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**KWAZULU-NATAL PROVINCE**

PUBLIC WORKS  
REPUBLIC OF SOUTH AFRICA

# Draft Occupational Health and Safety Specification (OHSE SPEC)

PROJECT NAME	Sokhulu Clinic
PROJECT ADDRESS	uMhlathuze Municipality
WIMS NR:	063049
CLIENT:	Department of Health
PREPARED BY:	SF Ntuli

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## 1. Abbreviations

AIA	Approved Inspection Authority
ALARP	As low As Reasonably Practicable
BRA	Baseline Risk Assessment
BOQ	Bill of Quantities
COIDA	Compensation for Occupational Injuries and Diseases Act.
CHSM	Construction Health and Safety Manager
CHSR	Client Health and Safety Representative
CR	Construction Regulations
CWP	Construction Work Permit
DMR	Driven Machinery Regulations
DEL	Department of Employment and Labour
FEMA	Federated Employers Mutual Association
FPP	Fall Protection Plan
GAR	General Administration Regulations
GSR	General Safety Regulations
HCSR	Hazardous Chemical Substances Regulations
HIRA	Hazard Identification and Risk Assessment
H&S	Health and Safety
JSA	Job Safety Analysis
MSDS	Material Safety Data Sheet
OH	Occupational Health
OHSA	Occupational Health and Safety Act, Act 85 of 1993
PC	Principal Contractor

PPE	Personal Protective Equipment
Pr CHSA	Professionally Registered Health and Safety Agent
RAMS	Risk Assessment and Method Statement
RTA	Road Traffic Safety Act, Act 93 of 1996
SABS	South African Bureau of Standards
SACPCMP	South African Council for Project and Construction Management Professions.
SARTSM	South African Road Traffic Safety Manual, Chapter 2. Volume 13
SANS	South African National Standards
SSHSS	Site Specific Health and Safety Specification
SSHSP	Site Specific Health and Safety Plan
SWP	Safe Work Procedure

## 2. Definitions

**“Occupational Health Practitioner”** Doctor or Nurse registered and in Good Standing with the Health Professions Council of South Africa and has a tertiary qualification in Occupational Health Nursing.

**“Medical Surveillance”** Planned program of periodic examination/medicals of employees by an occupational health practitioner.

**“Act”** Means, unless the context indicates otherwise, the Occupational Health and Safety Act, 85 of 1993.

**“Agent (Pr. CHSA)”** means a competent person who acts as a representative for a client in terms of Regulation (5)5 of the Construction Regulations of 2014.

**“Audit”** Means a systematic examination of documents, equipment, physical on-site conditions etc. to evaluate the levels of compliance with clients OHS requirements, applicable legislative requirements, and the achievement of a safe working environment for Employees, as well as not posing a risk to other persons and the environment.

**“Baseline Risk Assessment” (BRA)”** A wide encompassing risk assessment performed by the client of anticipated construction activities to execute the anticipated scope of work pertaining to the project.

**"CR"** refers to the Construction Regulations 2014.

**"Client"** in terms of this document means Department of Public Works, Kwazulu-Natal.

**"CHSR"** Means Client Health and Safety Representative, an in-house employee appointed by the Client to oversee the Health and Safety Management of a project.

**"CHSM"** means Construction Health and Safety Manager.

**"Competent person"** means a person who-

- a) Has in respect of the work or task to be performed the required knowledge, training and experience and, where applicable, qualifications, specific for that work or task provided that where appropriate qualifications and training are registered in terms of the provisions of the National Qualifications Framework Act, 2000 (Act No.67 of 2000), those qualifications and that training must be regarded as the required qualifications and training; and is familiar with the OHS Act, Act 85 of 1993 and with the applicable regulations made under the Act.

**"Construction Health and Safety Officer"** Means a person deemed competent by SACPCMP under the relevant category of registration appointed by the Principal Contractor to oversee the Safety, Health and Environmental Management on-site.

**"Construction Manager (Site Agent)"** means a competent person responsible for the management of the physical construction processes and the coordination, administration, and management of resources on a construction site.

**"Construction Plant"** Encompasses all types of plant including but not limiting to, cranes, piling equipment, boring machines, excavators, dewatering equipment, and road vehicles with or without lifting equipment.

**"Construction Site"** means a workplace where construction work is being performed.

**"Construction Supervisor"** means a competent person responsible for supervising construction activities on a construction site.

**"Construction Vehicle"** means a vehicle used as a means of conveyance for transporting persons or material, or persons and material, on and off the construction site for the purposes of performing construction work.

**"Construction work"** means any work in connection with –

- a) The construction, erection, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure; or
- a) the construction, erection, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer, or water reticulation system; or the moving of earth, clearing of land, the

making of excavation, piling, or any similar civil engineering structure or type of work.

**"Construction Work Permit"** means a document issued in terms of Regulation 3 of the Construction Regulations of 2014;

**"Contractor"** means an employer who performs construction work.

**"Demolition Work"** means a method to dismantle, wreck, break, pull down or knock down of a structure or part thereof by way of manual labour, machinery, or the use of explosives.

**"Designer"** Means a competent person as defined by the Construction Regulations of 2014 appointed by the Client or the Principal Contractor as Agent to design and/or supervise and/or monitor construction work on their behalf.

**"Fall Protection Plan"** (FPP) means a documented plan, which includes:

- a) Identification of hazards and risks pertaining to the risk of falling taking the nature of the work and its environment in consideration;
- b) The procedures and methods to be applied to eliminate the risk or to reduce it to a level which is as low as reasonably practicable; and
- c) A rescue plan and procedures.

**"Fall Prevention Equipment"** Means equipment used to prevent persons, tools, equipment, machinery materials etc from falling from a "fall risk" position, including personal protective equipment, body harness, body belts, lanyards, lifelines or physical equipment, guardrails, screens, barricades, signage anchorages or similar equipment.

**"Fall Risk"** means any potential exposure to falling either from, off, over or into.

**"Hazard"** Means a source, situation, feature, activity, or anything else which has got the potential to cause harm, injury, death, environmental damage, business interruption etc.

**"Hazard Identification and Risk Assessment (HIRA)"** Means a document, which identifies hazards, assesses the risks and identifies the control measures, which are to be used to mitigate or reduce to a level which is as low as reasonably practicable the occurrence of hazards and risks during construction, use, operation and eventual demolition phases of a project.

**"Hazardous Chemical Substance (HCS)"** Means any toxic, harmful, corrosive, irritant or asphyxiating substance, or a mixture of substances, for which an occupational exposure limit is prescribed, or an occupational exposure limit is not prescribed, but which creates a hazard to health and the environment.

**Induction Training:** Means once off introductory training on general health and safety issues given to all employees and visitors to the site before commencement of work on site.

**"Issue based Risk Assessment"** Means a Risk Assessment based upon a specific issue/activity/item which could be instituted in response to the high priority risks identified in the Baseline Risk Assessment, Programme Risk Assessment or even after a near miss or actual loss event.

**"Job Safety Analysis (JSA)"** Means an analysis of a specific job or task according to a pre-determined procedure which helps to integrate accepted SHE principles and practises into a particular task or activity. Each step of the JSA is to identify potential hazards and to recommend the safest way to do the job.

**"Medical Certificate of Fitness"** means a certificate contemplated in regulation 7(8) of Construction Regulations of 2014.

**"Method Statement (MS)"** also known as a **Safe Work Method Statement (SWMS), or Safe Work Procedure (SWP)** is a document developed because of the outcome of a risk assessment by the contractor, which contains details of how each task should be performed safely.

**"Principal Contractor (PC)"** means an employer appointed by the client to perform construction work, but may also include the responsibility of designing or overseeing the design process.

**"RAMS"** Means Risk Assessments and Method Statement.

**"Risk"** Means the probability or likelihood that the possible harm, injury, death etc potential of a hazard could be realized with a consequence attached.

**"SHE"** Means Safety, Health and Environmental.

**"Site":** Means the area handed over to the Principal Contractor for the purposes of construction work. Where there is no demarcated boundary it will include all adjacent areas, which are reasonably required for the activities for the Principal Contractor and approved for such use by the Designer and/or the Client.

**"Site Specific Health and Safety File (SSHSF)"** Means a file specifically pertaining to a site containing all health and safety documentation relating to the project as per the requirements of the Construction Regulations of 2014 and/or the SSHSS.

**"Site Specific Health and Safety Plan (SSHSP)"** means a detailed site, activity, or project specific documented plan in accordance with the client's OHSE specification indicating how health and safety will be managed during the project.

**"Site Specific Health and Safety Specification (SSHSS)"** means a site, project specific document prepared by the client pertaining to all health and safety requirements related to construction work.

### 3. KEY REFERENCES

Occupational Health and Safety Act No. 85 of 1993 and Regulations (as amended)

Compensation for Injury and Occupational Diseases Act No. 100 of 1993 (as amended)

South African Roads Traffic Safety Manual (SARTSM) Chapter 2, Volume 13 of 1999 Road Traffic Safety Act No. 93 of 1996 (as amended)

SANS Code 10400.

SANS 10085

### 4. INTRODUCTION AND PURPOSE

The *KwaZulu Natal Department of Public Works* is deemed as the “Client” in terms of the definitions of the Construction Regulations of 2014 as published in *Government Gazette No. 37305*. The Construction Regulations of 2014 in terms of *CR(5)(1)* stipulates that the Client must prepare a suitable, sufficiently documented and coherent ,SSHSS, for the intended construction work based on the Baseline Risk Assessment, (BRA) which in turn is based on the Scope of Work and several other related factors such as hazards and risks identified by the designer. It must be noted that for ease of reading the term “He/His” will be descriptive of both male and female gender throughout this document

#### Purpose

The purpose of this SSHSS identifies the health and safety requirements the contractor needs to comply with. It will be periodically reviewed and updated (if necessary) to address and / or include:

- Changes in legislation;
- Client requirements;
- Leading practices;
- Lessons learnt from incidents; and
- Unforeseen issues.

This SSHSS also forms an integral part of the contract between the Client and the PC. It identifies and encompasses the working environment, practises and behaviours expected of all parties who have roles to play in the successful completion of this project. The SSHSS provides guidelines to comply with the Occupational Health and Safety Act, Act 85 of 1993 (OHS Act) as amended, The Construction Regulations of 2014, other applicable legislative requirements, and applicable best practises. It aims to firstly ensure compliance with applicable legislative requirements as indicated above and secondly to form the basis for the PC to develop his/her SSHSP.

As with any other plan for it to be implemented and managed effectively it requires the allocation of sufficient funds and resources, human and others, to achieve the objectives set out in the plan. In line

with this requirement, Construction Regulation 5(1) (g) also requires the Client to ensure that the Principal Contractor has made adequate provisions for the cost of Health and Safety Measures in their tenders. The PC will be required to submit a Bills of Quantities (BOQ) with his SSHSP, which can be found under the Annexures section of this document which will be evaluated at the time of the evaluation of the SSHSP to satisfy the requirements of CR 5(1)(g).

This specification covers the requirements for eliminating and/or mitigating health and safety risks, injuries, accidents, and incidents on site to a level which is as low as reasonably practicable (ALARP). It addresses legal compliance, hazard identification, risk management and the promotion of a positive health and safety culture within the project. This specification also makes provision for the protection of persons other than those employed by the PC as stipulated by Sec 9 of the OHS Act, Act 85 of 1993.

It will also be noted that this document specifies certain recommendations, which should be followed so that the health and safety of all persons who may be potentially at risk and the potential risk to the environment may receive the same priority as other facets of the project such as Time, Cost and Quality.

It must be noted that this SSHSS as much as it is detailed it is not exhaustive and the onus is on the PC to ensure that he complies with Section 8 of the OHS Act, Act 85 of 1993 which reads as follows:

Sec 8(2)(d) "Establishing as far as reasonably practicable what hazards to the Health and Safety of persons are attached to any work which is performed, and he shall as far as is reasonably practicable, further establish what precautionary measures should be taken with respect to such work in order to protect the health and safety of persons, he shall provide the necessary means to apply such precautionary measures..", this means that Principal Contractors as an employer in his/her own right must at all times ensure continuous Hazard Identification and Risk Analysis (HIRA) and the implementation of appropriate risk reduction and/or elimination measures so as to strive towards the implementation and continued provision and maintenance of a healthy and safe working environment. The SSHSS is a performance specification aimed at ensuring that the Client and any persons it enters into an agreement with achieves an acceptable level of SHE performance.

**This OHSE Specification further seeks to achieve the following.**

- a) To provide Principal Contractors with the Structure of the Detailed OHSE Plans they will have to prepare and submit for this project. **See Annexure A**
- b) Provide the overarching framework within which the Principal Contractor is required to demonstrate compliance with certain requirements for occupational health and safety established by the Occupational Health and Safety Act, Act 85 of 1993, all applicable regulations and Client Specific Requirements. **See Annexure B**
- c) To bring to the attention of the Bidding Principal Contractors that they need to make an undertaking that the costs for executing the project includes the costs of complying with the OHS Act, Act 85 of

1993, all applicable regulations including Client Specific requirements. Such undertaking is made by appending signatures on the OHS Declaration for Tenders. **See Annexure C**

- d) Ensure that the Principal Agent as the Professional Service Provider appointed by the Department to manage the project on its behalf in terms of the Conditions of Contract applicable to this project ensures that the contents of this document and the attached Baseline Risk Assessment are taken into consideration during design by all professionals appointed and that the OHSE Specification is incorporated into the tender documents. **See Annexure D**

## **5. SCOPE OF APPLICATION**

This SHE Specification is exclusively applicable to the following project:

**SOKHULU CLINIC: WIMS No 063049**

### **5.1 SITE LOCATION**

- |                                  |   |                                      |
|----------------------------------|---|--------------------------------------|
| • Province                       | - | KwaZulu Natal                        |
| • District Municipality          | - | King Cetshwayo District Municipality |
| • Local Municipality             | - | uMhlathuze                           |
| • Ward                           | - |                                      |
| • Latitude :                     | - |                                      |
| • Longitude :                    | - |                                      |
| • Street address (or directions) | - |                                      |

### **5.2. DRAFT SUMMARY SCOPE OF WORK**

1. Manual Offloading of materials.
2. Placement of containers.
5. Bricklaying and plastering
6. Erecting and assembling Elevated steel structures
7. Placement of Water tanks
8. Fitting gutters and downpipes.
9. Installation of tiles and skirting.

### 5.3 THE PROJECT TEAM

The Project Team is as follows:

Initials and Surname	Organisation	Discipline	Telephone	E-mail
Ms Pamela Tshuta	D.O.PW	Project Leader	035 874 3280	Pamela.Tshuta@kznworks.gov.za
Mr SF Ntuli	D.O.P. W	CHSR	035 874 3223	Smanga.Ntuli@kznworks.gov.za

## 6. REQUIREMENTS PERTAINING TO SITE SPECIFIC HEALTH AND SAFETY PLAN SUBMISSION

The PC shall prepare a documented SSHSP as per CR 7(1) (a) based on the information / requirements contained in this specification, applicable legislative requirements and demonstrate how he is going to implement health and safety requirements during the construction process. It must cover all activities that will be carried out on the project site, from mobilisation and set-up through to Close-out. The SSHSP must include all documentation required in terms of The Act, Regulations, and this specification for the purpose of evaluation and approval.

The PC must refer to Annexure C of the SSHSS to familiarise himself with the requirements pertaining to the contents of his SSHSP to be submitted to the CHSR for approval. Failure to comply with the requirements of Annexure C may result in unnecessary delays in the SSHSP approval process. The PC must keep the original SSHSP and submit a copy for evaluation and approval purposes, which will be kept by the CHSR for filing and referencing purposes.

Upon approval of the PC's SSHSP, the CHSR will issue the final letter of SSHSP approval as required by CR 7(1)(a) and confirm his appointment as required by CR 5 1(k). The PC must file the letter on his SSHSF. It must be noted that Construction work may not commence until an official letter issued by the CHSR has been issued. The PC shall be responsible for ensuring that adequate information is submitted as supporting documentation with his completed documentation.

The approved SSHSP included in the SSHSF as well as this SSHSS must always be kept on site and include all documentation required in terms of The Act and this specification. It must be kept in mind that All Subcontractors must open their own SSHSP's and files. These health and safety files shall be approved in writing by the PC's CHSO, as required by CR 7. 1 (c)(x), a copy of which must be filed on the Subcontractors as well as the PC's Health and Safety File. The Sub-Contractor must also be appointed in terms of CR 7. (c)(v). The Subcontractor's Health and Safety Files will also be subjected to evaluation by the CHSR when conducting an Audit in addition to the evaluation by the CHSO.

It is of the utmost importance that the PC takes note of the following when submitting his SSHSP for approval **in addition the requirements of Annexure A:**

- Completion and submission of Annexure C “Health and Safety Declaration” to the effect that he has the competence and necessary resources to carry out the work safely in compliance with the Occupational Health and Safety Act and its Regulations.
- A valid Letter of Good Standing.
- Two detailed Risk Assessments and Method Statements (RAMS) of two priority hazards as identified by the Risk Profile of anticipated construction activities for review by the CHSR, with evidence of the CHSO input to enable the CHSR to evaluate the Risk Assessors competency in terms of being able to conduct sufficient Risks Assessments and subsequent Method Statements.
- Valid Proof of Competencies, including CV’s of Key Appointments.

<b>7.1.</b>	<p align="center"><b>ANNEXURE A:</b>  <b>OHSE PLAN STRUCTURE</b>  SSHSP submitted for approval and SSHSF layout requirement.</p>
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<u>Number</u>	<u>Item</u>	<u>To be submitted with SSHSP for approval</u>	<u>Comments</u>
1.	INDEX	Yes	None
2.	SSHSP Approval Letter and Appointment letter.	No	To be filled in SSHSF after issuing by CHSR
3.	Letter of Good Standing	Yes	To be kept up to date and filled in SSHSF
4.	Notification of Construction Work	Yes	To be submitted to DEL for recording, stamped copy forwarded to Client before SHE Plan Approval Letter will be issued. No work will be able to commence until letter has been issued including Site Establishment. work. To be filled in the SSHSF
5.	Signed and dated SHE Management Plan	Yes	To be filled in SSHSF
6.	Organogram	Yes	To be placed on the SSHSF, kept updated
7.	Signed and dated Health and Safety Policies	Yes	To include communication Register and filled in SSHSF
8.	Site Layout Plan	Yes	To be kept updated and filled in SSHSF
9.	Signed and dated Emergency Plan	Yes	To be kept updated and filled in SSHSF
10.	Signed and dated Environmental Management Plan	Yes	To be kept updated and filled in SSHSF
11.	Signed and dated Personal Hygiene and Infectious Disease Management Plan.	Yes	To be kept updated and filled in SSHSF.
12.	Signed and dated Fall Prevention Plan	Yes	To be reviewed prior to work being conducted, and filled in SSHSF with communication record.

