact</p> | 1 | Med 10 | Low 4 | Low 3 | Low 2 | Low 1 | <p><u>RISK RATING (Likelihood x Severity)</u> 1- 4 LOW RISK (No further action required) 5-10 MEDIUM RISK (Procedure to be available) 11-25 HIGH RISK (Full time supervision present)</p> |
| <p>Likelihood Rating</p> | | 5 | 4 | 3 | 2 | 1 | |

| SI No. | Task Step | Hazard Details | Consequence Details | Risk Rank | | | Current Control Measures | Risk Rank | | | Responsible Person |
|--------|---|--|---|-----------|---|-----------|--|-----------|---|-----------|---|
| | | | | P | S | Risk Rank | | P | S | Risk Rank | |
| 1) | Site operatives include foreman & operators crossing access road and site where other equipment operate | Operative / drivers not seen the pedestrian moment on access road may cause accidents with vehicle. Mobile Equipment Personnel Interface (man & machine interface) Unauthorized way crossing road by walk. | Minor/Major injuries/fatalities | 5 | 4 | 20 | Site assigned workers don't cross the road without vehicle. All site operatives training in MEPI. Project management Team has to provide vehicle for operatives. Road safety sign in place (men at work, reduce speed) Use designated U turn for moving one road direction to another road direction. Prior to start the task conducted startup Briefing with operatives. Adequate supervision at workplace on operative's moment. Road safety signage in place to control vehicle speed limit. Traffic management plan in place. Discipline action if rules are broken No night works. | 3 | 2 | 6 | Site engineer / Safety Officer/ Supervisor/ Foreman |
| 2) | Road survey mark activity for placing Safety signage & barrier | Traffic Tripping Hazards. | Minor/Major injury to personnel & Property damage | 4 | 4 | 16 | Particular care is to be taken when entering or leaving public road. Crash cushion vehicle at survey work area. MEPI Training has to be conducted with team. Use suitable PPE (safety shoes, hardhat, safety glass, safety vest) Traffic management plan in place | 2 | 2 | 4 | Site engineer / Safety Officer/ Supervisor/ Foreman Surveyor/Technician |

| | | | | | | | | | | | |
|----|---|---|---|---|---|----|---|---|---|---|--|
| 3) | Placing concrete barriers for traffic diversion with using of boom truck/mobile crane/shovel. | Lack of operator competency /training Using uncertified lifting tools Tackle. Using uncertified equipment for lifting task. Failure of lifting | Fatality or serious injuries can be sustained by persons if struck by moving plant. Minor/Major injuries to personnel/ Property damage. | 4 | 4 | 16 | Permit to work system in place (lifting plan in place) crash cushion vehicle at signage placing area for workers safety. Adequate supervisor in place. Install warning signage, Barricade the area and use tag line Lifting equipment and accessories shall be inspected and certified by an approved third- party agency periodically. Lifting supervisor to ensure lifting equipment and accessories are visually inspected prior to each shift so as to identify defective items. Daily Safety Talk briefing shall be given to the crew. | 2 | 3 | 6 | Operators Competent Person / Safety Officer/ Supervisor/ Foreman/ Site Engineer |
| | | | | | | | Stop work during foul weather. Ensure communicate to rigger via walkie talkie. Ensure adequate illumination. Liaise with police and department of transport for approvals/consent. Ground conditions to be firm and level. Outriggers to be deployed pads to be used. Competent operators. Emergency response team &Ambulance at workplace. | | | | |