13.	Demolition Plan	Yes	To be submitted to CHSR and Structural Engineer for approval before work commences and filled in SSHSF with communication record.
14.	Two signed and dated risk assessments of priority risks as per the risk profile.	Yes	To be submitted with SSHSP for evaluation. To be filed in SSHSF and reviewed prior to work being conducted.
15.	Two signed and dated Method Statements/ Safe Work Method Statements for the two priority risk assessments as per item 11.	Yes	To be submitted with SSHSP for evaluation. To be filed in SSHSF and reviewed prior to work being conducted.
16.	Risk assessments and Method Statements.	Yes	To be kept on SSHSF with communication records
17.	Daily Safe Task Instruction (DSTI)	No	To be signed off at the start and end of shift with communication record, to be kept in SSHSF.
18.	Induction Course	Yes	To be reviewed, kept updated and include communication record register. Filled in SSHSF.
19.	Toolbox talks	Yes	To include communication register and filled in SSHSF.
20.	PPE Issue Record	Yes	To include training in correct use etc and filled in SSHSF.
21.	Sub – Contractor Monthly Audit records	No	To be discussed at SHE Committee meeting, closed out and kept on SSHSF.
22.	External Audit Reports	No	To be discussed at SHE Com Meetings, Internal Meetings etc and filed in SSHSF.
23.	Self-Audit Format	Yes	To be completed on a monthly basis, forwarded to team members at least 7 days before progress meeting, to report on close out at the meeting. Filed on the SSHSF.
24.	Sub- Contractor Appointments and scope and list	No	To be kept on SSHSF

25.	Section 37(2) Agreements	Yes	To be kept on SSHSF.
26.	Copy of Construction Regulations	Yes	To be kept on SSHSF.
27.	Construction Manager (CR 8(1))	Yes	Including CV / Proof of Competency. To be kept in the SSHSF.
28.	Assistant Construction Manager (CR 8(2))	Yes, if applicable	Including CV / Proof of Competency. To be kept in the SSHSF.
29.	SHE Officer (CR 8(5))	Yes	Including CV / Proof of Competency and SACPCMP Registration. To be kept in SSHSF.
30.	Construction Supervisor (CR 8(7))	Yes	Including CV / Proof of Competency. To be kept in SSHSF.
31.	Risk Assessor (CR 9 (1))	Yes	Including CV / Proof of Competency. To be kept in SSHSF.
32.	Fall Prevention Planner (10 (1)(a))	Yes	Including CV / Proof of Competency. To be kept in SSHSF.
33.	Temporary Works Designer (CR 12(1))	No	Including CV / Proof of Competency. To be kept in SSHSF.
34.	Temporary Works Supervisor (CR 12(2))	No	Including CV / Proof of Competency. To be kept in SSHSF
35.	Excavation Supervisor (CR 13(1)(a))	Yes	Including CV / Proof of Competency. To be kept in SSHSF
36.	Demolition work Supervisor (14(1))	Yes	Including CV / Proof of Competency. To be submitted with Demolition Plan. To be kept in SSHSF
37.	Scaffold Supervisor (CR 16(1))	Yes	Proof of Competency. To be kept in SSHSF
38.	Scaffold Erector (CR 16 (2))	Yes	Proof of Competency. To be kept in SSHSF
39.	Scaffold Inspector (CR 16(2))	Yes	Proof of Competency. To be kept in SSHSF

40.	Suspended Platform Supervisor (CR 17(1))	No	Proof of Competency. To be kept in SSHSF
41.	Material Hoist Inspector (CR 19(8)(a))	No	Proof of Competency. To be kept in SSHSF
42.	Bulk Mixing Plant Supervisor (CR 20(1))	No	Proof of Competency. To be kept in SSHSF
43.	Construction vehicle and Mobile Plant Operator (CR 23(1)(d))	Yes	Proof of Competency, medical fitness etc. To be kept in SSHSF
44.	Crane Supervisor (CR 22(a))	Yes, If applicable	Proof of Competency, medical fitness. To be kept in SSHSF
45.	Temporary Electrical Installation Inspector (CR 24(d))	Yes	Proof of Competency. To be kept in SSHSF
46.	Stacking and storage Inspector (CR 28 (a))	Yes	Appointment, to be kept in SSHSF
47.	Fire Equipment Inspector (CR 29(h))	No	Including basic Fire Fighting Training proof of competency
48.	Fire Team Member (CR 29 (i))	No	Including basic Fire Fighting Training proof of competency
49.	Portable Electrical Equipment Inspector (EMR 9)	No	Appointment to be kept in the SSHSF
50.	Accident Incident Investigator (GAR 9(2))	Yes	Including CV / Proof of Competency. To be kept in SSHSF
51.	First Aider GSR (3(4))	Yes	Including at least Level 2 First Aid Competency. To be kept in the SSHSF
52.	Welding/Flame cutting equipment Inspector (GSR 9)	No	Appointment to be kept in the SSHSF
53.	Ladder Inspector (GSR 13 (a))	No	Appointment to be kept in the SSHSF.
54.	Hazardous Chemical Substances Supervisor (HCSR 3(3))	No	Appointment to be kept in the SSHSF.
55.	Hand Tool Inspector (Sec 8(2)(a))	No	Appointment to be kept in the SSHSF.
56.	SHE Representative (Sec 17)	No	Including proof of Competency. To be filled in SSHSF

57.	Sub-Contractor (CR 7(1)(c))	No	As per applicable legislative requirements
58.	Electrical Contractor (EIR 6)	No	Including proof of Professional Registration
Registers as required by scope of work, equipment, facilities etc.			

**7.2.****ANNEXURE B****OHSE CLIENT SPECIFIC REQUIREMENTS****SITE SPECIFIC OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT (IN ALPHABETICAL ORDER)**

7.2.1	Accident, Incident Investigation.
7.2.2	Alcohol and Drugs.
7.2.3	Appointments.
7.2.4	Consultation, Communication and Liaison
7.2.5	Close-out requirements.
7.2.6	COIDA.
7.2.7	Competency and Training
7.2.8	Confined Space Work.
7.2.9	Construction Supervision.
7.2.10	Cranes, Cradles and Man Cages.
7.2.11	Defects Reporting and Correction.
7.2.12	Demolition.
7.2.13	Delivery and Placement of Containers, Park Homes etc.
7.2.14	DSTI's.
7.2.15	Electrical Connections.
7.2.16	Emergency Drills and Evacuation Procedures.
7.2.17	Environmental Management Plan.
7.2.18	Edge Protection.
7.2.19	Excavations.
7.2.20	Extreme Weather Conditions.
7.2.21	Fall Prevention Plan and Planning.

7.2.22	First Aid Boxes and Equipment.
7.2.23	Fire Extinguishers, Precautions and Fighting.
7.2.24	Fuel and Flammable Liquids.
7.2.25	General Record Keeping.
7.2.26	Hand Tools.
7.2.27	Hazardous Chemical Substances
7.2.28	Hazard Identification and Risk Analysis (HIRA).
7.2.29	Hazards and Potentially Hazardous Situations.
7.2.30	Health and Safety Audits, Monitoring, Reporting and Statistics.
7.2.31	Health and Safety Disciplinary Procedure.
7.2.32	Health and Safety Management Notice Board.
7.2.33	Health and Safety Organogram.
7.2.34	Health and Safety Plan Submission.
7.2.35	Health and Safety Policy.
7.2.36	Health and Safety Training.
7.2.37	Heat Stress and Sun Protection.
7.2.38	High Voltage Equipment and Installations.
7.2.39	Housekeeping.
7.2.40	Incident and Injury Management.
7.2.41	Induction Training
7.2.42	Ladders, Portable.
7.2.43	Lighting.
7.2.44	Lifting Machines and Tackle.
7.2.45	Manual Handling of Materials.

7.2.46	Maintenance.
7.2.47	Medical Fitness / Fitness to work
7.2.48	Method Statements, Safety (SMS)(SWP'S)
7.2.49	Noise.
7.2.50	Notices.
7.2.51	Notification of Construction Work
7.2.52	Occupational Hygiene (Personal Hygiene and Infectious Diseases).
7.2.53	Permits to Work
7.2.54	Personal Protective Equipment. (PPE)
7.2.55	Plant and Machinery.
7.2.56	Planned Task Observations
7.2.57	Pneumatically Powered Tools and Equipment.
7.2.58	Portable Electrical Tools.
7.2.59	Public Safety and Security.
7.2.60	Risk Assessment of Plant and Equipment.
7.2.61	Roof Work.
7.2.62	Safety Meetings: Pre- Start, Review etc.
7.2.63	Safety, Health and Environmental Representatives and Committee's.
7.1.64	Safety Officer (CHSO), Roles and Responsibilities.
7.2.65	Signage.
7.2.66	Site Clearance.
7.2.67	Site Establishment
7.2.68	Site Layout Plan.
7.2.69	Site Specific Safety Rules.

7.2.70	Smoking on Site.
7.2.71	Speed restrictions and Protections.
7.2.72	Stacking and Storage of materials.
7.2.73	Structures and Temporary Works.
7.2.74	Sub-Contractors.
7.2.75	Transportation of Workers.
7.2.76	Trespassing.
7.2.77	Toolbox Talks
7.2.78	Vehicles and Traffic Management.
7.2.79	Ventilation.
7.2.80	Vibration.
7.2.81	Visitors to Site.
7.2.82	Waste Management.
7.2.83	Water Management.
7.2.84	Welding, Grinding, Cutting etc.
7.2.85	Welfare Facilities.
7.2.86	Working at Heights.

**LISTED BELOW PLEASE FIND SITE SPECIFIC OCCUPATIONAL HEALTH AND SAFETY STIPULATIONS IN ALPHABETICAL ORDER. IT MUST BE NOTED THAT SOME ITEMS MAY BE OF MORE DETAIL THAN OTHERS, THE REASON BEING THAT DUE TO THE LEVEL OF RISK ASSOCIATED WITH THESE ITEMS THAT MORE DETAILED INFORMATION IS NEEDED TO BE BROUGHT TO THE PC'S ATTENTION, BUT THIS MUST NOT BE SEEN AS AN INDICATOR THAT OTHER ITEMS ARE OF LESS IMPORTANCE.**

### 7.2.1 Accident, Incident Investigations

All Injuries sustained on the site are to be categorized into the following categories:

- first aid.
- medical attendance (Doctor).
- disabling; and
- fatal injuries

The PC must manage Accident/ Incidents. A procedure for the management of all health and safety accidents/Incidents must be drawn up and implemented. This procedure must define the responsibilities, methodologies and processes that must be followed for:

- Reporting an incident/accident.
- Investigating an incident/accident.
- Analysing an incident/accident to determine the root cause.
- Identifying and implementing corrective actions to prevent a recurrence; and
- Communicating information concerning an incident to relevant persons and / or groups.

A documented, detailed investigation report must be submitted with 7 days to the Project Team which and as a minimum include the following:

- The date, time, and location of the accident.
- Witness statements, including residential and contact details.
- A detailed description of the accident, including photographs.
- The Initials, Surnames, residential and contact details of any injured person/s.
- Injury details (if applicable).
- A summary of the first aid and / or medical treatment provided (if applicable).
- The status of any injured persons (if applicable).
- The root causes of the incident; and
- Detailed corrective actions, including responsible persons and target dates for implementation.

A Near Hit/Mis is an incident which may have the potential to cause harm, injury or damage and need therefore to be reported and investigated to prevent the potential negative effect it may have been realised.

The contractor/ Supervisor/Employee must report each incident that occurs (including Near Hits/Mis) to the CHSO without delay. Preliminary details must be recorded on the same workday or shift on which an incident occurs. In the event of a significant incident, with the potential to cause serious injury, harm or damage taking place, work must cease and may only resume once the necessary actions, including the re-evaluation of any relevant risk assessments have been taken to reduce the risk of recurrence. Work

may only be permitted to recommence once formal authorisation has been granted by the CHSO after consultation with the CR 8(1).

In the event of a person requiring First aid such cases must also be recorded in the First Aid Dressing Register. All accidents /Incident investigation reports and related documentation must be recorded on the safety file. All disabling and fatal accidents must immediately be reported to the CHSR telephonically after they occur followed by and e-mail notifying the CHSR of accident.

All incidents as described in Section 24 of the OHS Act must be reported in the prescribed period and manner to the Department of Employment and Labour. Copies of Section 24 reports, including WCL 2 forms must be forwarded to the CHSR.

The PC must on a monthly basis include in his Self-Audit Report all injuries sustained on site with the required remedial measures taken. Accident/ Incidents and the identified Root Causes with the recommended corrective measures must be included on the agenda of Safety Committee Meetings for discussion and reported back on at the next progress meeting.

#### **7.2.2**

#### **Alcohol and Drugs**

A fit-for-work policy must be in place, incorporating zero tolerance for any drugs (including prescribed medication with an intoxicating effect) or alcohol in the system of a driver or operator. Drug and alcohol testing must be part of all medical fitness assessments for the issue of medical fitness certificates.

No alcohol and other drugs will be allowed on site. No person may be under the influence of alcohol or any other drugs while on the construction site. Any person on the construction site who is on prescription medication must inform the CHSO officer or the safety representative accordingly. A register must be kept of all persons on prescription medication with the contact details of the medical practitioner prescribing such medication.

Any person on the construction site who is suffering from any illness/condition that may have a negative effect on his/her safety performance must report this to the CHSO or Safety Representative.

Any person on the construction site who is suspected of being under the influence of alcohol or other intoxicating drugs must be removed from site. He must be instructed at the time of being removed from site to report the next day for a preliminary inquiry. A full disciplinary process must be followed by the Contractor concerned and a copy of the disciplinary action must be forwarded to the PC for his records.

**7.2.3****Appointments**

The PC shall make appointments as per the Act and its Regulations; structured and guided by the scope of works and its associated risks. The PC must refer to Annexure C for a list of appointments which may be applicable to his Safety Management Structure.

All health and safety appointments must be done in writing and kept on the SSHSF. Where appointments have lapsed or new appointments have been made, such previous appointments and the new appointments must be kept in the SSHSF. Expired appointment may not be discarded or destroyed.

All SHE Appointments must be reflected on the Site SHE Organogram, which must be kept up to date, filed in the SSHSF and displayed in the Site Office.

It is acknowledged that the PC may need to allocate more than one appointment to certain staff members. This practice may only take place if health and safety standards would not be negatively affected, with the CHSR reserving the right to specify otherwise if deemed that it may affect health and safety standards.

**7.2.4****Consultation, Communication and Liaison**

The PC must establish and maintain effective communication and consultative processes, allowing for a two-way dialogue for the duration of the project to ensure that:

- All personnel are kept up to date regarding health and safety matters e.g., Hazards and risks, incidents and lessons learnt, leading practices, performance against objectives, etc.
- General health and safety awareness levels are kept high.
- Prompt feedback is given to personnel about health and safety issues or concerns that they raise; and
- Relevant, and often critical, health and safety related information e.g., design changes, instructions, reporting of hazardous conditions or situations, etc. is effectively disseminated.

This can be achieved by means of Toolbox Talks, Project Safety Meetings, Health, and Safety Awareness Programs etc.

**7.2.5****Close-out**

In terms of CR7(1)(e) and CR7(2)(b) the PC must hand over a consolidated SHE File to the Client when Construction work ceases, and the PC hands the site back to the Client. The Sub-Contractors appointed by the PC are required to do the same for the PC when exiting the site after completion of their work. The onus is on the PC to allow adequate time to ensure the correctness and approval by the CHSR of the files prior to exiting the Site.

The following list is an example of what should be included in the Close –out files but is not exhaustive. The CHSR may require further information at the time of completion of the project and the PC will have to ensure that all instructions are met. All records from the start of the project must be included. Daily or monthly inspection records are not required unless they are related to an accident. All records must be in electronic format and submitted to the CHSR for approval in adequately formatted lists and folders. The Layout should be logical and in the same order as in the site files. Upon final approval of the files by the CHSR, two hard copies of the electronic files must be handed over to the CHSR unless otherwise indicated by the CHSR.

#### Health and Safety close out file requirements.

##### PC File to include the following:

- Copy of Notification of Construction Work/Construction Permit, stamped by DOL.
- Client SHE Specification.
- Principal Contractor's SHE Plan.
- Client Letter of SHE Plan Approval.
- Organograms (Original and amended.)
- List of SHE Legal Appointments (Originals and amended).
- List of all employees employed on a permanent or contractual basis over the duration of the contract, PPE receipt records.
- Medical Fitness Certificates for all employees.
- Letters of Good Standing for the Project.
- Incident/ Accident Records.
- NCR's.
- CHSR Health and Safety Audits.
- Risk Assessments.
- Method Statements.
- Safe Work Procedures etc.
- List of all Subcontractors.

##### Sub-Contractor Files to include the following:

- SHE Plan.
- SHE Plan Approval letter issued by the PC.
- Organogram/s (Original and amended).
- List of SHE Appointments (Original and Amended).

- All employees employed on a permanent or contractual basis over the duration of the contract receipt records.
- Medical Certificates of Fitness for all employees.
- PC and own audits.
- Mandatory Agreements (if applicable).
- Risk Assessments.
- Method Statements.
- Safe Work Procedures
- Letters of Good Standing.
- Incident Records.
- Non-Conformance records.

PC to include in its SHE File the following documentation if not being attended to by other discipline of PSP Team:

- All drawings for temporary structures (suspended beams etc.).
- All operating manuals for any systems that require on-going maintenance, and
- Copies of test results, policies, and procedures for environmental monitoring (silica, noise, dusts etc.).

#### **Defect and Liability Period**

The H&S files must be kept 'live' for the defect and liability period by the Principal Contractor, including those of their Subcontractors. Any work required during the defect and liability period will require an assessment of the H&S file by the PC's CHSO prior to any work commencing.

<b>7.2.6</b>	<b>COIDA</b>
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The PC must ensure that all employees are fully covered in terms of the COID Act, either through the Workmen's Compensation Commissioner or another registered approved institution and that such cover will remain valid for the duration of the project. Failure to keep his/her cover valid will result in instructions to cease construction work being issued.

The PC must ensure that all Sub-Contractors appointed by him are fully covered in terms of the COID Act, or another institution as indicated above, and that such cover must remain valid for the duration of their contractual relationship with the PC.

The PC must have Public Liability Cover, which must adequately make provisions for any losses because of his and/or his employee's acts and/or omissions, which must remain valid for the duration of the project.

**7.2.7****Competence and Training**

The CEO (OHSA S16.1) of the PC will be overall responsible for the appointment of competent Construction Managers and site staff for the duration of the project unless it has been delegated to the Section 16.2 Appointee. All legal appointments are to be made with relevance to the type of work to be performed and kept current with the project programme. The PC, all contract employees, and their supervision must be in possession of the required qualifications or licences where the activities they must perform require such qualifications or licences.

The following Health and Safety competencies are applicable to certain appointments:

Sec 16.2 and CR 8.1: Supervisors Safety Course (IRCON) or equivalent and Legal Liability Course.

Safety Officer: SAMTRAC/ Lex Nexis 3 week SHE Management Course / Nebosh, or equivalent.

SACPCMP CHSO Registration and Relevant Experience.

Safety Representatives: SAQA Accredited SHE Representative Training Course.

Risk Assessor: SAMTRAC / Lex Nexis 3 week SHE Management Course / Nebosh or SAQA accredited Risk Assessors Course

First Aider: SAQA accredited Level 2 First Aid Course.

Where operations are being performed such as Crane Operations, Riggers, Scaffold Erectors, and Inspectors all such operators must be in possession of proof of qualifications, which is in compliance with Legislation, National qualifications Framework, Act 2000: Act No 67 of 2000, or similar industry standard where legislation does not prescribe such training. It must be noted that course providers used for training purposes must be accredited course providers.

Training must be given to each employee, including sub-contractor employees, to equip them with the knowledge and skills, understanding of the hazards and the risks as well as mitigating measures to enable such employee as far as is reasonably practicable to perform his duties in a safe manner.

Specific competency profiles and selection criteria (fitness for work) must be developed for all roles where significant health or safety risk exists.

A formal training needs analysis must be carried out based on the competency profiles and a training matrix must be developed for the project. Competency-based training must be provided and include operational controls (procedures and work instructions), management of change, and emergency response. All employees must hold and maintain the required competencies (including appropriate qualifications, certificates, and licences) and are under competent supervision.

A site-specific induction and orientation programme that highlights health and safety requirements, procedures, and significant hazards, risks and associated control measures must be in place for all new employees and visitors. Personnel must be trained on new or amended standards, rules, SWMS/SWP's ,

Risk Assessments etc. Refresher training must be conducted where required e.g., where employees are found disregarding rules etc. Records must be kept of training, qualifications, experience etc. Whenever training is given follow ups must be conducted to evaluate the efficiency of the training.

<b>7.2.8</b>	<b>Confined space work</b>
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The PC must comply with the OHS Act, General Safety Regulation 5

Detailed RAMS must be conducted, SWMS /SWP's must be developed and communicated in writing to persons designated to perform work in confined spaces. Confined space entry work requires the issue of a Confined Space Entry Permit which has been issued by an authorized competent person.

Responsibility for safe work procedures from entering, whilst working in the confined space, and including exiting the confined space is the responsibility of the Contractor. The Contractor must ensure that all measures have been implemented to address hazards and their associated risks to a level which is ALARP.

The Contractor is responsible for the provision and correct use of all of all required tools and equipment required to conduct the work in the confined spaces, e.g. Tripods, Testing Equipment, Signage, Communication Equipment etc.

<b>7.2.9</b>	<b>Construction Supervision</b>
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As indicated in the previous paragraphs the CEO (OHSA S16.1) of the PC will be overall responsible for the appointment of competent Construction Managers and site staff for the duration of the project. These appointments will be tasked with different supervisory responsibilities to ensure the provision of a safe working environment. The PC is again reminded to refer to Annexure C to determine what Supervisory Appointments need to be made taking into consideration the scope of work, Legislative requirements etc. Note must also be taken of at which stage certain appointments need to be made. The construction team is to ensure the appointed CHSO is kept up to date with all planned activities, to ensure all H&S requirements are met.

<b>7.2.10</b>	<b>Cranes, Cradles and Man Cages</b>
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The PC must implement and ensure compliance with OH&S Act - Driven Machinery Regulation 2015, Section 18(8), General Safety Regulation 13C, and Lift Escalator and Passenger Conveyer Regulations. Special cognisance must be taken of the requirement that no user of machinery may require or permit any person to be moved or supported by means of a lifting machine fitted with a cradle (man-cage) unless approved for that purpose by an Inspector from the local Department of Employment and Labour.

In the event where the use of such equipment is required for the purpose of reaching otherwise inaccessible places, the PC must advise the CHSO of the equipment required and produce a certificate of approval from the Chief Inspector from the DEL.

The PC must ensure that every Man Cage or similar device is securely suspended and is constructed in such a manner to prevent any occupant from falling from such equipment. Each employee within the cradle must wear an approved safety harnesses and attached by a lifeline/sling to an anchorage point, which does not form part of the cradle. No employee may be permitted to climb onto rails or any other part to extend their reach. The Man Cage must be correctly positioned to ensure workers are able to achieve the required reach to perform their intended activities. Appropriate means of communication such as two-way radios must be provided to ensure communication with workers inside the cradle.

The PC must ensure that all equipment is inspected before use, that the permissible workload is displayed, that load test certificates are available, equipment is operated by trained competent operators etc.

<b>7.2.11</b>	<b>Defects reporting and correction</b>
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The purpose of any inspection is to determine deviations in need of remedial action. Where defects are identified during any routine inspection, pre-start check or during operation or use of any tools, equipment, motor vehicle, tools, or equipment, etc. it needs to be reported immediately.

Steps need to be taken to remedy such defects reported for the purpose of repairing such tools, equipment, etc. Where such remedial action cannot be actioned, immediate measures such as the fitting of Tags, taking out of service etc. needs to be applied to limit further use until repairs/replacements have been completed and re-inspection carried out. Such defect reports must be done in writing.

<b>7.2.12</b>	<b>Demolition</b>
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The PC needs to ensure compliance with OHS Act, Sec 8 and CR 14.

A detailed Structural Engineering Survey needs to be carried out before demolition work takes place and a Demolition Method Statement must be developed based on the structural engineering survey and include:

- Scope of Work.
- Termination of services requirements.
- Construction vehicles and plant and equipment to be used.

- Personnel Involved.
- Procedural steps to be followed.
- PPE Requirements.
- Signage requirements.
- SHE measures to be applied.
- Waste Management and housekeeping measures to be applied.
- Emergency Procedures applicable.
- Training to be rendered.

The Proposed Demolition Plan must be signed off by the Structural Engineer and the CHSR **PRIOR** to Demolition Work being conducted.

<b>7.2.13</b>	<b>Delivery and Placing of Containers. Park homes etc.</b>
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The PC must ensure compliance with OHS Act, Sec 8 and Cr 22. The items must be placed according to the predetermined positions indicated on the Site layout Diagram. Soil conditions, overhead hazards etc need to be taken into consideration when doing Risk Assessments and developing the required method statements. Only trained competent workers and supervisors may be used to execute and supervise the work operations.

<b>7.2.14</b>	<b>DSTI's</b>
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The Daily Safe Task Instruction, DSTI, forms a critical part of the Risk Management process No work may be conducted on site without a valid DSTI signed off by the relevant signatories. Supervisors must have the competency to be able to complete DSTI's correctly and the work area must be inspected at the end of the shift.

A DSTI is a pre-start discussion amongst the members of a work team, led by the appointed supervisor, aimed at anticipating hazards and potential risks associated with the activities planned for the day or shift, and ensuring that the necessary control measures are in place to prevent incidents.

At the start of each day or shift, prior to the start of any work, each appointed supervisor must inspect the work area which he is responsible for and ensure that it is safe. He must then conduct a DSTI with his work team specifically concerning the tasks that they will be performing during the day or shift. The relevant SWMS/SWP for the activity must be used as the basis for the discussion. The correct work method must be reiterated, and the identified hazards, risks and control measures must be discussed with the team allowing team members to contribute to the discussion.

Any team member arriving late must first be taken through the information that was discussed prior to his arrival before being permitted to start working. If the work method changes or scope changes after activities have already begun, the DSTI must be revisited and updated with the team, and the changes must be signed off by the relevant CHSO.

Every member of the work team must sign the DSTI attendance register. The attendance records must be kept and maintained in the contractor's SSHSF.

<b>7.2.15</b>	<b>Electrical connections</b>
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The PC must implement and comply with OH&S Act, Electrical Installation Regulations and Construction Reg 24. All electrical installations must be carried out by an appointed and qualified certified Electrical Installation Electrician. A Certificate of Compliance (COC) must be issued and kept on the SSHSF. Temporary Electrical Installations must be inspected on a weekly basis and recorded in an appropriate register, which must be kept in the SSHSF.

<b>7.2.16</b>	<b>Emergency drills and evacuations and Procedures</b>
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The PC must develop, implement, test, and maintain an Emergency Response Plan, incorporating emergency evacuation procedures that focuses specifically on the contractor's team and work activities. The plan must be risk-based and must detail the procedures that must be followed when responding to all potential emergency scenarios such as a medical emergency including first aid response, a fire, an explosion, a hazardous substance spill, rescue from height, rescue from a confined space, etc.

Consideration must be given to the procedures of other occupants on the premises and their emergency procedures to ensure that in the event of an emergency that the PC's Emergency procedure does not hinder or clash with their procedures. Details of any arrangements with external emergency response service providers must be included.

The plan must be adequately resourced to ensure effective implementation. These resources must include appropriate personnel, external emergency response service providers, emergency response equipment, and warning devices. All equipment and warning devices must be identified, maintained, and tested to always ensure availability.

An Emergency Response Team (ERT) responsible for the implementation, management and execution of the Emergency Response Plan must be established. The roles and responsibilities of each team member must be clearly defined in the plan. Each team member must receive appropriate training to ensure that each role is performed competently.

The process for managing incident communication, notification, and reporting must be incorporated into the Emergency Response Plan. The responsible person(s) must be clearly identified, and the protocols for communicating with internal and external stakeholders must be defined.

At project work site:

- A suitable evacuation alarm (siren) must be provided. All persons working in an area where an evacuation alarm is sounded must respond to it immediately.
- Suitable fire-fighting equipment must be provided and maintained, and personnel must be trained in fire-fighting procedures and the use of fire-fighting equipment.
- Suitable first aid equipment and supplies must be provided and maintained, and an adequate number of appropriately trained First Aiders with kits must be in place.
- Emergency assembly points positioned in safe locations away from containers, plant and equipment must be designated and conspicuously signposted. In the event of an evacuation, all persons, personnel, and visitors, must assemble and be accounted for at these emergency assembly points.
- All personnel must receive awareness training on the applicable emergency response procedures, and all visitors entering the site must be properly instructed in these procedures as part of their induction training.
- The emergency response procedures must be displayed on notice boards.
- A Site Layout Plan indicating evacuation routes, emergency assembly point locations, and the positioning of emergency equipment (fire extinguishers, first aid boxes, etc.) must be prominently displayed in all offices, boardrooms, notice boards, and in other locations on the site as may be required.
- An up-to-date list of emergency telephone numbers must be compiled and maintained. A copy of this list must be posted at each site entrance, in each office, and notice board.
- Emergency response drills must be conducted to test the effectiveness of the emergency procedures and equipment, as well as the knowledge and proficiency of the response personnel. Where appropriate, drills must include liaison with and the involvement of external emergency response service providers. A variety of emergency scenarios must be tested including, but not limited to, medical emergencies, fires, rescues, and hazardous substance spills. A drill must be carried out one month after site establishment and six-monthly thereafter. Each drill must be monitored, and the outcomes (highlights and shortcomings) must be documented. Corrective actions must be identified and implemented to address the shortcomings, and the Emergency Response Plan and associated procedures must be amended as required.

#### 7.2.17

#### Environmental Management

The PC must take all precautionary steps to prevent any pollution because of his activities. Matters such as waste disposal, cement run-off, not permitting vehicles leaking oil and fuel on site, not permitting disposal of water used for cleaning paintbrushes into normal wastewater disposal lines, not permitting the burning of materials etc must be addressed in his Environmental Management Plan.

Workers must be familiarised with the contents of the Environmental Management Plan as part of the Induction. The PC's Environmental Management Plan must be submitted with his SSHSP for approval.

<b>7.2.18</b>	<b>Edge Protection</b>
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Persons falling over open edges can result in severe injuries. The PC's responsible person must ensure that edge protection forms part of the Fall Protection Plan. Edge protection must be able to withstand the load imposed of an average worker's weight should the worker lean against such edge protection. All edges which pose a fall risk to persons must be protected. Barricading tape or snow netting is not deemed as suitable edge protection and may only be used to highlight such edges.

Activities, which may create temporary open edges such as the removal of drain covers must be always supervised whilst open or be cordoned off with temporary suitable barricading.

<b>7.2.19</b>	<b>Excavations</b>
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The PC must implement and comply with Construction Regulation 13 OH&S Act - General Safety Regulation 13. All excavation work must be conducted under the Supervision of an appointed competent person. Excavations must be fitted with barricading which will be able to withstand the load of the weight of an average worker should he lean or accidentally fall against such barricading. Barricading must be constructed to provide access points for workers to enter and exit and the removal of excavated material without leaving other sections of the excavation exposed.

When excavations are necessary across roadways or pathways where necessary, "Detour" notices and detour routes must be provided. Should such Detours have a negative impact on other occupants of the premises the execution of the excavations plus the implementation of detour routes must be communicated to the responsible person for the other occupants of the premises at least 7 working days prior to such excavation work taking place.

Warning signs and flashing warning lights at night must be provided in suitable positions to warn any persons approaching the area of the location and extent of any excavation should such excavations be accessible by other occupants or members of the public. Where the possibility exists of unknown hidden services where excavations are conducted, such risks must be communicated and the required risk reduction measures implemented such as the digging of pilot holes, use of detection equipment and insulated tools.

All excavations must be on register, inspected daily before commencement of work, after inclement weather, certified safe, and recorded accordingly in the appropriate register. No loose material may be stored within 1 meter from the edge of the excavation and more than 45 degrees to the angle of repose.

<b>7.2.20</b>	<b>Extreme weather conditions</b>
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Adverse weather conditions can lead to loss of life and damage to structures and plant. The PC must develop an emergency plan which stipulates measures how to mitigate the impact such weather conditions can have. The Contractors' Emergency Plan must include procedures to be followed for adverse weather conditions such as high winds, Lightning, Flooding etc. Response measures must be communicated to the appropriate Supervisory Staff including materials required such as ropes, shutter board etc.

In the event of impending adverse weather or other conditions, Emergency response Staff and Supervisory Staff must be made aware of the impending weather conditions and the possible need to implement the required response measures.

<b>7.2.21</b>	<b>Fall Protection Plan and Planner</b>
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PC to comply with OHS Act, Sec 8 and CR10. When there is a risk of falling off, into or over a risk assessment must be carried out regardless of the potential fall distance. The PC shall appoint a competent Fall Protection Planner. The Fall Protection Planner shall have the following minimum qualifications:

- Fall Arrest Course (Accredited to SAQA Unit Standard 229998)
- Fall Protection Planner (Accredited to SAQA Unit Standard 229994)

An appropriate, project specific FPP, developed by the appointed competent appointed Fall Prevention Planner must be developed, and submitted as an annexure to the SSHSP when submitting the SSHSP for approval by the CHSR. The following aspects as a minimum must be included in the FPP:

- Risk Assessment identifying areas where a Fall Risk may exist as well as the required mitigating measures e.g., Signage, Edge Protection, Hard Barricading etc.
- Permit system for working at heights.
- Prevention measures for falling tools or equipment, and persons, and link to emergency plan regarding rescue.

<b>7.2.22</b>	<b>First Aid Boxes and Equipment</b>
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The PC to comply with GSR 3. The contractor shall ensure that enough competent First Aiders is appointed and present on site. All First aiders must have a level 2 First Aid certificate. Where Sub-Contractors are appointed, they need to comply with GSR 3 and have trained, competent First Aiders on site. If they do not have trained competent First aiders, they may enter into a First Aid Agreement with the PC to provide such services, subject to the PC having enough First Aiders on site as well as First Aid Equipment. The

written agreement entered with Sub-Contractors must be kept on the PC as well as the Sub-Contractors SSHSF.

Adequately maintained First Aid equipment compliant with Statutory Safety Regulations must be available on site. The contents of First Aider kit must always comply with minimum amount as per Annexure to GSR. Records of First Aid Treatment administered must be kept in an appropriate register.

The Location of the First Aid facilities must be indicated with the required SABS approved Symbolic Safety Signage posted at the entrances to such facilities. The name of the First Aider must be displayed in addition to Symbolic Safety Signage.

<b>7.2.23</b>	<b>Fire Extinguishers, Precautions and Fighting</b>
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The PC must ensure that the location of fixed Fire Extinguishing Equipment is indicated on his Site Layout plan and in his Emergency Plan. The procedure to be followed in the event of a fire must be translated into the languages of all workers on site, posted on notice boards, communicated to workers and records kept of such communication.

All work involving the generation of a Fire Risk may only be executed upon the issue of a Hot Work permit, which include the presence of Fire Extinguishing equipment and checking for smouldering materials.

Fire precautions on construction sites in addition to the requirements of CR 29 must include Good Housekeeping, the keeping of minimum amounts of Flammable liquids etc. SABS compliant signage such as "No Smoking" "No Naked Flames" etc. posted where appropriate.

Sufficiently trained persons such as Supervisors need to be available on site to be able to perform fire-extinguishing exercises and use equipment correctly. Persons involved with activities such as welding, grinding etc. must be able to perform fire-extinguishing exercises when required.

All Fire extinguishing Equipment must be serviced annually, numbered, on register and inspected by a trained competent person at least every six months. All fire extinguishing equipment which has been discharged or damaged in any way must be sent off site and be attended to by a SABS accredited Service Agent.

<b>7.2.24</b>	<b>Fuel and Flammable liquids</b>
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The PC must ensure compliance with OH&S Act - General Safety Regulation 9 and Temporary Storage of Flammable liquids on Construction Sites, Construction Regulation Reg.25.

Storage areas must be provided with a bund wall to contain 110% of the maximum volume of the container/s stored in the area. Drip trays of sufficient size must be provided at tap off points.

Storage Containers must be clearly marked with a "Flammable Liquid, No Smoking & No naked Flame" signs, be clearly marked to indicate contents of the tank and bonded to prevent static electricity sparks being generated. An adequate numbers of dry chemical fire extinguishers, each with a minimum capacity of 4.5kg, must be provided,

Before any fuel driven plant or equipment is refuelled, it must be switched off, and no refuelling may take place where machinery is kept running. Refuelling must take place at designated safe areas and appropriate warning signs installed.

The Contractor must ensure that storage areas must be designated at a safe distance from other buildings. It must be kept free from all combustible materials and must be constructed from brick/ mortar/steel, no timber or similar combustible materials may be used.

The following SABS compliant Symbolic Safety Signage need to be displayed: "No Smoking" and" No Naked Flames", Fire extinguisher and Location signs.

<b>7.2.25</b>	<b>General Record Keeping</b>
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The PC and Subcontractors must keep and maintain Health and Safety records to demonstrate compliance with the Clients SSHSS, OHS Act, Act 85 of 1993 and the Construction Regulations of 2014. The PC must ensure that records of all incidents/accidents, training, inspections, audits etc. are kept in the SSHSF held in the Site Office.

THE SSHSF must always be present on site. The PC must ensure that every sub-contractor opens and maintains his own SSHSF under the control of the PC's responsible person.

<b>7.2.26</b>	<b>Hand Tools</b>
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Hand Tools and its use can contribute to accidents and incidents. The PC must ensure that all Hand Tools brought onto and used on site are safe for use. Hand tools must be inspected by an appointed competent person at least once a month and the results of such inspections to be recorded on an appropriate register. If hand tools are found to be unsafe, it needs to be removed, tagged unsafe for use and removed from site.

No Makeshift hand tools may be brought onto and used on site. If found such hand tools must be removed from site with immediate effect and/or disposed of.

<b>7.2.27</b>	<b>Hazardous Chemical Substances (HCS)</b>
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The PC must comply with the Hazardous Chemical Substances Regulations as published in Government Notice No. R. 1179 dated 25 August 1995 and amendments thereto. No HCS may be permitted to be brought on site without a MSDS. The PC must ensure that all the necessary use and storage precautions are taken and that the required safety equipment, first aid measures etc is available.

All employees required to use HCS, or products containing Hazardous Chemical Substances must be adequately and comprehensively trained with regards to the requirements of the Hazardous Chemical Substances Regulations including the potential sources of exposure and the potential risks to their health caused by exposure.

MSDS's for all Hazardous Chemical Substances must be kept on site in the SSHSF and recorded in a HCS Register.

<b>7.2.28</b>	<b>Hazard Identification and Risk Assessment (HIRA)</b>
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The PC must comply with Sec 8 of the Act and CR 9 by allowing for and ensuring that Site-Specific HIRA's are conducted by an Appointed Competent Person. Supervisory staff must be equipped with the required skills to do HIRA's.

The purpose of a RA is to firstly identify main activities which form part of the construction process, then its sub activities, then the hazards associated with the sub-activities, the risks associated with the sub-activity hazards, then determining the Pure Risk level by using a risk matrix, propose risk reduction/control measures and then re-evaluating the effect such risk reduction/control measures have had on the risk level once again using a risk matrix to calculate the Residual Risk Rating ,which must be as low as reasonably practicable (ALARP) and finally communicating the hazards, residual risks, risk reduction/control measures etc to the workforce. In the form of a SWMS/ SWP.

Please refer to item 9 at the beginning of this document for details regarding the submission of Risk Assessments and the approval process.

The PC and its appointed competent person will be responsible for the evaluation and approval of HIRA's developed by their appointed Sub-Contractors and must be as a minimum of the same standard as required by the CHSA. If at the time of an Audit or any other time being present on site, it is found that HIRA's and/or SWMS/SWP used by Sub-Contractors are of a sub-standard level the CHSR will issue instructions to cease work which is applicable to such sub- standard RA's and/or SWMS until amended to a satisfactory level.