| | | | | | | | | | | | |
|----|---|---|---|---|---|----|---|---|---|---|--|
| 4) | Swinging the load (Concrete barrier) for proper positioning | Hit by object. Restricted visibility. Miscommunication. Inadequate lighting | Damage of materials and Minor/Major injury to task involve personnel. | 4 | 4 | 16 | Ensure tag line is installed. Ensure sufficient manpower to handle tag line. Don't stand under suspended load. Ensure the immediate lifting area is cordoned off. Stop Boom truck/Mobile Crane movement if load swing is too extensive. Never swing load over cab of truck. Stop work during foul weather. | 3 | 2 | 6 | Operators Competent Person / Safety Officer/ Supervisor/ Foreman/ Site Engineer |
| 5) | Lifting & vehicle moment task under overhead power line/ underground services | Loss of life due to contact with energy source Damage to equipment Interruption to services | Minor, Major Injuries & Property damage | 4 | 4 | 16 | Permit to work system in place. Barricading of the area below, overhead services, restricting access to overhead lines by means of signage and physical height restricting structure- (safety goal post in place) Identification of underground service Drawing verification o drawings, verification of service location by hand excavation & metal detector etc. Daily safety talk briefing in place. Adequate supervisor in place. | 2 | 3 | 6 | Operator/Workers/ Foreman/Supervisor/ site Engineer |
| 6) | Trailer truck, dump Truck operator covering truck body with tarpaulin unsafe manner. (directly climbing on truck) | Operator can fall from truck body | Minor/Major injuries to operative's Permanent disability | 3 | 4 | 12 | Trapping/de-trapping station in place to remove & cover tarpaulin sheet from tuck body safely with using of retractable lanyard. Adequate supervisor at workplace. Safety signage's in place. Discipline for those who violate the rules | 2 | 2 | 4 | Operatives/ Safety Officer/ Supervisor/ Foreman/ Site Engineer |

| | | | | | | | | | | | |
|----|---|--|---|---|---|----|--|---|---|---|---|
| 7) | Shifting signage board with boom truck at project site for traffic control. | Lack of operator competency /training Using uncertified | Fatality or serious injuries can be sustained by persons if struck by | | | | Permit to work system in place (lifting plan in place) crash cushion vehicle at signage placing area for workers safety. | 2 | 3 | 6 | |
| | | Lifting tools Tackle. Using uncertified equipment for lifting task. Failure of lifting | Moving plant. Minor/Major injuries to personnel/ Property damage. | 4 | 3 | 12 | Adequate supervisor in place. Barricade the area and use tag line Lifting equipment and accessories shall be inspected and certified by an approved third- party agency periodically. Lifting supervisor to ensure lifting equipment and accessories are visually inspected prior to each shift so as to identify defective items. Daily Safety Talk briefing shall be given to the crew. Stop work during foul weather. Good communication between work groups Ensure adequate illumination in night work. Emergency response team & Ambulance at workplace. | | | | Operator/Workers/ Foreman/Supervisor/ Safety Officer/ Engineer |