The PC must ensure that all persons who could be negatively affected by hazards and risks associated with construction operations are informed and trained according to the hazards and risks and are conversant with the Safe Work Procedures, control measures and other related rules.

If the CHSR identifies alternative hazardous activities or risks for which a Risk Assessment was not performed or was not identified as part of a Risk Assessment Process, the PC will be required to implement corrective measures before being permitted to continue with work. **It must be noted that**

although the CHSR may approve RAMS, the responsibility rest with the PC as the employer in terms of Sec 8 of the Act to ensure the correctness of such RAMS and the required mitigation measures etc.

<b>7.2.29</b>	<b>Hazards and Potentially Hazardous Situations</b>
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The PC must immediately notify other Sub-Contractors and/or occupants of the site where work is being conducted of any hazardous or potentially hazardous situations that may arise during performance of construction activities.

Should a hazardous situation require work stoppages, the work must be stopped, and corrective steps taken such as the conducting of new RA's, amending RA's the development of new SWMS, amendment of existing SWMS's, barricading, signage etc.

<b>7.2.30</b>	<b>Health and Safety Audits, Monitoring, Reporting and Statistics</b>
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The CHSR shall strive to at least once a month or at closer intervals as determined necessary for the duration of the contract conduct Health and Safety Audits of the work operations. The audit shall be consisting of a detailed audit of physical site activities and administration of Health and Safety. Copies of the audit reports will be forwarded to the Project Leader and the PC within seven working days. Copies of the Audit report must be kept in the SSHSF. The CHSR may at any time visit the site for an Audit without prior notification to the contractor.

The CHSO must conduct monthly Self-Audits including all the sub-contractors on site at the time of the audit as approved at the time of the SSHSP approval. The results of the Self Audits must be made available to all members of the project team at least 7 days before the following progress meeting. At the progress meeting the CHSO must report on his finding and closing out of deviations.

Issues such as injury and incident records e.g., Near misses, First Aid, Medical Cases, and the Disabling Injury Frequency Rates must be included in the audit report. Copies of self-audit reports must be kept in the SSHSF.

<b>7.2.31</b>	<b>Health and Safety Disciplinary Procedure</b>
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The PC is responsible for maintaining discipline on site in terms of his employees, sub-contractor employees and visitors. In line with this requirement, the PC will be required to have a documented Disciplinary Procedure, which must be communicated to all persons working on site. Where a breach of a Site Health & Safety Rule or The PC's Safety Procedure is identified, the Contractor must ensure that disciplinary action is initiated against such contravening Persons/s in accordance with the documented procedure. Dependent on the nature of the breach and the nature of such presence on site, the process as outlined below could be used:

- First breach – verbal warning/counselling
- Second breach – written warning/counselling
- Third breach - appropriate disciplinary action taken such as Suspension Without Pay/Termination of Service, penalties etc.

All disciplinary steps taken in terms of OHS such as NCR's issued must be included in the PC's monthly SHE Audit report submitted to the CHSR and other team members.

<b>7.2.32</b>	<b>Health and Safety Management Information Notice Board</b>
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The PC must provide a Safety Management Information Notice Boards (SMI boards) as a minimum near the site office and if possible, in other areas e.g., eating and changing areas, with the following information posted:

- Supervisors Photos and Contact details.
- First Aider Photo and Contact detail.
- Valid, completed DSTI/S for the day's activities.
- Emergency Procedure.
- Any other information as required by the CHSR.

<b>7.2.33</b>	<b>Health and Safety Organogram</b>
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An organogram outlining the Health and Safety Management Structure as per appointments under the OHS Act and the Regulations must be included in the SSHSP and kept in the SSHSF. The Organogram must also be displayed in the Site Office.

Any changes to the appointments as per the approved Organogram must result in the Organogram being revised. All previous organograms must be kept in the SSHSF and not be discarded. The initials and Surname of appointees. Including the description of their appointment must be reflected on the Organogram.

<b>7.2.34</b>	<b>Health and Safety Plan and Submission</b>
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The PC must submit a detailed SSHSP based on this document known as the SSHSS. The contents of the SSHSP can be found under Annexure C of this document. Note must be taken of the required documentation which needs to be submitted as part of the SSHSP.

Failure to submit the required documentation as required by Annexure C, may result in a delay of the SSHSP approval process. When submitting the SSHSP to the Client/or its duly appointed representative the PC's CHSO must contact the CHSR appointed to this project, who's contact details can be found under the heading "Item 5.3: The Project Team" to arrange a sit-down meeting to discuss the PC's SSHSP

to work towards approving the SSHSP. It must be noted that no evaluation or approval of the PC's SSHSP will take place without engaging with the CHSO.

<b>7.2.35</b>	<b>Health and Safety Policy</b>
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The Safety, Health and Environment Policy signed by the Chief Executive Officer must form a part of the SSHSP. The policy must outline Health and Safety objectives and set out how they will be achieved and implemented during construction.

The Policy must in addition to being part of the SSHSP and being kept on the SSHSF also be communicated to all employees, copies of such communication must be kept on the SSHSF. A copy of the Health and Safety Policy but must also be displayed in the Site Office.

<b>7.2.36</b>	<b>Health and Safety Training</b>
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The PC must ensure that all site personnel and Visitors attend a site-specific health and safety induction training session before starting work or being permitted entrance onto the site.

Employee Induction training must also include training on the risks associated with the works to be executed, method statements (SWP's) and emergency procedures. Visitor Induction training must include items such as site safety and health risks, steps to follow in the event of emergency, restricted areas and on the site and health and safety rules.

A record of attendance reflecting the signature of all training must be kept in the SSHSF. Employees and Visitors must carry proof of induction training whilst being on site, which may be a nametag or sticker, displayed on a hardhat. The PC must ensure that none of his employees, or sub-contractor employees, including transport and delivery Contractors entering the site delivering materials and/or equipment, may proceed to enter the Site or any operations area until they have received all training required under applicable laws and regulations, including, but not limited to, work activity inductions and Site-specific induction etc.

Induction Training is generally valid for 1 year but should the contents of the training previously rendered change then follow up training must be rendered irrespective of the fact that induction training may still be valid.

The PC must prepare and present to all its employees its own Contractors Induction training, explaining the PC's SSHSP, Rules, the obligations imposed by the Occupational Health and Safety Act and Regulations, as well as a Site Specific Induction, which must as a minimum consist of an introductory briefing explaining the nature of the work, the general hazards which may be encountered during the operation, and the particular hazards attached to their own function within the site.

<b>7.2.37</b>	<b>Heat Stress and Sun Protection</b>
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The PC must ensure compliance with the OHS Act- Environmental Regulations 2(4). Heat stress can form part of many work activities associated with construction work. Where work is of a physical nature, and/or is conducted in excessive ambient or radiant temperatures the PC must implement measures such as rest breaks, provision of adequate amounts of water, scheduling work to coincide with cooler times during the day such as in the mornings and late in the afternoons.

Workers who are exposed to excessive ambient or radiant temperatures can suffer from a lack of ability to concentrate with resultant injuries becoming a probability.

The PC must ensure that all personnel are protected from excessive sunlight exposure by means of the use of long sleeve shirts, long trousers, brims to safety helmets, UV factored sunscreen and shade structures etc.

<b>7.2.38</b>	<b>High Voltage Equipment and installations</b>
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In the event where the presence or location of High Voltage Equipment such as underground cables are not known with a high level of certainty, the PC must ensure that the necessary precautionary steps are taken such as the manual digging of pilot holes, use of detection equipment, lock out and isolation at sources, use of insulated tools and equipment etc.

Where work must be conducted in the presence or below overhead lines issues such as the correct lifting of conductive materials, keeping of safe distances to prevent flash over etc must be documented and communicated to employees. No isolation, termination of services may take place without the documented permission of the Electrical Engineer and the issue of an appropriate permit, which will include the necessary lockout, tagging and testing by an appointed competent person.

**No unauthorised person may in any way interfere with or switch off any high voltage or critical electrical supply.**

<b>7.2.39</b>	<b>Housekeeping</b>
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The PC must implement and ensure compliance with the requirements of Construction Reg. 27.

The PC must ensure that all work areas are kept in a neat and tidy state, free of debris and rubbish, at all times. Unless otherwise directed, the PC must dispose of all debris, rubbish, spoil, and hazardous waste off site in a designated and authorised area or facility.

The PC must keep in mind that poor housekeeping does not only contribute to the creation of an unsafe working environment but also a poor image of the project and its management, as well as the department as the client. In the event where housekeeping standards are not maintained or implemented the CHSR may issue instructions to cease, work until housekeeping is of an acceptable

standard without the Client entertaining any extension of time claims or costs claims by the PC. **Keeping the site in a neat and orderly condition at all times is the sole responsibility of the PC.**

Regular safety/housekeeping inspections on an at least a weekly basis to ensure maintenance of satisfactory housekeeping standards must be conducted by the PC and the results of each inspection documented and the recorded. Records of such inspections to be kept on the SSHSF for viewing by the CHSR. The PC must ensure that all supervisory staff are made aware of their responsibility to monitor and manage housekeeping in their respective areas of responsibility.

DSTI's must make provisions for the checking that work areas are left in a neat and tidy fashion at the end of each shift. The CHSO must on a random basis after signing off on DSTI's at the end of shifts inspect such work areas to verify that such work areas are left in a neat and tidy condition. Should it be found that DSTI's are not a true reflection of the condition the work area was left in, the Supervisor must be engaged regarding the matter and if it is found to be a repeated situation, disciplinary measures must be implemented.

Waste disposal and general refuse disposal areas must be made available and barricaded off. The PC **MUST** ensure that refuse removal frequencies are in line with waste /refuse generation frequencies. If waste/refuse generation rates increase the removal frequencies must increase, no overflowing waste/refuse disposal areas will be tolerated.

Employees must, as part of the hazard communication process on DSTI's be made aware of the hazards and risks created due to poor housekeeping practises. Incidents of poor housekeeping practises and poor levels of supervisory enforcement of good housekeeping practises must be considered as part of offenses which may require steps to be followed as part of the PC's disciplinary process.

<b>7.2.40</b>	<b>Incident and Injury Management</b>
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The PC must implement and ensure compliance with OH&S Act - General Administrative Regulations 6 and 8. This section must be read in conjunction with item 10.1 Accident, Incident Investigation.

The PC must have in position prior to site establishment and have submitted with his SSHSP for approval by CHSR suitable /sufficiently documented accident/ incident reporting system/procedure that is following all applicable statutory requirements.

Any incident or "near miss" involving the PC or its subcontractor's or any third party's personnel, property, plant or equipment, must with immediate effect be verbally reported to the CHSR by the PC's CHSO whether or not injury to personnel or damage to property or equipment resulted from such incident or "near miss". The verbal reporting must be followed within 48 hours by a brief written report stating the known facts and conditions including a preliminary assessment of the most likely consequence potential of the incident in the circumstances, as well as the preventative measures to be

implemented by the end of the shift. The abovementioned procedure does not exempt the PC from providing accident reports required by Statutory Authorities.

In the event of any serious incident resulting in a fatality, or permanent disability, the incident scene must be left untouched until witnessed by a representative of the SAP. This requirement does not mean that First Aid cannot be administered, or the scene be made safe. In the event where items or equipment have to be moved to assist in removing injured person/s photographs detailing the scene of the accident must be taken if possible before the scene is disturbed preclude immediate first aid being administered and the scene being made safe.

Names and contact details of witnesses to the accident must be taken by the CHSO or a SHE Representative delegated with such responsibility by the CHSO ASAP after arriving at the scene of the accident to assist in the accident investigation procedure.

Failure by the PC's SHE Officer to provide the CHSR with the abovementioned report within the specified timeframe as required will result in the Construction Manager (CR 8.1) being required to submit to the CHSR with a letter indicating the reasons as to the required report not being submitted as well as when the report will be submitted which may not exceed 72 hours from the time of the incident. Failure to comply with the abovementioned requirements at the discretion of the CHSR may result in instructions to cease work being issued until the detailed report as required has been submitted.

In the event where an injury has taken place such injury must be managed by ensuring that appropriate medical treatment is provided to ensure that the injured person has the opportunity as far as is reasonably practicable taking the injuries sustained into consideration to return to a level of good medical fitness and be able to resume his normal day to day activities whatever they may be.

The PC must ensure that suitably qualified medical persons/practitioners must treat all injured persons.

<b>7.2.41</b>	<b>Induction Training</b>
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Each employee and person wishing to enter the site must attend all mandatory Health and Safety Induction Training applicable to the project. No employee or visitor will be permitted to enter any project work site until he has attended this training. Each employee and visitor must carry proof that he has completed the induction training and may be removed from site if such proof cannot be produced on request.

All visitors must receive a visitor induction briefing before entering any project work site. However, this induction does not permit a visitor to enter a site unescorted. Visitors must be always accompanied by an appropriately senior employee who has been fully inducted.

<b>7.2.42</b>	<b>Ladders, Portable</b>
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The PC must comply with OH&S Act - General Safety Regulation 13A. PC to ensure that:

- All ladders used on the site is constructed and used in compliance with the OH&S Act and Regulations.
- Ladders, which provide access to a working platform, must extend at least one meter above the platform where it provides access, and is secured to prevent slipping.
- Timber ladders must not be painted other than with clear preserving oils, clear varnishes etc.
- Damaged ladders must be removed from the work area, tagged unsafe and removed from site.
- All ladders must be tagged with a clearly visible tag or numbered which is recommended to be positioned below the second rung from the top, logged in a register and inspected by a competent person.
- All portable ladders when in use must be held by an assistant or properly tied down.
- All persons using ladders must be trained in the correct, safe use of ladders.

<b>7.2.43</b>	<b>Lighting</b>
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The PC must implement and comply with OH&S Act – Environmental Regulations, Schedule E of the Regulation.

The PC must ensure where natural lighting is inadequate to provide workers with a safe working environment. Lighting issues must be addressed by providing artificial lighting in all work areas and walkways.

Portable lights must be of a robust construction have adequate stability and be fitted with a mechanical guard to protect the lamp. No makeshift lights such as overhead florescent tube type of lighting may be positioned on floors or leaned against walls. Cables and plugs must be in a good condition and properly routed, preferably overhead to prevent tripping hazards.

Where work activities include wet processes cables and lights must be suitable to be used in such in wet environments. All lighting must be electrically safe for use in terms of their construction, cables etc.

It must be kept in mind that where lighting is of the “plug in” and “Plug out” type it is classified as Portable Electrical Equipment and must be accordingly numbered, inspected, and recorded on a Portable Electrical Equipment Register.

In the event where night work will be conducted Illumination checks must be performed to ensure conformance to minimum lighting requirements and the provision of emergency lighting must be addressed in the event of power failures.

<b>7.2.44</b>	<b>Lifting Machines and Tackle.</b>
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The Principal Contractor and Sub-Contractors must ensure that lifting machinery and tackle is inspected before use and thereafter in accordance with the Driven Machinery Regulations as published in Government Notice No. R. 298 dated 26 February 1988 and CR 22.

The PC must take note of the following and apply it as a minimum standard, where it is not possible to meet the standards listed below the CHSR must be engaged regarding the issue.

Each contractor carrying out lifting operations on the project site must develop, document and implement Method Statements (SWP) Procedures that are aligned with the requirements of this standard.

### **Design, Manufacturing and Safety Features**

An Equipment Profile (dossier) must be compiled for each crane. A copy must be kept in the cab of the crane and must be kept current.

As a minimum, the design and manufacturing of each crane or hoist used on the project premises must comply with the requirements of the relevant ISO standard or national standards, implementing the most stringent standards.

The Safe Working Load (SWL) must be clearly indicated on each crane, hoist, and item of lifting tackle. If the safe working load (rated capacity) of a crane varies with the conditions of use (i.e. varies with the angle of the boom and the boom length) then the manufacturer's load chart(s) indicating the crane's rated capacity at various boom lengths and angles must be available in the crane cabin. If the crane has a single load chart, it must be displayed in a position visible to the crane operator. If the crane has numerous load charts, they must be easily accessible to the operator.

For each crane or hoist, the manufacturer's operating manual must be available to the operator. The load chart(s) and operating manual for a crane or hoist must be in a language understood by the operator. All lifting hooks must be fitted with a safety latch to prevent the load from accidentally detaching.

Each crane or hoist must be fitted with a load cell (with the mass of the load displayed in the visual range of the operator) and a load limiting device to prevent the crane or hoist from being operated outside of its safe working limits.

Where practicable, each crane must be equipped with an upper hoist limit switch (or anti two-block device) to prevent the hook block from colliding with the drum, and a lower hoist limit switch to prevent the rope on the drum from unwinding completely. These systems must provide both a visual and an audible alarm to the operator.

Under no circumstances may any limit switch or warning device be bypassed, disconnected, or adjusted to lift a load higher (or to lower a load lower) than the respective switches allow. Limit switches MAY NOT be adjusted to stop the hoist at a particular height under normal operating conditions - these are safety devices, and as such, should not be used as operating tools. The same applies to lifting heavier loads.

For a vehicle-mounted crane, the operator control station must be in a position protected from swinging loads and from the crane jib.

A fall protection system must be provided for the assembly, dismantling, operation, maintenance and inspection of any crane where falling from height is identified as a hazard.

Each crane should be fitted with a stability monitoring device to prevent it from toppling over.

Only items of lifting tackle that have been designed and manufactured with adequate factors of safety may be used on site. The following minimum factors of safety with respect to the Safe Working Load must be met:

Ten (10) for natural fibre ropes,

Six (6) for synthetic-fibre ropes or woven webbing; Six (6) for steel-wire ropes,

Five (5) for steel chains; and

Four (4) for high-tensile or alloy steel chains.

An excavator or tractor-loader-backhoe (TLB) may not be used to lift a load unless all of the requirements of this standard as would apply to a crane have been complied with and authorisation has been granted by the nominated project representative.

### **Planning and Risk Assessment**

For each critical lift that must be carried out on site, a documented and detailed lift plan and risk assessment must be prepared to address all associated hazards. Only suitably qualified, competent, and experienced persons (lift planners) may evaluate critical lifts and prepare lift plans.

The lifting supervisor, crane operators, riggers and spotters responsible for carrying out a critical lift must have input into the lift plan and risk assessment and must be consulted before these documents are finalised. All lifting supervisors, crane operators must be appointed in writing. No critical lift may commence until the lift plan and risk assessment has been compiled and approved by the contractor.

Critical lifts include:

- All multiple (including dual) crane lifts.
- Lifts where the operational arcs of two or more cranes can overlap.
- Lifts over operating facilities where this may endanger personnel.
- Lifts carried out near power lines (over, under, or adjacent to).
- Any lift carried out in close proximity to equipment or a vessel containing a flammable or toxic substance.
- Any lift carried out near an embankment or an excavation.
- Lifts where the centre of gravity of the load could change.
- Any lift where the total weight on the hook exceeds 20 tonnes.
- Lifts near the rated capacity of the crane (i.e., exceeding 85% of the rated capacity at the working radius).
- Any lift when the wind speed (including gusting) exceeds 35 kilometres per hour (if a crane is not fitted with an anemometer, a handheld anemometer must be available).

- Lifts involving a man basket (safety cage).
- Lifts to and from water.
- Lifts requiring specialised equipment or involving complicated lifting or rigging configurations.
- Lifts requiring non-standard rigging or slinging techniques.
- Lifts involving the simultaneous use of more than one hoist on the same crane; and
- Any other lift deemed to be critical by the nominated project management representative or assessed as critical during a risk assessment.

The lift plan for a critical lift must include:

- General Information - crane manufacturer, crane model, items to be lifted, and reason for lift.
- Lift Data - load weight, lifting block and hook weight, hoist rope weight, rigging weight, total weight, height of lift, radius of lift, surface area of load, and centre of gravity of load.
- Rigging Data - sling material (chain, wire rope, or synthetic), sling diameter, sling length, sling configuration, sling capacity, hook type, shackle size and capacity.
- Lift Computation - boom length, jib length, radius of lift, crane capacity as configured, size of outrigger footplates, and wind speed.
- Proximity to Power Lines and Process Areas- mobile cranes working in proximity to energised power lines must operate under a Permit to Work, which must define exclusion zones and spotter duties.
- Local Hazards and Controls - including the route for the crane, ground stability, proximity of people or equipment, and agreed communication method; and
- Diagrams (sketches) a rigging diagram, and a crane set-up diagram illustrating the positioning of the crane(s) in relation to surrounding structures and the initial and final positions of the load (including crane boom movement).

The use of a crane-suspended man basket (safety cage) may only be considered when all other avenues to safely perform the work (e.g., scaffolding, mobile elevating work platform, etc.) have been exhausted. Cranes used to lift or suspend personnel must be approved as suitable for this purpose.

If a crane must be operated in proximity to energised overhead power lines (or any other exposed electrical conductors) then minimum clearance distances (specified by the electrical power utility or the nominated project management representative) must be observed. Whenever possible, power lines must be de-energised and isolated while lifting operations are carried out.

## **Operation**

At the start of every day or shift, the operator of a crane or hoist must carry out a pre-operation safety check using a prescribed checklist. The specific requirements of the pre-operation safety check (and associated checklist) must be based on:

- A risk assessment that addresses all aspects of safe operation of the crane or hoist; and
- The inspection recommendations of the manufacturer.

As a minimum, the pre-operation safety check must include:

- A thorough visual inspection of all wire ropes, chains, hooks and safety latches, hook blocks, sheaves, hydraulic hoses, electrical cables, and the general condition of the crane or hoist.
- Checks to confirm the serviceability of the operating controls.
- Tests to confirm the correct operation of all limit switches, emergency shutdowns, load indicators, alarms and other safety devices; and
- A thorough visual inspection of all lifting tackle to be used.

The operator must:

- Check for any loose or missing parts.
- Make sure that the wire rope (or chain) of the hoist is properly seated in its drum and sheave grooves without any slack or overlapping.
- Operate each control to make sure it functions properly, releases immediately, and does not stick. Each control must be labelled to indicate its function.
- Listen for any unusual mechanical noises and look for any jerky movements while operating the crane and / or hoist several feet in each direction that it travels.
- Check the functionality of the upper and lower hoist limit switches (if applicable) by slowly raising and then lowering the block to trip the respective switches.
- Check all hooks. Hooks must not be cracked, stretched, bent, or twisted. Each hook must have a safety latch that automatically closes the throat of the hook. If the latch is bent, has a broken spring, or is otherwise damaged, it must be repaired before use. Hooks must rotate freely in the block assembly without any “grinding” felt or heard.
- Check the wire rope by lowering the block to its lowest level and looking for the following signs of damage:
  - Reduced rope diameter. This may indicate that the rope has been stretched, has lost its inner core support, or has worn outside wires.
  - Broken wire strands (any number).
  - Kinked, crushed, cut, or “bird caged” wiring, or wiring with heat damage.
- Check all chains for damage including wear at contact points, cracks, or distorted links (bent, twisted, or stretched). All mechanical coupling links must be inspected to ensure that the linking pins are secure and in good condition. The capacity rating of each chain must be adequate for the load and the attachment method.
- Check the condition and capacity of wire rope and synthetic web slings. Capacity ratings must be legible on the manufacturer’s label. The capacity of the sling being used must be adequate for the load and the attachment method. A sling must be replaced immediately if it is excessively worn.

The operator must report any fault, defect, or damage to his supervisor immediately.

A crane or hoist must not be operated if any safety device is out of order or defective, or if any rope, chain, hook, or other component is worn or damaged.

Completed checklists must be made available (on request) for inspection by the nominated project management representative. Wherever possible, these checklists must be kept with the crane or hoist.

All lifting operations must be supervised by suitably qualified, competent, and experienced supervisors.

An effective method of communication between the crane operator and those assisting with the lift must be in place and documented.

Documented Method Statements (SWP) must be in place to ensure the following:

- Access into an area where lifting operations are being carried out must be restricted. Such an area (i.e., where there is a risk of a load falling and striking a person) must be barricaded and only authorised persons may enter (i.e. those directly involved with the lifting operations). Warning signage must be conspicuously displayed.
- Where a load is being moved from one location to another (i.e., the lifting operations are not being carried out in a discrete area that can be barricaded), measures must be taken to ensure that all persons in the path of the suspended load are made aware of the approaching hazard and that they move, and remain, well clear of it. All persons potentially affected must be given warning before the load is lifted.
- A lift must be directed and controlled by a single person (a suitably qualified, competent, and experienced rigger).
- Dedicated spotters (one or more, as determined during the risk assessment) must be in place during a lift to observe and provide warning (if necessary) to prevent incidents and ensure that safety protocols are adhered to.
- Before commencing with a lift, it must be verified that the load being lifted is both within the rated capacity of the crane (or hoist) and lifting tackle and within the limits set out in the lift plan and / or risk assessment. The rated load capacities of the crane, hoist, rope, chains, slings, or other components may never be exceeded.
- Only certified lifting tackle may be used to lift a load.
- No tackle that has been used for towing may be used for lifting operations.
- Only an approved material box (skip box) may be used for lifting loose items or materials.
- Before commencing with a lift, it must be verified that no safety devices (including load limiting devices) have been bypassed, overridden, or disconnected.
- To prevent the load from swinging as it is lifted, the hoist must be centred over the load (when using slings or chains) or positioned directly above the lifting point of the load.
- Hoisting ropes must be kept vertical. No side loading of a crane boom is permitted (i.e., a crane may not be used to make a side pull).
- Three full wraps of rope must always remain on the hoisting drum. If a lower hoist limit switch has been fitted, and it is working correctly, it should not be possible to lower the block below the point where less than three full wraps of rope are on the drum.
- Before commencing with a lift, it must be verified that all rigging connections are correct and secure. Slings, chains, or other lifting devices must be fully and securely seated in the saddle of the hook.

- Slack must be removed from the slings, chains and / or hoisting ropes before lifting the load. It must be ensured that multiple lines are not twisted around each other and that the hoist rope is not wrapped around the load.
- To ensure that the load is properly secured and balanced, it must initially only be lifted a few centimetres. Slings must be repositioned if required.
- Before moving a suspended load, it must be lifted high enough to clear all obstructions. The load must only be lifted to the height necessary to clear obstructions, and no higher.
- Directional movement must be made smoothly and deliberately (there must be no sudden acceleration or deceleration of the moving load). Abrupt, jerky movements of the load in any direction must be avoided.
- Tag lines must be used in situations where a load needs to be steadied or guided while suspended.
- When using tag lines to steady or guide a suspended load that is being moved using a crane, personnel on foot must always remain in sight of and in communication with the crane operator (through the rigger), must never walk between the crane and the load, and must always remain clear of the load and the crane (at least 5 metres). The load must be moved at a slow walking speed.
- A suspended load must be always monitored closely.
- If a crane operator's view of a suspended load is unavoidably obscured (completely or partially), or if a suspended load is unavoidably obscuring (completely or partially) a crane operator's view, then suitably positioned spotters must be in place to provide guidance to the crane operator.
- A load MAY NOT be moved over, or be suspended above, any person or any occupied building. No person may walk beneath, or position himself below, a suspended load.
- No person may pass or work beneath the boom of a crane.
- No person may be positioned between a suspended load and a solid object where there is a risk of being crushed should the load swing.
- No person may be positioned within the radius of the boom of a crane unless directly involved with the lift.
- Under no circumstances may any person ride on a crane's hook or on a load.
- No load may be left suspended unless the operator is at the controls and is monitoring the load. In such a situation, the load must be kept as close as possible to the ground or floor to minimise the possibility of injury should the load drop.
- The controls of a crane or hoist may never be left unattended while a load is suspended. If it becomes necessary to leave the controls, the operator must lower the load to the ground or floor.
- No lifting may be carried out using a mobile crane unless the outriggers have been deployed and are locked in position.
- Load spreaders or packing under the outriggers must be used irrespective of the underfoot conditions.
- Before a mobile crane is moved into position to carry out a lift, the area must be inspected by a suitably qualified person who must verify that the underfoot conditions are satisfactory. If any uncertainty exists, DCP (Dynamic Cone Penetration) testing must be carried out. For critical lifts, ground compaction must be assessed using suitable instrumentation (e.g. Troxler).
- When using a mobile crane, slewing to test the effectiveness of the outriggers must be carried out prior to commencing with a lift.

- Under no circumstances may a mobile crane (or vehicle-mounted crane) travel with a suspended load.
- Slew pins must be securely in place while a mobile crane is travelling.
- Unauthorised use of a crane or hoist must be prevented by removing the keys, locking the cabin, isolating the controls, etc. when lifting operations have been completed.
- When not in use, lifting tackle must be stored off the ground and must be protected from the elements (rain, harsh sunlight, etc.) and contamination (dust, solvents and other chemicals) in order to prevent damage and / or deterioration.

A crane or hoist or an item of lifting tackle may only be used for the purposes for which it was designed.

### **Inspection, Testing and Maintenance**

Any crane or hoist brought onto the project premises must have a current test certificate and record of inspection as well as a suitable checklist (derived from the crane or hoist manufacturer's inspection recommendations) for use by the operator(s) when carrying out pre-operation safety checks.

A register of all cranes, hoists and lifting tackle brought onto the project premises must be compiled and maintained.

Each crane, hoist and item of lifting tackle must have a unique identification code or number, which must be referenced in the register.

For each crane, hoist and item of lifting tackle, the following documentation must be kept on site and must be made available (on request) to the nominated project management representative for inspection:

- Test records and certificates.
- Inspection records.
- Maintenance records; and
- Details of any modifications or repairs made.

All cranes, hoists and lifting tackle must be inspected, tested, and confirmed fit for purpose (i.e. safe for use):

- Before being operated or put into service.
- Before being returned to service following any repair or modification; and
- Periodically as follows (unless local regulations require examination more frequently):
- Each crane or hoist (including all ropes, chains, hooks or other attaching devices, sheaves, brakes and safety devices that form an integral part of the crane or hoist) must be thoroughly examined by a competent, experienced person every 6 months.
- Each crane or hoist must be subjected to an annual performance test (i.e., load test) by a competent, experienced person; and
- All lifting tackle must be thoroughly inspected by a competent, experienced, and appointed person every 3 months.

The system of inspection and testing must provide verification that each crane or hoist is able to function to its design specifications, and must verify the integrity of:

- Mechanical and electrical components.
- Controls.
- Cables and all lifting attachments.
- Structural components including boom, hoist, brakes, wheels, hooks, baskets, out-riggers, hook-blocks and rails; and
- Load limiting devices, hoist limit switches, alarms or warning devices, and other safety devices and control systems (including independent fail-safe braking systems, devices to stop the crane or hoist such as a dead man's switch, and emergency shut-off switches).

A preventative maintenance system must be in place to ensure that all cranes and hoists are maintained in a safe and serviceable condition.

For any crane or hoist, all inspections, testing, maintenance, and repairs must, as a minimum, be carried out in compliance with the requirements and specifications of the manufacturer as well as all applicable regulatory requirements (in terms of both the frequency of inspection, testing and maintenance, and the physical condition of the crane or hoist).

Repairs to a crane or hoist may only be carried out by competent persons. After repairs have been made, the crane or hoist must be tested and recertified fit for purpose (unless the repairs did not affect the integrity of the lifting mechanism).

Any modification to a crane or hoist must be subject to the approval of the original equipment manufacturer and a rigorous change management process.

Each item of lifting tackle must be tagged following each quarterly (3-monthly) inspection. Details of these inspections must be recorded in the lifting tackle register which must be made available to the nominated project management representative on request.

The following colour coding system is recommended for the tagging of all lifting tackle:

<u>Quarter</u>	<u>Tag Colour</u>
January – March	Blue
April - June	Red
July - September	Green
October - December	Yellow

The tag placed on an item of lifting tackle must be traceable to an entry in the lifting tackle register where the following information concerning the inspection of that item of tackle must be recorded:

- Item description.
- Unique item identification code or number.
- Item owner.
- Item location.
- Date of inspection.
- Name and signature of competent person who carried out the inspection; and
- Any comments concerning the inspection.

Any item of lifting tackle that is found to be damaged or defective must be removed from service (and tagged, "Out of Service") immediately and must then either be repaired and recertified (if possible) or destroyed to prevent further use.

Similarly, any lifting tackle that is known (or is suspected) to have been overloaded must be removed from service immediately and destroyed to prevent further use.

If an item of lifting tackle is removed from service or destroyed (scrapped), this must be indicated in the lifting tackle register.

Any item of lifting tackle without a tag or with an out-of-date inspection may not be used.

### **Training and Competency**

Only suitably trained, competent, and experienced persons are permitted to:

- Evaluate and plan critical lifts.
- Supervise lifting operations.
- Operate cranes and hoists.
- Use lifting tackle, and rig (sling) loads.
- Provide signals for controlling lifts; and
- Inspect, maintain, or test cranes, hoists and lifting tackle.

Each operator must meet the competency requirements for the particular class or type of crane or hoist to be operated. Depending on the project location and applicable legislation, operators may need to hold a certificate of competency issued by a recognised training institution.

#### **7.2.45**

#### **Manual handling of materials**

The PC must ensure that no employees are required or permitted to lift or move by hand any object that is likely to create a risk of injuries being sustained by such employees. The shape weight etc of the items to be lifted must be considered and where required issues such as training in correct lifting methods, use of PPE use of alternative lifting methodologies must be considered.

Any handling or lifting task that can only be done manually must be planned and rehearsed before the task is done. If more than one person is involved in a task a communication procedure must be agreed in advance. Lowering the load must be done in a controlled manner. Dropping a load is dangerous and must be avoided.

As a guideline 25 kg is the limit of what a person can safely handle. Where there are loads exceeding 25 kg the risk of handling the load must be mitigated to assure minimal potential for any injury.

When mechanical lifting aids are provided, they should be used.

Extra care should be taken when lifting awkwardly shaped objects.

Position the feet correctly. The feet should be placed hip-width apart to provide a large base. One foot should be put forward and to the side of the object, which gives better balance.

Bend or 'unlock' the knees and crouch to the load. The weight will then be safely taken down the spine and the strong leg muscles will do the work.

Get a firm grip. The roots of the fingers and the palm of the hand should grip the load. This keeps the load under control and permits it to be distributed more evenly.

The following should be considered with conducting the Risk Assessment with regards Manual Handling and take into consideration the task factors, physical demands and tools involved in the task:

- Load weight / frequency.
- Hand distance from lower back.
- Asymmetrical trunk / load.
- Postural constraints.
- Grip on the load.
- Floor surface.
- Environmental factors.
- Carry distance.
- Obstacles in route the load must be carried.

Team Manual Handling:

- Load weight.
- Hand distance from lower back.
- Vertical lift region.
- Trunk twisting / sideways bending.
- Postural constraints.
- Grip on the load.
- Floor surface.
- Environmental factors.
- Communication, co-ordination, and control.

<b>7.2.46</b>	<b>Maintenance</b>
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All equipment and structures on site, whether it is fixed or temporary must be maintained at intervals no longer than that recommended by the manufacturer, under a planned maintenance system to ensure the safety of personnel who are responsible for operating or using the equipment.

Proof of all current tests and maintenance certificates relating to cranes, lifting beams, pulley blocks, lifting gear and slings must be kept on site in the SSHSF and be available for inspection by any person authorized to do so.

<b>7.2.47</b>	<b>Medical Fitness/ Fitness for work</b>
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The PC must ensure compliance with CR 7(1) (g) and that all his personnel as well as those of Sub-Contractors appointed by him are healthy and medically fit for their respective assignments and keep proof of such medical fitness on the SSHSF. The PC must ensure that all persons required to have a certificate of medical fitness must be in possession of such certificates prior to being permitted to assume their duties on site. Should employees be found on site without a valid medical fitness certificate at the time of the CHSR conducting an audit, such employee must be removed from site and the CHSR may at his discretion issue instructions to cease work.

All medicals to include the Annexure 3 form as per the Construction Regulations 2014 signed and stamped by the occupational medical practitioner. The PC must ensure that only suitably qualified occupational health practitioners' issue medical certificates.

Should a worker's scope of work change, or he be required to work outside the scope of work for which his medical certificate has been issued, he may not be permitted to do such work until an updated medical fitness certificate has been issued.

The PC must develop and implement a programme to manage employee fitness for work for all employees working on the project. Working hours must be managed in compliance with applicable legislation. An exit medical from a previous project or site must not be deemed as a valid medical.

The medical examinations carried out for all drivers and operators must include testing and assessment for medical conditions that could affect the safe operation of vehicles or equipment. Specific testing and questioning must be carried out to determine if an individual:

- Suffers from epilepsy or any other medical condition deemed to be a risk by the occupational medical practitioner.
- Makes use of chronic medication that could affect performance
- Is colour-blind.
- Has poor day or night vision.

The medical examinations carried out for employees that are required to work at height must include testing and questioning to determine if an individual suffers from epilepsy, hypertension (high blood pressure) or any other medical condition deemed to be a risk (with regard to working at height) by the occupational medical practitioner.

7.2.48	Method Statements, Safety (SMS)/ Safe work procedures (SWP)
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SMS's/SWP must be in line with the associated Risk Assessments. The SMS's/SWP's must detail in a step- by- step and methodical manner on how the task is to be done from beginning to the end and must indicate what tools/equipment will be used at each stage and/or how the work area is to be accessed. The Task Items listed in the SMS's/SWP must tie up exactly with the task items being assessed in the Risk Assessment document.

**Acceptance of a SMS by the CHSR does not relieve the PC of his responsibility for ensuring full compliance with SSHS and any applicable legislation.**

7.2.49	Noise
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The PC must implement and comply with OH&S Act - Environmental Regulation 7 and the Noise Induced Hearing Loss (NIHL) 2003 Regulations.

The PC must meet statutory requirements on limitation of noise emitted by machines and equipment. When personnel are required to operate such equipment, noise level exposure at the operator position must not exceed an equivalent level of 85-dB (A) or more during normal working conditions without the required mitigating measures being implemented.

Employees working in the vicinity must not be subjected to an equivalent continuous level of 85-dB (A) during normal operating conditions. The PC must comply with time periods and PPE requirements where applicable.

Consideration must be taken of the fact that the sound level at any works/site boundary caused by mobile equipment must not exceed the nighttime background level pre-existing the operation of the equipment. **At no time must the noise emission of the equipment or activities cause the sound level at the nearest residence, hospital ward or adjacent structure to exceed 40-dB (A).**

Sound levels must be measured in accordance with SANS 10083, with due allowance being made for tonal or impulsive components. A plot plan of project or plant must be drawn up to identify the measuring points with date, time, and frequency duration of measurement.

Symbolic safety signs, warning employees and visitors regarding the hazard of noise in the area, shall be erected at all entrances to the area and in a position where it must be clearly visible.

**7.2.50****Notices**

If the PC receives any notice issued by any relevant Government Authority concerning Health and Safety, he must immediately upon receipt of such notice comply with the requirements of such notice. The PC must provide the CHSR with copies of any such notices, correspondence or directions of whatsoever nature issued by the abovementioned Government Authority concerning Health and Safety within 2 hours of the dispatch and/or receipt of such notice, correspondence, or direction.