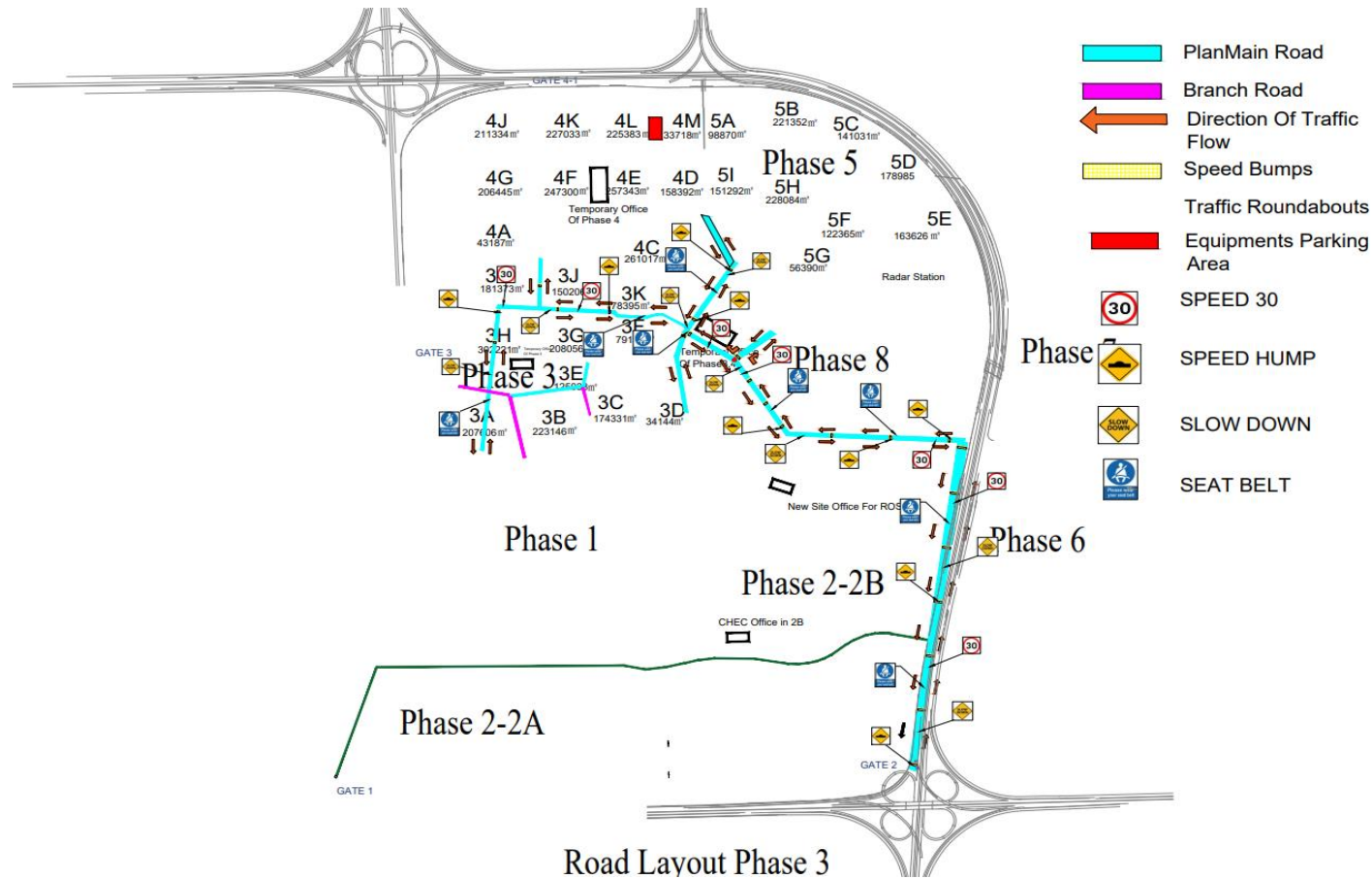
| | | | | | | | | | | | |
|----|---|---|--|---|---|----|--|---|---|---|---|
| 8) | Manual loading & unloading of sign boards, barriers at road besides | Manual handling tasks/activities that include the following characteristics: repetitive or sustained application of force Repetitive or sustained awkward posture. handling of unstable or unbalanced loads or loads which are difficult to grasp or hold | | 4 | 4 | 16 | Manual handling training has to provide for workers. Use suitable PPE (safety shoes, hardhat, safety glass, safety vest) Use proper manual handling techniques for handling materials. Use suitable PPE (safety shoes, hardhat, safety glass, safety vest) conduct MEPI Training for All workers. Briefing conduct at workplace prior to start the task. Liaise with police and department of transport for approvals/consent. | 3 | 2 | 6 | Operator/Workers/ Foreman/Supervisor/ Safety Officer /Engineer |
| 9) | Tools for fixing sign boards and utilities | Use of irrelevant tools. | Minor/Major injury to personnel & Property damage. | 4 | 3 | 12 | Site use power tools must be inspected & color code system in place. Trained personnel only allow to use the power tools. Proper cable management to avoid slip, trip hazards from trailing cables. Adequate supervisor at workplace. Equipment proper grounded. Prior to start the task conduct Briefing at workplace. Correct PPE to be worn | 2 | 2 | 4 | Technician/Workers/ Foreman/Supervisor/ Safety Officer /Engineer |