**7.2.51****Notification of Construction Work****Notification of Construction Work**

The PC must submit an Annexure 2, "Notification of Intention to Commence Construction Work" to the closest Department of Labour office, have it stamped provide the CHSR with a copy. A copy must be kept on the SSHSF for inspection purposes. Submitting a copy to the CHSR does not constitute permission to proceed with construction work.

Should construction work extend past the completion date reflected on the submitted Annexure A the PC must inform Department of Labour accordingly and file the amended Annexure A on the SSHSF.

**It must be noted that no work of any nature may take place on site until permission to proceed with site Handover has been received from the Project Leader after receipt of letter from CHSR.**

**7.2.52****Occupational Hygiene (Personal Hygiene and infectious Disease Management)**

The PC must ensure that its personnel and subcontractor's personnel is able to maintain and maintains high standards of hygiene, personal and in connection with the performance of the work. All work areas must be kept in a clean and tidy state. Waste disposal must be facilitated by providing sufficient waste collection receptacles and the correct disposal frequencies to prevent waste build up.

Employees must be trained on the contents of the Personal Hygiene and Infectious Disease Management Plan which must identify any anticipated hazardous biological agents which may be present in the work environment, trained in measures to protect themselves in terms of personal hygiene and provided with the necessary means to minimise the risk of contracting the harmful effects associated with such hazardous biological agents.

All Resting and Eating areas must be kept in a clean, tidy condition as well as being positioned away from contaminants and hazards. No eating and drinking may take place outside the designated eating or

in office areas. Facilities for hand washing must be made easily accessible for persons to wash hands when leaving the construction area and entering the construction site offices.

7.2.53	Permit to work
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The PC must implement a permit-to-work system to control identified high-risk activities such as:

- Major lifting operations.
- Hot works.
- Cold work in areas where operational plant or equipment can pose a threat.
- Working in confined spaces.
- Excavation work (cable clearance permit).
- Use of a hazardous substance, e.g., lead.
- Roof work etc.

Permits to work must list the specific conditions and hazards involving the specific task. Only authorized competent persons may issue and sign off Permits-to-work.

7.2.54	Personal Protective Equipment (PPE)
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The PC must implement and comply with OH&S Act – General Safety Regulation 2. It must be kept in mind that PPE must only be the last resort in addressing risks. All Contractors' personnel on site and visitors, must always use the following minimum personal safety equipment which must be compliant with relevant SABS codes. Each item of PPE supplied for use on the project site(s) must be designed and manufactured in accordance with the relevant South African National Standard, ISO standard, or other recognised international standard.

#### Visitors (minimum PPE)

- Hard Hat,
- Reflective vest and
- Safety Boots.

#### If required due to on-site risks,

- Eye Protection,
- Hearing Protection,
- Respiratory Protection

**No Visitor, regardless of title or position may be permitted to enter the construction site without the minimum PPE which is a Hardhat, Reflective Vest and Safety Boots. Should the CHSR when present on site find any person without the minimum PPE, he may issue instructions to cease construction work.**

#### On site Workers.

- Suitable protective clothing (Overalls for all employees working on-site)
- Personnel exposed to noise levels exceeding 85dB (A), SANS 11451 approved hearing protection.
- Gloves, (Type appropriate to risks, or recommended by product manufacturers).
- Eye Protection/Face shields, (Appropriate to risks, or recommended by product/equipment manufacturers).
- Leather spats, (Appropriate to risks, or recommended by product/equipment manufacturers).
- Safety harnesses, (Where work is conducted from a Fall Risk Position).

Additional PPE requirements must be determined through hazard identification and risk assessment. This hazard-specific PPE (such as hand protection, hearing protection and respiratory protection) must be worn as required (e.g., when in a certain area, when performing a certain task, or when working with a certain substance).

The correct PPE must always be worn:

- In accordance with site requirements (as indicated at the entrances to a project site and at the entrances to buildings and/ or designated areas on the premises).
- In zoned areas (e.g., noise zones and respirator zones).
- As required by a Safe Work Procedure, a risk assessment, or a Material Safety Data Sheet (MSDS).

PPE must be provided to the employees by the PC and Contractor at no cost to the employee. Due to hygiene risks associated with interchanging PPE Site visitors wishing to gain access to the site must have their own personal PPE.

**Should a worker not have the required PPE he may not be permitted to work.** Employees must be trained in the correct use and how to take care of PPE. Supervisors need to as part of the Pre-Shift inspections when conducting DSTI's check that employees have the required PPE and that it is in a good condition.

If an item of PPE has worn out, has become damaged, or is found to be defective in any way, it must be replaced by the contractor. Employees must be provided with facilities which enable them to store their PPE e.g., lockers.

Employees who wear prescription spectacles (i.e., require corrective lenses) must make use of either:

- Prescription safety glasses (with permanent fixed side shields) that conform to the requirements of a recognised national or international standard (e.g., CSA, ANSI, or equivalent), or
- Over-spec safety glasses or goggles.

Any person who refuses to wear PPE as required must be removed from the site.

Symbolic signs indicating mandatory PPE requirements must be prominently displayed at the entrances to a project site and at the entrances to buildings and / or designated areas on the premises where additional PPE is required. These signs must comply with SANS 1186.

The PC must ensure the:

- Control the issuing and replacement of PPE.
- Maintenance of a register as proof that items of PPE have been issued to Individuals with signatures of receipt of PPE.
- Keeping of adequate quantities of replacement PPE on site.
- Carrying out of regular inspections to ensure that PPE is being used correctly, is being maintained in a good, serviceable, and hygienic state, and is not being shared between employees.

7.2.55	Plant and Machinery
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The PC must ensure that he controls **all plant and equipment entering and exiting the site**. Daily monitoring of all plant and equipment is required prior to commencing work, on issue and prior to use. A full list of hired and own plant must be available for inspection at each audit.

All daily inspection records are to be filed in the SSHSF and must not be more than one week behind. Only competent, medically fit plant operators must be permitted to operate plant. Medical certificates of fitness must be filled in the SSHSF. No unauthorized person may be permitted to operate or use plant.

Lifting equipment, plant or material that require annual load testing by an AIA, are to comply with the Driven Machinery Regulations (2015). Operators must be adequately trained and certified to operate mobile cranes or crane trucks. Certificates and registers are to be placed in the SSHSF.

Each contractor making use of plant and machinery on the project site must develop, document, and implement SWMS that will ensure the safe use and operation of such equipment.

For all plant and machinery, the following documentation must be kept in the Equipment Profile:

- Test records and certificates.

- Inspection records.
- Maintenance records; and
- Details of any modifications or repairs made.

<b>7.2.56</b>	<b>Planned Task Observations</b>
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### **PLANNED TASK OBSERVATIONS**

All contractor and sub-contractor supervisors must perform Planned Task Observations (PTO's) to verify that the control measures that have been identified in SWMS's (and associated Risk Assessments) are being adhered to and are being properly implemented, and to provide guidance where deviations are noted.

Each supervisor must complete at least one PTO per day involving one or more employees in his work team.

When an unsafe act or condition is identified, the supervisor must coach the work team to correct the act or condition in line with the Safe Work Procedure.

Where valid changes to the work method are identified, the supervisor must ensure that the SWMS/SWP and Risk Assessment are updated to reflect the current practice.

<b>7.2.57</b>	<b>Pneumatically powered tools and equipment</b>
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Compressed air and associated tools may only be used when compliant with the OHS Act, DMR 14. Air to operate pneumatic tools may only be supplied from compressors or compressed air lines. No homemade compressors may be used on site. All airlines must be in a good working condition and fitted with suitable clamps to prevent accidental connection. Compressed air may not be used for general cleaning including the cleaning of overalls.

Pneumatic powered tools must only be driven by filtered compressed air with an in-line lubrication system or be lubricated prior to use if there is no in-line lubrication system. When using pneumatic powered tools, the designated tool pressure must be attained using a regulator.

Pneumatic powered tools must be disconnected when not in use. They must not be disconnected from the air supply until all the residual pressure has been released or contained by a shut-off device. Hoses must not be kinked as a means of containment.

Employees operating pneumatic powered tools, and any potentially affected employee in the vicinity of use, must wear suitable PPE.

All rotary compressed air tools (e.g., drills) must have the rated revolution per minute (RPM) permanently marked on the casing. Only attachments of compatible RPM must be used with these machines.

The actual RPM of the tool must be checked every three months to ensure that the speed is as rated by manufacturers specifications.

Pneumatic powered tools must be secured to the air supply hose by an approved positive means to prevent the tool from becoming accidentally disconnected. Safety clips or retainers must be securely installed and maintained on pneumatic impact (percussion) tools to prevent attachments from being accidentally expelled.

All pneumatically driven nailers, staplers, and other similar equipment provided with automatic fastener feed, which operate at more than 100 kPa pressure at the tool, must have a safety device on the muzzle to prevent the tool from ejecting fasteners unless the muzzle is in contact with the work surface.

If an impact wrench is used, the sockets must be impact rated.

Compressed air must not be used for cleaning purposes except where reduced to less than 30 kPa, and then only with effective chip guarding and personal protective equipment in place. The 30 kPa requirement does not apply to concrete form, mill scale and similar cleaning purposes. Compressed air must not be pointed at any part of the body or used for cleaning clothing.

Airless spray guns of the type which atomize paints and fluids at high pressures must be equipped with automatic or visible manual safety devices which will prevent pulling of the trigger to prevent release of the paint or fluid until the safety device is manually released. A diffuser nut which will prevent high pressure, high velocity release while the nozzle tip is removed, plus a nozzle tip guard which will prevent the tip from coming into contact with the operator, or other equivalent protection must be provided in lieu of the above.

Abrasive cleaning nozzles must be equipped with an operating valve, which must be held open manually to enable operation. A support must be provided on which the nozzle may be mounted when it is not in use.

<b>7.2.58</b>	<b>Portable Electrical Tools</b>
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The PC to ensure compliance with EMR 10. PC to ensure safe Portable Electrical Equipment is used on site. The PC is required to inspect/have inspected by an appropriately qualified person all portable electrical equipment as follows:

- Supply cabling distribution boards, fixed lighting, and portable appliances on a monthly basis or more frequently if required by frequency of use.
- Extension leads, welding machines, compressors, pumps, and portable hand- tools on a weekly basis.

All sub-Contractor equipment must be inspected and tested at the same intervals as indicated above. The PC must implement a management system to ensure effective inspection and control over

equipment such as a monthly colour coding tagging system. Tagging must be durable and be able to withstand the stressors associated with working in a construction environment.

A record book/register must be kept reflecting the following:

- Item unique number.
- Items inspected.
- Deviations identified.
- Signature Of Inspector.
- Date of inspection.

In addition to the abovementioned, the PC must ensure the following:

- That only trained authorized persons use the Tools.
- That equipment is inspected at the start and end of each shift and included in the DSTI.
- That damaged, unsafe equipment is removed from service, tagged unsafe for use until repaired and returned to service.

<b>7.2.59</b>	<b>Public Safety and Security</b>
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#### Hoarding/Fencing

The PC must hoard/enclose the construction site to prevent unauthorised entry and disruption to the site where required. The hoarding must be as follows:

- The hoarding/ enclosure must be at least **1.8-meter-high** and must enclose the entire parameter of the site.
- It must be constructed of a material, which must be able to prevent unauthorised persons from entering the site such as welded mesh/ diamond mesh and 80% shade cloth.
- A Lockable gate must be at least 1.8 meters in height as well a security staff member to control access.
- Hoarding parameters must be as per project's decanting plan.

#### Warning / informative signs

The entrance of the site must have easily visible construction safety warning signs posted which must contain as a minimum of the following information:

- Construction activities ahead/ Construction Site.
- No unauthorised entry.
- Different Types of Personal Protective Equipment required for the site as per risk assessments.
- Speed limit (10 km/h), unless otherwise stipulated.
- Visitors to report to the site office.

- Where applicable the Construction Permit Number issued by DEL.

Appropriate warning signs must also be posted in different locations of the site to create awareness of danger e.g., demolition in progress sign, required PPE and deep excavations signs etc.

Informative signs indicating the Emergency Assembly Point/s, location of fire extinguishing equipment and first aid equipment must be displayed where required.

#### Location of site office

The location of the site office should be in an area that will not require visitors to pass through or enter areas where construction work is active and will not require the re-location of the office as the project progresses. The location of the site office must be included in the Site Layout Plan submitted with the SSHSP.

<b>7.2.60</b>	<b>Risk Assessment of Plant and Equipment</b>
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The PC must ensure that Risk assessments of plant and equipment is undertaken and documented before arrival at site, after major service, after modification, and before use in an unusual operating mode or conditions. The RA's must be undertaken by a suitably qualified and experienced person.

RA's for equipment mobilising to Site must be conducted prior to the equipment arriving on Site, and must consider, where applicable, potential for entanglement in moving parts, crushing or striking by moving or falling objects, cutting or stabbing by sharp objects, high pressure fluids, electrical shock or burns, burns from hot or cold surfaces, slips, trips and falls, ergonomic design of access and egress, seating, vibration, noise, exhaust fumes, etc.

The identification of hazards should consider normal operations, abnormal or unusual operations, breakdowns, and servicing operations. Particular attention must be given to fall protection attachment points when there is a requirement to work where a fall risk exists for activities such as repairs to equipment due to breakdowns. Where repairs to earthmoving equipment must take place on site the risk assessments must include provisions to deal with oil, diesel, and coolant spillages.

The PC must maintain all Plant and Equipment in good order and condition. Where equipment becomes inoperable due to breakdowns or other reasons and is being replaced by other equipment the same RA' requirements will be applicable to such replacement equipment.

The CHSR may inspect items of plant or equipment brought to site by the PC for use on site. Should the CHSR deem that it is inadequate, faulty, unsafe or in any other way unsuitable for the safe and satisfactory execution of the work for which it is intended, he must advise the Contractor in writing and the Contractor must forthwith remove or have repaired the item from the site and replace it with a safe and adequate substitute which does not entitle the PC to any additional claims or extension of time in respect of delays caused by the CHSR's instructions.

<b>7.2.61</b>	<b>Roof Work</b>
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The PC must ensure compliance with OH&S Act - General Safety Regulation 10. Safe access for gaining access on to roofs must be provided which can be ladders, scaffolding, man-cages, or elevated work platforms. Man-cages and elevated work platforms may only be used where scaffolding, and ladders is not suitable.

A lifeline, consisting of a steel wire rope, the diameter which has been calculated to suit the span and the number of persons attached to it must be erected on the ridge of the structure including the use of a mechanical device, e.g., turnbuckle, for tensioning the wire rope.

The lifeline to be erected/installed, must be recorded on register, and checked daily by a suitably qualified, competent, appointed person. Employees working on the roof must be clipped onto the lifeline via their safety harnesses. No work may be permitted during rain or windy conditions more than 30 kph.

Roof structures must not be overloaded with bundles of roofing materials. Only bundles for immediate use must be stacked onto the roof structure. Bundles must be sufficiently secured to the structure to prevent it from being blown away or falling off. No materials may be permitted to be stored on the roof structure over weekends or holidays.

<b>7.2.62</b>	<b>Safety meetings: Pre-start, Review etc.</b>
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The PC must ensure compliance with OH&S Act, Section 19. Weekly Toolbox meetings must be conducted with employees. Topics for Toolbox Meetings must be pertinent to the site, equipment used, activities performed, SHE committee resolutions. Records of contents of Toolbox Meetings as well as attendance records must be kept on the SSHSF.

The PC must conduct at least one formal Health and Safety Meeting per month or at shorter intervals if required by the CHSR. Safety Representative Inspection reports contents must be discussed in addition to items such as Safety Statistics for the Month, PPE Issues, training requirements, CHSR Audit reports and results etc.

Daily Safe Task Instructions (DSTI) briefings must take place with each work team before the start of each shift. Hazards and risks as well as the required risk reduction measures must be communicated to workers. The Supervisor, CHSO and workers must sign the DSTI before work commences. At the end of the shift after the required close out check and signing, the DSTI's must be signed off and filed.

Weekly Safety Review Meetings of all safety related aspects of the week must be conducted. OHS must be a standing item on Planning and Progress Meeting Agenda's and attended by the CHSO.

<b>7.2.63</b>	<b>SHE Representatives and Committees</b>
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The PC and Sub-Contractors to comply with Section 16 and 17 of the Act by allowing for and ensuring that Health and Safety Representative(s) whom, after consultation, have been appointed and trained to carry out their functions.

The appointments must be in writing and the Health and Safety Representative must carry out regular inspections, keep records and report all findings to the CHSO. The CHSO must co-ordinate at least monthly H&S Committee meetings and attend all H&S committee meetings held by the Contractors. The CHSO shall further ensure that H&S is discussed at all internal production or progress meetings. Issues arising from the H&S committee meetings are to be discussed at internal meetings, as well as all H&S related issues, incidents, non-conformances, and penalties issued (if applicable).

Feedback to the CHS committee and close out of findings is imperative. Minutes of meetings must be kept for all H&S interventions and meetings. Minutes of meetings must be filed on the SSHSF.

<b>7.2.64</b>	<b>CHSO Roles and Responsibilities</b>
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The PC must ensure that the CHSO performs the following duties:

- Assist and co-ordinate the development of the SSHSP.
- Attend Project Planning Meetings.
- Assessment and approval of Sub-Contractors SSHSP's.
- Facilitation of Site HS Meetings.
- Identification of Hazards and risks relevant to the construction project through regular co-ordinated site inspections.
- Establish and maintain HS communication structures, systems, and distribution of HS specific documents to sub-contractors, compiling of project specific emergency preparedness documentation and supervising testing and evaluation of emergency preparedness plans.
- Conducting of induction training sessions.
- Evaluation of compliance by sub-contractors to project specific HS Plans and Client specification through inspections and audits.
- Overseeing the reporting and investigation of project related incidents.
- Overseeing the maintenance of all HS related records.
- Participation in management reviews of HS Systems.
- Draft and analysis of trend analysis to identify system deficiencies and incident trends, outline relevant improvements and incorporate changes into the HS management system.
- Reviewing and updating the SHE Plan.
- Ensuring that all staff, visitors, sub-contractors etc comply with the site rules and procedures.
- Ensure that no new workers or Contractors commences work without prior approval of their SSHSP or any other documentation as per required applicable legislative documentation.

- Ensuring that no work will be permitted to be performed without a valid RA and where required Method Statement as agreed with CHSR until such documentation has been approved by the CHSR.
- Any other duties as agreed between Construction Manager and/or CHSR.

**The CHSO may not be removed or replaced without the approval of the CHSR, nor may the site be left unattended for more than 1 day without adequate, competent cover.**

<b>7.2.65</b>	<b>Signage</b>
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The PC must ensure that signage is posted on site as per site risks, legislative requirements e.g., General Safety Regulations or SANS, prohibiting entrance, specifying PPE requirements, location of First Aid Station and Fire Fighting Equipment etc. Signage must be noted on the site layout plan indicating where fixed/temporary signage is required.

Temporary electrical signage is to be included for the temporary electrical supplies. All rules or signage provided by the PC must to be adhered to. Where possible wording on signage must be in English and isiZulu.

<b>7.2.66</b>	<b>Site Clearance</b>
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Site Clearance activities will vary depending on the condition of the site in terms of it being overgrown, if trees must be removed if redundant materials must be removed from site etc. All site clearance activities irrespective of what it entails must be conducted under supervision and subjected to the Risk Assessment Process as well as the development of SMS's (SWP's).

Where the site is overgrown with vegetation, RA's must make provisions for the presence of snakes, poisonous vegetation, sharp objects, open trenches and excavations and insects. All tools, equipment vehicles and machinery must be in a safe working condition and operated by trained competent persons. Employees must be provided with the required PPE.

<b>7.2.67</b>	<b>Site Establishment</b>
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Site establishment can only be deemed complete when the site is enclosed, signage is posted, welfare facilities have been provided, containers have been placed etc. Upon site establishment being deemed as complete the PC must refer to the "Site Establishment Checklist" under item 12.6.1 which can be found under Annexures at the end of this document. Only once all items have been ticked as being present/completed can the PC proceed with other construction activities.

The checklist as indicated above must be signed by the CHSO and the CR8.1/CR8.7 and submitted to the CHSR. Should the CHSR upon conducting a site visit/audit and find that site establishment was not

completed before commencing with other construction activities the CHSR may issue instructions to cease construction work until all outstanding items have been attended to.

<b>7.2.68</b>	<b>Site Layout Plan</b>
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The PC must ensure that a Site Layout Plan is developed and submitted with the SSHSP as indicated in Annexure C of this document. This document must indicate items such as Location of the Site Office, Laydown areas, Location of welfare facilities, Traffic routes, location of first aid and emergency equipment etc. After Site establishment and as the project progresses the plan must be updated if required and a copy provided to the CHSR. The Location Plan must be displayed at the entrance to the site as well as at the site office.

<b>7.2.69</b>	<b>Site Specific Health and Safety Rules</b>
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The PC must provide and ensure implementation and compliance with the following Site-Specific Health and Safety Rules and requirements:

- Safe Access and Egress to be provided to and from work areas.
- Good Housekeeping and Stacking Practices to be implemented and always maintained.
- Continuous cleaning to take place especially at the end of the shift and be recorded in DSTI "close out" Section.
- Safe and orderly routing of electrical cables and air hoses to prevent tripping of persons must be always enforced.
- Rigging Studies must be conducted for all heavy and/or difficult lifts.
- No lifting of loads in windy conditions exceeding 30 km/h depending on RA, Rigging Study, dimensions and weight of the load and lifting capability of the crane.
- Prohibition of certain activities in wet conditions e.g. un-shored excavations, use of portable electrical equipment, elevated work, roof work etc.
- Employees may not be transported on the back of a bakkie and or truck, unless fitted with a canopy and separated by means of a barrier from tools and equipment.
- All elevated work must include compulsory use of Lifelines (unless secured to an approved fixing point), Safety Harnesses & Fall Arrestors including a height rescue system and training of rescuers. To comply with SABS-EN –353-355,358,360-365,795,813&SABS033, 1833, 341,564-567,892,1891,12277 and 4878 -Fall Right SA standards or equivalent - always attached in elevated positions and use of double lanyards.
- Scaffolding must comply with SANS 10085 standards. Scaffold inspectors and Erectors may not be the same person. Access ladders must be erected on the inside of frames, staggered every 2 meters with a safe landing platform. Trapdoors must be provided on working platform. Scaffold must remain tagged "Unsafe for use" until certified "Safe for use". If modified to be re-tagged "Unsafe for use: until certified 'Safe for use'".

- Where required workbenches must be provided for onsite work.
- Barricading must be able to sustain loads imposed on it, should a fully grown person fall against it or lean against it, solid frame covered with orange netting to highlight presence.
- Tools and equipment used in working at heights to be secured by use of lanyards/Tool belts.
- Minimum PPE required to permit entry onto site: Safety boots, Hard Hat and Reflective Vest.
- When grinding, welding and gas cutting operations take place Shields and extinguishers must be used to contain sparks and control fire spread. Fire watchers to be posted whenever Hot Work is conducted.
- Guide ropes must be used whenever lifting operations are conducted.
- Flagmen must wear reflective vests.
- Heavy mobile plant and earth moving equipment must be fitted with rotating lights and operated with lights on and functional reverse hooters and/back up alarms.
- Concrete buckets to be fitted with safety Chains and opening wheels.
- All portable generators and welding machines with electrical outlet sockets must be fitted with earth leakage switches.
- All electrical items used in wet conditions must be fitted with waterproof caravan type plug fittings.
- No machinery e.g. grinder designed with guards may be operated without guards unless approved by CHSR.
- All Self- Propelled mobile machines must be fitted with Fire Extinguishers, Revolving Lights and Back-up and Reverse Hooters.
- All oxygen –acetylene cylinders must be fitted with Flashback Arrestors and proper, good condition hoses and clamps in a trolley equipped with a fire extinguisher.
- Supervision ratios between Foreman and workers not to exceed 1:15 ratio.
- Staff to always wear appropriate PPE with sufficient replacements to being available.
- All employees on site to carry identification e.g. ID card reflecting the following information:
  - Initials and surname.
  - Designation.
  - Company number.
  - Name of Employer,
  - and proof of induction, sticker on hardhat unless otherwise agreed with CHSR.

#### Welfare Facilities to:

- Be protected from environmental conditions such as rain, sun, and wind.
- Tables and Chairs to be provided in eating areas.
- Refuse bins for disposal of food containers and food scraps.
- Hand washing facilities.
- Portable toilets 1:10 ratio.
- Separate male and female toilets with doors that can be locked from the inside.
- Running water, soap, and toilet paper to be always available at toilets.
- All facilities to be always kept in neat hygienic condition.

<b>7.2.70</b>	<b>Smoking on site</b>
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The PC may not permit any person to smoke on site unless in designated area, which has clearly been identified by means of signage being posted indicating it as the designated smoking area which has been selected in accordance with applicable legislative requirements. Applicable receptacles must be provided for the disposal of cigarettes butts to ensure good housekeeping standards are maintained and prevent accidental fires being started.

<b>7.2.71</b>	<b>Speed Restrictions and Protections</b>
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The maximum speed limit on site shall be limited to 10 km/h unless otherwise agreed upon with the CHSR. Vehicle movement routes on site must be clearly indicated where applicable and indicated on the Site Layout Plan.

Signage to ensure the safe movement of vehicles on site, as well as to ensure the health and safety of all employees and visitors on site, must be displayed in strategic locations.

<b>7.2.72</b>	<b>Stacking and Storage of Materials</b>
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The PC must ensure compliance with CR 28 and General Safety Regulations 8. Stacking and Storage must take place under the supervision of an appointed competent person.

Storage areas must be designated, kept neat and under control. Inspections of stacking and storage areas must be done and recorded on a register which must be kept on the SSHSF. Adequate stacking, storage and lay down areas must be provided on site. If unauthorized persons can enter an area where materials are stacked, such area must be barricaded off to prevent access to such area. Stacks should not exceed the height to width ratio of 3:1.

Hazardous chemical substances must be stored in dry storeroom as per the specifications of their material safety data sheets.

No materials may be stored outside the site perimeter, unless agreed to in writing with the CHSR and Project Leader.

<b>7.2.73</b>	<b>Structures and Temporary Works</b>
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The Principal Contractor must ensure that the provisions of CR 11 & 12 are adhered to.

A Competent Temporary Works Designer must be appointed as per CR 12(1). All temporary works must be erected under the supervision of the appointed Temporary Works Supervisor who will be responsible to certify that the structure is suitable to withstand the loads imposed on it when concrete is poured. No concrete may be poured until authorised to do so by the Temporary Works Supervisor in writing.

All temporary works structures must be inspected by the Temporary Works Supervisor/s after concrete pouring and thereafter daily until the concrete has cured. Temporary works materials or sections may only be removed or dismantled upon receiving authorisation from the appointed Temporary Works Supervisor in conjunction with the Structural Engineer. Records of all inspections and authorisation to dismantle temporary works materials must be kept in the SSHSF.

#### 7.2.74

#### Sub-Contractors

All Sub – Contractors shall be responsible for their own Health and Safety on site. The PC shall sign Section 37(2) mandatory agreements with the Sub – Contractors for the works, which stipulate the arrangements and procedures to ensure compliance by the Sub-Contractor and his/her employees with the requirements of the OHS Act, Act 85 of 1993, CR and the SSHSS.

All subcontractors must have their own SSHSP applicable to the scope of work they will be performing on site, which has been approved in writing by the PC's CHSO. Records of such approval letters must be kept on the PC's as well as the Sub-Contractors SSHSF.

The PC **may not** permit any Sub-Contractor to start working on site without his SSHSP being approved. The PC's failure to ensure compliance with any of the abovementioned and to monitor Sub – Contractor's compliance on site may be seen as failure by the PC to enforce good SHE Practises, Compliance with the Act, CR and this SSHSS and may result in the CHSR issuing instructions to cease work.

#### 7.2.75

#### Transportation of Workers

The PC and Sub-Contractors shall not:

- Transport persons together with goods or tools unless there is an appropriate area or section of the vehicle separated/partitioned off from the area where workers are seated in which to store such goods or tools.
- Transport persons on the back of trucks except if a proper canopy (properly covering the sides and top) has been provided with suitable seating areas.
- Permit workers to stand or sit on the edge of the transporting vehicle.
- Transport workers in light duty vehicle (LDV) unless they are closed / covered and have the correct number of seats for the passengers.
- No driver may transport more than six people on the back of a 1-Ton LDV and more than four passengers on the back of a ½-Ton LDV.
- The driver of any LDV may not permit more than two passengers to occupy the cab of any LDV. Drivers of such vehicles must have a valid driver's license for the code of vehicle being driven by them.

<b>7.2.76</b>	<b>Trespassing</b>
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The PC and his employees may not trespass on any land/area outside the limits of the site, as indicated at the time of Site Handover, and must communicate such requirement to his sub-contractors. The PC must ensure that all fences are maintained during the Contract.

The PC and his employees are required to work only in the specified construction areas and access to these areas is only by specified routes. Should access routes change due to work related issues on site such routes with applicable restrictions must be communicated to the employees. Changes in routes must go with the required barricading and signage to prevent unauthorised persons from using such routes to access the site where such routes may enable unauthorised persons from entering the site,

Where changes in routes may have a negative impact on the day-to-day functions of persons other than that of the PC such changes in routes must take place in consultation with such affected parties.

<b>7.2.77</b>	<b>Toolbox Talks</b>
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The contractor must prepare a Toolbox Talk on a weekly basis and must share it with all personnel for which the contractor is responsible (including all sub-contractors). Toolbox Talks must address health and safety issues that are relevant to the work performed on the project site and must include information and / or knowledge sharing, lessons learnt from incidents that have occurred, information concerning specific hazards and / or risks and control measures to prevent injury, etc.

Attendance records must be kept and maintained in the contractor's SSHSF.

<b>7.2.78</b>	<b>Vehicles and Traffic Management</b>
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The PC must ensure compliance with OHS Act- Construction Regulations 23 and that all vehicles entering the site, moving around on the site, parked on site, and exiting the site does so in a safe manner. In addition to the abovementioned, the following must be adhered to:

- Vehicles parked outside the site area must be parked in such a way as to not obstruct the movement of public vehicles nor put the public in danger in any way.
- Contractor's vehicle drivers must comply with all safety direction and speed signs.
- Drivers must ensure that vehicle loads are properly secured before setting the vehicle in motion.
- The Contractor must only permit the authorized, necessary number of vehicles on site.
- Traffic rules and signs such as speed signs; stop signs must be always obeyed.
- No vehicles may be left with the engine running or the keys in the ignition.
- Warning signage must be posted on the outside of site entrances of the site to make road users aware of vehicles entering or exiting the site.

<b>7.2.79</b>	<b>Ventilation</b>
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The PC must implement and comply with OH&S Act - Environmental Regulation 5. Any activity/task, which generates excessive dust such floor sanding, or fumes, such as welding where natural ventilation is not sufficient to ensure the provision of a safe working environment must include the use of an exhaust extraction system. Care must be taken to ensure that outlets of exhaust extraction system do not pose a risk to the health and safety of other persons on or outside the site or contaminate other ventilation system intakes.

<b>7.2.80</b>	<b>Vibration</b>
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As far as is reasonably practicable, exposure to vibration must be eliminated. However, if this is not possible, short-term solutions to decrease exposure include:

- Reducing the vibration levels.
- Removing the person from the vibrating equipment / tools.
- Reducing the period that the person works with the vibrating equipment e.g., at least 40 minutes break after 20 minutes working with a machine that vibrates excessively.

To reduce exposure to vibration:

- Consider buying equipment that operates effectively at lower speeds.
- Buy equipment with built-in damping materials.
- Buy lighter tools if they are available - they require less of a grip.
- Maintain the equipment.
- Make sure equipment is balanced and there are no worn parts.
- Use remote controls when they are available.
- Workers must be informed to reduce their grip on the equipment when it is safe. The less time they have their hands on the equipment the better. They need to relax their hands during these brief breaks.

<b>7.2.81</b>	<b>Visitors to Site</b>
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The PC must ensure that all Visitors to the site are subjected to a site-specific safety induction training session prior to being allowed access to site. Visitors are required to conform to the Site PPE requirements and should arrive at site with the appropriate PPE, with the minimum being safety boots/shoes, hard hat and a vest.

Visitors must not be permitted to roam around on site without being accompanied by a representative of the PC, so as to make them aware of on-site hazards, risks, No-Go areas etc.

<b>7.2.82</b>	<b>Waste Management</b>
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The PC must ensure that a Waste Management Plan must be developed which must be submitted with the SSHSP as indicated in Annexure C. It must be kept in mind that a site with areas overflowing with waste creates health hazards, attracts rodents and a poor image of the company.

Sufficient receptacles and designated stored areas must be provided which must be cleared frequently. Consideration must be taken of the types of waste generated and where required waste separation must form part of the Waste Management Plan. Environmentally hazardous waste such as empty paint tins, fluorescent light fittings, asbestos etc must be disposed of in line with applicable legislative requirements.

<b>7.2.83</b>	<b>Water Management</b>
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The PC must keep in mind that South Africa is a country with limited water resources. Water may only be obtained on site, as per contract stipulations. The PC may not make unauthorised water connections. Where water is brought onto site by means of water tankers the PC must ensure that the water is suitable for its intended use.

The PC must communicate to all workers the importance of water conservation and management. Run-off water from washing and cleaning activities must be managed in a controlled manner to not create areas where water becomes stagnant contributing to the creation of areas for mosquitos to breed. Run-off water must also not contribute to the creation of slippery surfaces. It is recommended that taps are of the press-button type to reduce water wastage.

No hazardous substances such as paints, oils etc may be disposed of into drains, and sewers.

<b>7.2.84</b>	<b>Welding, Grinding, Cutting etc.</b>
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The PC must comply with the requirements of the OHS Act-Construction Regulation 29. The Pc must also ensure the following:

- That all equipment used is in a safe working condition.
- That Hot Work Permits have been issued by the appointed Competent Person.
- That where required the necessary screens have been erected to protect against harmful rays and sparks.
- The presence of close proximity fire extinguishing equipment.
- Dampening down takes place where required.

<b>7.2.85</b>	<b>Welfare Facilities</b>
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The PC must implement and comply with Construction Regulation 30. PC to ensure:

- Sufficient chemical ablution facilities on site where connection to existing sewer system is not possible.
- Separate facilities must be provided for males and females with gender signs posted at entrance or on door.
- Ablutions must be serviced weekly as a minimum.
- Safe drinking water must be provided to employees.
- Safe, clean storage areas for workers personal belongings and clothing to be provided.

<b>7.2.86</b>	<b>Working at Heights</b>
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The PC must implement and comply with OH&S Act - General Safety Regulation 6 & Construction Regulation 10. Note: The following must be implemented in conjunction with the requirements for Elevated Work and the Fall Protection Plan as covered earlier in this document:

- If personnel are required to work in any area, which is not guarded, which has a fall risk, either above or below ground, fall protection equipment must be provided and utilised by the personnel. Fall protection includes Safety harnesses and double lanyards with the correct hooks, approved lifelines, or other approved means.
- All harnesses must comply with SABS/EN/EC Standards and must be in a "good state", inspected using a comprehensive inspection checklist, and "in-date" as per manufacturing guideline.
- All persons working in a fall risk position, e.g., scaffolding, formwork/false work, support work, roof work, etc. must be trained for working at heights with a minimum of an Accredited Fall Arrest Course compliant to applicable SAQA Unit Standards.
- The supervisor of the work relating to the fall risk area must be trained at a minimum level of a SAQA Accredited Fall Arrest and Basic Rescue Course.
- A Rescue Kit (Contents of the Rescue Kit as per the Fall Protection Plan, and as determined by the type of working from a fall risk position that is being conducted on site) must be always available on site.
- The site must have at least one Accredited Fall Arrest Rescue Co-Coordinator on site who will co-ordinate the rescue operation.

**CONTRACTORS HEALTH AND SAFETY DECLARATION FOR TENDERS**

**INTRODUCTION**

In terms of Construction Regulation 5(1) (h) of the Construction Regulations of February 2014 a Contractor may only be appointed to perform construction work if the Client is satisfied that the Contractor has the necessary competencies and resources to carry out the work safely in accordance with the Occupational Health and Safety Act, Act 85 of 1993 and the Construction Regulations of February 2014. In line with this requirement the Contractor is required to read through this document carefully, sign it and submit it with his/her Tender.

**DECLARATION**

1. I the undersigned hereby declare and confirm that I am fully conversant with the Occupational Health and Safety Act, Act 85 of 1993, the Construction Regulations of February 2014 and the Site Specific Health and Safety Specification attached in the tender document.
2. I hereby declare that my company and its employees has the necessary competency and resources to safely carry out the construction work under this contract in compliance with the Occupational Health and Safety Act, Act 85 of 1993, the Construction Regulations of February 2014 and the Construction Safety, Health and Environmental Specification.
3. I hereby confirm that adequate provisions has been made in my tender to cover the cost of all Safety, Health and Environmental duties and responsibilities imposed on me by the Occupational Health and Safety Act, Act 85 of 1993, the Construction Regulations of February 2014 and the Site Specific Health and Safety Specification
4. I confirm that I may not commence with any part of construction work under the contract until the Client has approved my OH&S Plan in writing.
5. I hereby confirm that copies of the following documentation will be kept on site for viewing and inspection purposes for the duration of the construction work:
  - a) Client's Site-Specific Health and Safety Specification
  - b) Approved Construction Occupational Health and Safety Plan
  - c) Occupational Health and Safety Act, Act 85 of 1993, and
  - d) Construction Regulations of February 2014.
  - e) Any other documentation as specified in the SSHSS or as required by the CHSR.
6. I agree that my failure to complete and execute this declaration to the satisfaction of the Client will mean that I am unable to comply with the requirements of the Occupational Health and Safety Act, Act 85 of 1993 and Construction Regulations 2014, and accept that my tender will be rejected.

**Signature:**

**Date:**

(Person duly authorised to sign on behalf of Tender)

### **Contractual Issues**

Acceptance by the Principal Contractor of the contract with KZN DOPW shall constitute acknowledgement that the Principal Contractor has familiarised him/herself with the contents of the OHSE Spec and that he/she will comply with all its obligations in respect thereof.

Due to fact that this document is based on legislative requirements, the Client requires that all Contractors comply with the requirements of this document and all other relevant legislative requirements not covered by this document.

The Client or its duly appointed Construction H&S Agent reserves the right to stop any Principal Contractor or Sub-Contractors from working whenever Safety, Health or Environmental requirements are being violated as required by regulation 5(1)(q). Any resultant costs of such work stoppages will be for the relevant Contractor's account.

The requirements as specified by the Client in this document must not be deemed to be exhaustive and the Client reserves the right to make changes as and when the Client deems fit to address issue of OHSE Compliance.

The Client will not entertain any claim of any nature whatsoever which arises as a result of costs incurred or delays being experienced due to the Contractor not complying with the requirements of this document and/or any other applicable legislative requirements imposed on the Contractor.