| | | | | | | | | | | | |
|-----|--------------------------------|---|---|---|---|----|---|---|---|---|---|
| 10) | Working outside under sunlight | Sunburn, Heatstroke/Stress | Nuisance, dizzying & vomiting | 4 | 3 | 12 | <p>Sufficient drinking water must be supplied around the site. Drinking water stations must be located near to the working areas.</p> <p>Covered shelters also shall be provided to the workers could rest at time intervals to minimize the effect of heat.</p> <p>Tool box talks must be conducted and information shall be circulated to all workers to aware of heat effects and ways to improve body resistance against heat.</p> <p>If temperature is determined high for workers to resist the management should consider adjustments on work timings.</p> | 2 | 2 | 4 | Operator/Workers/ Foreman/Supervisor/ Safety Officer /Engineer |
| 11 | Unauthorized entry on site | Hit by object. Traffic at workplace. MEPI. Disturb the activity. | Minor/Major injury to personnel/ property damage | 4 | 5 | 20 | <p>Installing a physical barrier.</p> <p>Regime petrol to monitor the effectiveness of the control measures.</p> <p>Access card in place</p> <p>Adequate warning signage's and hard barriers</p> | 2 | 2 | 4 | Vehicular/Operator/ Workers/ Foreman/Supervisor/ Safety Officer /Engineer |

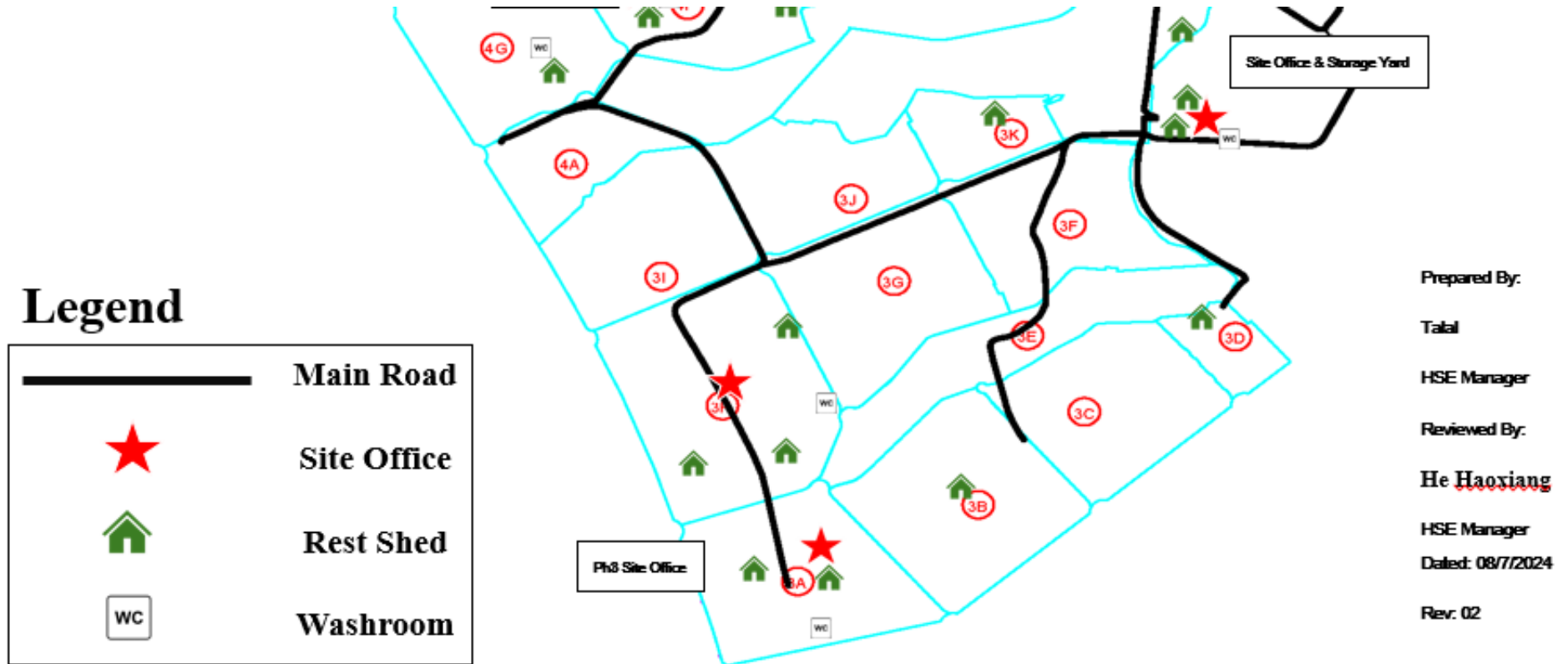
APPENDIX- B

LAYOUTS

Access Road Layout:



PHASE-3 Layout:



Prepared By:

Talal

HSE Manager

Reviewed By:

He Haoxiang

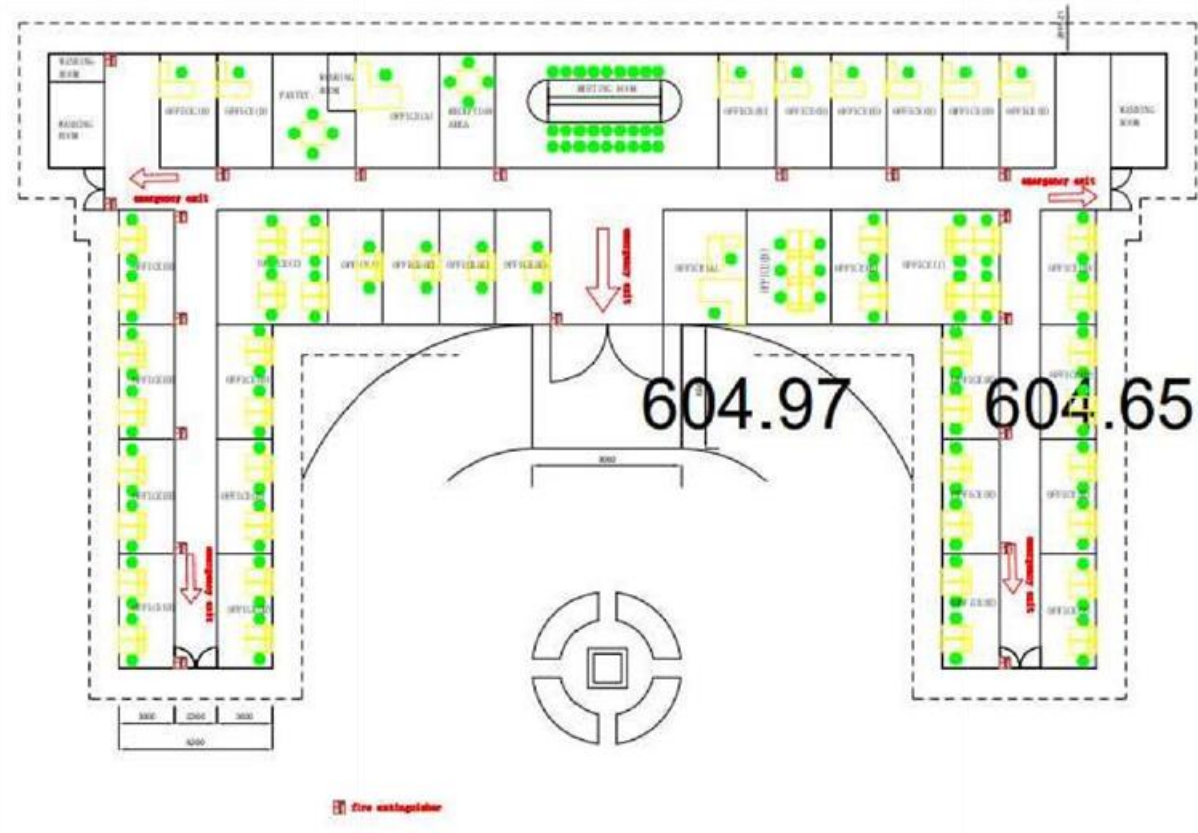
HSE Manager

Dated: 08/7/2024

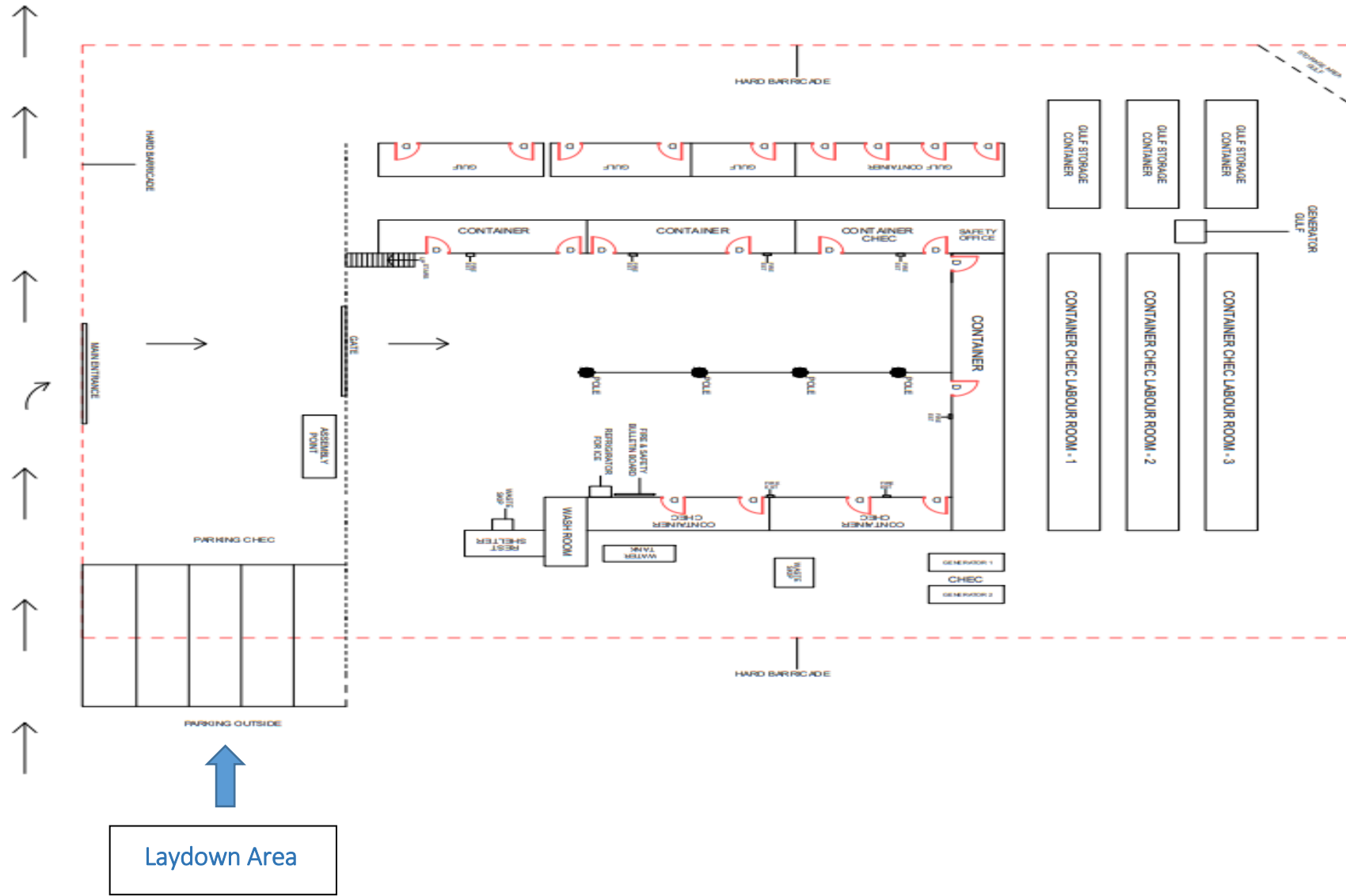
Rev: 02

PHASE 3-4 Main Office Layout:

CHEC Main Office:



PHASE 3 Site Office Layout:



PHASE 3 Road Access pictures:

Gate 2

| Equipment | Dimensions |
|-----------|---|
| LMV | 2.5 Meter |
| HMV | Width: 3.5 – 4 Meter, Height: 5.5 Meter |



Access Road from Gate 2 towards Phase-3





Left Turn





Phase 3-4 Main Office direction







Access Road to Phase 3 Sub Phases







Site Office Phase 3 direction