T2.33 - BASELINE RISK ASSESSMENT			
Project title:	ZNT 04268 W: DEPARTMENT OF HEALTH: MBONAMBI: WIMS NO. 063049: SOKHULU CLINIC: PROVISION OF A BOREHOLE AND WATER STORAGE TANK WITH BOOSTER PUMP (COMPLETION CONTRACT FOR WIMS NO. 072033)		
Tender no:	ZNT 04268 W	Project Code:	063049

<b>7.4.</b>	<b>ANNEXURE D</b> BASELINE RISK ASSESSMENT
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Please note that this is a Baseline Risk Assessment, Contractor to perform detailed Issue Based and Continuous Risk Assessments in sequence of the activities anticipated of being performed.

Project:		SOKHULU CLINIC WIMS NO: 063049									
REF NO		RISK ASSESSOR		REVISION	0	DATE					
Likelihood		Consequence		RISK RANKING			RANKING				
		RISK = LIKELIHOOD X CONSEQUENCE		Score							
Rare	1	Negligible	1	0-5	1						
Unlikely	2	Minor	2	6-10	2						
Possible	3	Moderate	3	11-16	3						
Likely	4	Major	4	17-20	4						
Almost certain	5	Severe	5	21-25	5						
Ref Nr	Activity		Potential Hazard	Potential Risk	S	H	E	Pure Risk	Mitigation Measures	Residual Risk	Risk Ranking
1	Vehicles accessing and exiting the site		1.1. Vehicles can run out of control due to mechanical failure etc.	1.1. Collisions with pedestrians, buildings, other vehicles. etc	x			4x5=20	1.1. Vehicle Maintenance records plus pre-trip inspection to be available before permitting	2x5=10	2



Totals		Pure Risk				76		Residual Risk		35	
Ref Nr	Activity	Potential Hazard	Potential Risk	S	H	E	Pure Risk	Mitigation Measures	Residual Risk	Risk Ranking	
2.	Manual Offloading of materials	2.1. Sharp Edges	2.1. Cuts to hands etc.	X			3x3=9	2.1 Use of hand Protection etc.	2x1=2	1	
		2.2. Incorrect Lifting methods	2.2. Back strain, injury etc.		H		3x2=6	2.2. Training in correct lifting methods etc.	2x2=4	1	
		2.3. Hands caught between surfaces.	2.3. Bruising, Fractures etc.	X			3x2=6	2.3. Awareness Training etc	2x1=2	1	
		2.4. Flammable substances	2.4. Fires, Explosions Burns etc.	x			3x3=9	2.4. Storage in correct sealed containers etc.	1x1=1	1	
		2.5. Spillage of fuel	2.5. Contamination of Soil etc.			x	3x2=6	2.5. Storage in correct sealed containers etc.	1x1=1	1	
Totals		Pure Risk				36		Residual Risk		10	
Ref Nr	Activity	Potential Hazard	Potential Risk	S	H	E	Pure Risk	Mitigation Measures	Residual Risk	Risk Ranking	

3.	Clearing Vegetation	3.1. Use of Brush Cutters by incompetent operators	3.1. Contact with high speed, sharp edges resulting in cuts and lacerations etc.	X		3x4=12	3.1 .Training of Operators etc.	2x2=2	1
		3.2. Use of slashers by incompetent users	3.2.Sharp edges resulting in cuts etc.	x		3x3=9	3.2. Training of Users etc.	2x2=2	1
		3.3. Venomous Snakes and poisonous insects	3.3. Respiratory failure, organ failure, death etc.	x		3x5=15	3.3. Snake Awareness training and treatment facility identified	3x2=6	2
		3.4. Sharp objects	3.4. Cuts, infections Etc.	X	X	1x3=3	3.4. Use of gloves, Pre-cut Checks etc	3x1=3	1
		3.5. Flammable substances	3.5. Fire, explosions, Burns etc	X	X	3x3=9	3.5. Use of approved containers etc.	3x1=3	1
		3.6. Spillages	3.6. Contamination of Soil etc.			3x6=6	3.6. Training in correct re-fuelling	2x1=2	1



		5.2. Material may have sharp edges	5.2. Cuts to hands, skin penetrations etc.	x			3x2=6	5.2. Use of correct hand protection etc	1x1=1	1
		5.3. Persons/limbs being struck with tools/items.	5.3. Bruising, fractures etc.	x			2x1=2	5.3. Training and Competent supervision etc.	1x1=1	
		5.4. Unknown location of underground services.	5.4. Accidental contact with electricity/water supplies etc.	x			3x4=12	5.4. Reference to drawings, use of detection equipment etc.	1x2=2	1
		5.5. Hot Environmental Temperatures.	3.5. Heat exhaustion, sunburn etc.	x			3x3=9	5.5. Adequate water supplies, use of sunscreen creams etc.	1x1=1	1
			Pure Risk				38	Residual Risk	6	
			Potential Risk	S	H	E	Pure Risk	Mitigation Measures	Residual Risk	Risk Ranking
6.	Stacking and Storage	6.1. Collapse of Stack.	6.1. Collapsing material may injure persons, cause tripping	X			3x3=9	6.1. Inspection of stacks, use of checklist, supervision	1x1=1	





		Ingestion of harmful bacteria could take place	infections resulting in diarrhea etc.						appropriate hand protection, good personal hygiene practises etc.		
		8.4. Possible presence of methane gas	8.4. In the presence of an ignition source could lead to explosion etc.	x				2x4=8	8.4. Test for presence of methane gas, ensure ventilation of system, avoiding ignition sources etc.	1x2=2	1
<b>Totals</b>		<b>Pure Risk</b>			<b>28</b>			<b>Residual Risk</b>			<b>7</b>
<b>Ref Nr</b>	<b>Activity</b>	<b>Potential Hazard</b>	<b>Potential Risk</b>	<b>S</b>	<b>H</b>	<b>E</b>	<b>Pure Risk</b>	<b>Mitigation Measures</b>	<b>Residual Risk</b>	<b>Risk Ranking</b>	
9.	Chiselling/Hammering	11.1. Use of poor condition hand tools	11.1. Tools breaking during use, causing risk of injuries etc	X			3x3=9	11.1. Tool inspections, use of checklists, Supervision etc.	1x1=1	1	
		11.2. Struck by tools when being used	11.2. Incompetent user resulting in incorrect use	X			2x2=6	11.2. Competent trained user,	1x2=2	1	

			which can result in injuries etc.						inspections, Supervision etc.		
		11.3. Harmful noise	11.3. Impulsive noise could contribute towards noise induced hearing loss etc.	X			3x3=9	11.3. Noise level assessment, use of correct hearing protection (SNR) etc.	1x2=2	1	
		11.4. Physical exertion	11.4. Risk of fatigue, muscular strain etc.	X			3x1=1	11.4. Regular breaks etc	1x1=1	1	
		11.5. Flying particles	11.5. Risk of flying particles entering the eyes and penetrating the skin etc.	x			3x2=6	11.5. Use of facial protection, long sleeve overalls etc.	1x1=1	1	
Total		Pure Risk			31			Residual Risk	7		
Ref Nr	Activity	Potential Hazard	Potential Risk	S	H	E	Pure Risk	Mitigation Measures	Residual Risk	Risk Ranking	
10.	Excavation Work (Manual and Mechanical)	12.1. Potential contact with hidden services.	12.1. Electrocutation, disruption of services etc.	X			4x5=20	12.1. Reference to plans to determine location, consulting	2x2=4	1	





		close proximity to excavations.	resulting in vehicles toppling over, and workers being trapped etc.						posting of signs, designated vehicular routes etc.		
		12.9. Use of unsafe hand tools.	12.9. Could result in injuries to hands etc	x			3x2=6	12.9. Hand tool inspections and checklists usage etc.	2x1=1	1	
		12.10. Incompetent user of hand tools.	12.10. Persons could strike each other with picks or shovels etc.	X			3x3=9	12.10. Training in correct use of hand tools, Supervision to monitor .etc	2x1=2	1	
		12.11. Poor ergonomics.	12.11. May result in musculoskeletal injuries etc		X		3x3=9	12.11. Regular breaks etc.	2x2=4	1	
		12.12. Natural elements, sun wind rain.	12.12. Heat stroke, sun burn etc.	x			3x2=6	12.12. Monitoring exposure, sufficient	2x1=2	1	



	13.3. Incompetent Operator	13.3. Incompetence of operator could result in failure of equipment, incorrect use etc resulting in injuries, death, damage etc.	x		3x5=15	13.3. Proof of Competency for operator to be present on site etc.	2x2=4	1
	13.4. Persons under suspended load	13.4. Should the load It could result in serious injuries, damage and even death etc.	X		4x5=20	13.4. Lifting zone to be demarcated, banksman to raise siren when lifting starts, no authorized person in lifting zone etc	1x1=1	1
	13.5. Inclement weather	13.5. Could cause control over the load being compromised,	X		3x5=15	13.5. Weather forecasts to be consulted,	2x2=4	1







		trusses	by trusses etc.					supervision. use of stays etc.		
		18.2. Working from a fall risk position	18.2. Falls , fractures death etc.	X			3x4=12	18.2. Fall arrest equip, working at heights training, etc.	2x3=6	
		18.3. Untrained erectors	18.3. Falls, struck by trusses etc.	X			3x3=9	18.3. Training, Supervision etc.	2x2=4	
		18.4. Falling tools	18.4. Struck by tools, cuts, bruising etc.	X			3x2=6	18.4. Tool belts, lanyards etc	2x1=1	
		18.5. Use of unsafe scaffolding	18.5. Collapse, falls, fractures etc.	X			3x4=12	18.5. Competent Erectors & inspectors etc.	2x3=6	
		18.6. Physical Exertion etc	18.6. Muscular strain, exhaustion etc.	x			3x2=6	18.6. Work Breaks, good ergonomic practises training etc.	1x2=2	









Ref Nr	Activity	Potential Hazard	Potential Risk	S	H	E	Pure Risk	Mitigation Measures	Residual Risk	Risk Ranking
18.	Retaining wall construction/Paving, aprons/V drains, walkways, floor slabs, tiling etc.	26.1. Sharp edges	26.1. Cuts.	X			3x2=6	26.1. Hand protection, Supervision Etc.	2x1=2	1
		26.2. Physical Exertion.	26.2. Muscular strain.	X			3x2=6	26.2. Training, Sufficient labour, supervision etc.	2x2=4	1
		26.3. Poor Working Posture.	26.3. Muscular strain, Joint strain, back strain.	x			3x3=9	26.3. Regular breaks, Knee pads, Training, Supervision etc	2x2=4	1
		26.4. Hazardous Chemical Substances.	26.4. Respiratory tract, Eye, Skin irritation etc.	X			3x2=6	26.4. PPE, Hazard training, Supervision etc.	2x2=4	1
		26.5. Strenuous climatic conditions.	26.5. Heat exhaustion, dehydration, etc.	X			3x3=9	26.5. Water intake, work breaks, long sleeve clothing, hard hat	2x2=4	1



ITEM	PURE RISK	RESIDUAL RISK
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Item	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	+
1.Vehicle entry and Exiting.																					
2. Manual Offloading																					
3. Vegetation Clearing																					
4. Container Placing																					
5.Fencing/Hoarding																					
6.Staking/Storage																					
7.Temp Service Connection.																					
8.Working on Sewer Systems.																					
11.Chiseling, hammering																					
12.Excavations																					
13.Lifting equipment																					



## 7.6.

# **ANNEXURE F** DRAFT OHS BILLS OF QUANTITIES.

## **HEALTH AND SAFETY IMPLEMENTATION AND MANAGEMENT COSTING**

Due to the nature of this project, the contractor must keep this page updated as work progresses. Items may be added or deleted if required.

ITEM	DESCRIPTION	UNIT	QUAN- TITY	MONTHS (Indicative)	RATE	AMOUNT (a)x(b)
<b>1</b>	<b>MEDICALS</b>					
1.1	Pre-employment medical	Nr.				
1.2	Psychological medical for working at heights	Nr.				
1.3	Psychological medical for working motorized equipment & construction machinery	Nr.				
1.4	Medical for working asbestos	Nr.				
1.5	Routine medical as per requirement of job activities	Nr.				
1.6	Re-medicals - yearly	Nr.				
	<b>OTHER ITEMS</b>					
	<b>TOTAL</b>					
<b>2</b>	<b>PERSONAL AND GENERAL PROTECTIVE EQUIPMENT</b>					
2.1	Overalls Blue					
2.2	Hard Hats					
2.3	Safety Boots/Shoes. Steel toecap Gumboots					
2.4	Gloves					
2.5	Hearing Protection					
2.6	Eye Protection					
2.7	Reflective vests					
2.8	Orange Star Netting - 1.2m High	m				
2.9	Orange Plastic Road cones	Nr.				
2.10	Plastic Reinforce Caps (Rebar)	Nr.				
2.11	Dust masks	Nr.				
	<b>OTHER ITEMS</b>					
	<b>TOTAL</b>					

<b>3</b>	<b>FIRE FIGHTING</b>						
3.1	Fire extinguishers - 4.5Kg				Nr.		
3.2	Training				Nr.		
3.3	Surveys				Nr.		
3.4	Other - Drip trays				Nr.		
	<b>OTHER ITEMS</b>						
	<b>TOTAL</b>						
<b>4</b>	<b>HEALTH AND SAFETY PERSONNEL</b>						
4.1	Safety Manager (50%)				Nr.		
4.2	Part Time Safety Officer (2x days a week)				Nr.		
4.3	Full time Safety Representatives (if required)				Nr.		
4.4	Fire Watchers				Nr.		
4.5	First aiders				Nr.		
4.6	External auditors' costs				Nr.		
4.7	Occupational hygienist				N/A		
4.8	Construction Phase SHE Plan						
	<b>OTHER ITEMS</b>						
	<b>TOTAL</b>						
<b>5</b>	<b>FACILITIES</b>						
5.1	Provision of ablution facilities				Nr.		
5.2	Service and maintenance of ablution facilities				Nr.		
5.3	Provision of eating areas				Nr.		
5.4	Cleaning of Lay down and other storage areas				Nr.		
5.5	Wash hand basin				Nr.		
5.6	Hot and Cold running water				Nr.		
	<b>OTHER ITEMS</b>						
	<b>TOTAL</b>						
<b>6</b>	<b>FALL PREVENTION / PROTECTION</b>						
6.1	Safety harnesses with double lanyards				Nr.		

6.2	Lanyard extenders	Nr.				
6.3	Scaffold hooks	Nr.				
6.4	Lifelines and vertical fall arrest systems	Nr.				
6.5	Scaffolding – material, erection and inspection (Estimate for project)	Nr.				
6.6	Temporary hand railing material and kick flats	Nr.				
6.7	Inspection for approval of equipment (AIA)	Nr.				
6.8	Chin Straps/Wrist bags/Wrist straps	Nr.				
	<b>OTHER ITEMS</b>	Item				
	<b>TOTAL</b>					
<b>7</b>	<b>VEHICLE / MOBILE EQUIPMENT UPGRADE FOR USE ON SITE</b>					
7.1	Raised lights	Nr.				
7.2	Rotating orange light	Nr.				
7.3	Flag as per procedure	Nr.				
7.4	Fire extinguisher - 4.5Kg	Nr.				
7.5	First aid box	Nr.				
7.6	Reflector tape	m				
7.7	Danger Tape	Rolls				
7.8	Signage	Nr.				
7.9	Roll over & fall over protection	N/A				
7.10	Safety belts for all passengers (LDV)	N/A				
7.11	Wheel; Chocks	N/r				
7.12	Directional control Signage	N/r				
	<b>OTHER ITEMS</b>					
	<b>TOTAL</b>					
<b>8</b>	<b>LIFTING MACHINERY AND EQUIPMENT</b>					
8.1	Annual inspections and load testing as per legal requirement	Nr.				
8.2	Certification of all lifting gear during the course of the project	Nr				
8.3	Third Party Inspections	N/r				
8.4	Inspections for approval of equipment (AIA)	N/r				
8.5	Slings	N/r				
8.6	Chains	N/r				



<b>13</b>	<b>ELECTRICAL</b>								
13.1	Locks required for lockouts		Nr.						
13.2	Tags		N/r						
13.3	Permit Books		N/r						
13.4	Callipers		N/r						
13.5	Key Safes		N/r						
	<b>OTHER ITEMS</b>								
	<b>TOTAL</b>								
<b>14</b>	<b>PLANT &amp; SCAFFOLDING</b>								
14.1	Telescopic Hoist		month						
14.2	TH-Driver		month						
14.3	Scaffolding		month						
	<b>OTHER ITEMS</b>								
	<b>TOTAL</b>								

**7.7.****ANNEXURE G:  
ACCEPTANCE OF SSHSS BY DESIGNERS**

By virtue of the appointee's signature, he /she acknowledges that they have received a copy of this document and understands the contents thereof. They also acknowledge that should there be any part of this document which needs clarification the onus lies with the appointee to engage with the appointed CHSR to obtain such clarification.

Organisation	Designation	Initials and Surname	Signature	Date

Prepared by: S.F Ntuli

Signature:



Date: 20 August 2024

## T2.34 - MANDATORY REQUIREMENTS

No.	REQUIREMENTS
1	Proof of working capital of at least 1.5% of the project value in the form of a letter or original bank statement with a bank stamp from a registered financial institution not older than 3 months or letter from registered financial institution not older than 3 months.
2	Previously completed borehole projects (2) to the value of 2CE contract or Higher is required in the last (5 years) - Letters of award, practical completion or completion certificates and reference letters for the projects completed
3	A minimum of two letters of credit references with a combined minimum limit of R500 000.00 credit limit. Letters to be signed, dated and not older than 6 months.
4	Letter of intent to provide a construction guarantee to a value of 5% of the project value from registered financial institution.

**PART A**  
**INVITATION TO TENDER - SBD 1**

**YOU ARE HEREBY INVITED TO TENDER FOR REQUIREMENTS OF THE KWA-ZULU NATAL DEPARTMENT OF WORKS**

<b>TENDER NUMBER:</b>	ZNT 04268 W	<b>CLOSING DATE:</b>	As Per Tender Advert	<b>CLOSING TIME:</b>	11:00
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**DESCRIPTION**

**THE SUCCESSFUL TENDERER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT**

TENDER RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE TENDER BOX SITUATED AT (STREET ADDRESS)

**KZN Department of Public Works and Infrastructure, North Coast Region, 709 Wombe Street unit "A" Ulundi, ULUNDI, 3838**

**SUPPLIER INFORMATION**

NAME OF TENDERER

POSTAL ADDRESS

STREET ADDRESS

TELEPHONE NUMBER

CODE

NUMBER

CELLPHONE NUMBER

FACSIMILE NUMBER

CODE

NUMBER

E-MAIL ADDRESS

VAT REGISTRATION NUMBER

**TCS PIN:**

**CSD No:**

B-BBEE STATUS LEVEL  
VERIFICATION CERTIFICATE  
(Tick YES or NO)

Yes

No

B-BBEE STATUS LEVEL SWORN AFFIDAVIT (Tick YES or NO)

Yes

No

If YES, State the name of the  
verification agency accredited  
by SANAS

ARE YOU THE ACCREDITED  
REPRESENTATIVE IN SOUTH  
AFRICA FOR THE GOODS  
/SERVICES /WORKS OFFERED?

Yes

NO

ARE YOU A  
FOREIGN BASED  
SUPPLIER FOR THE  
GOODS

YES

NO

**[IF YES ENCLOSE PROOF]**

**(IF YES ANSWER PART B:3 BELOW)**

**SIGNATURE OF TENDERER**

**DATE**

**CAPACITY UNDER WHICH  
THIS TENDER IS SIGNED**  
(Attach proof of authority to  
sign this tender; e.g.  
resolution of directors, etc.)

**TOTAL NUMBER OF ITEMS  
OFFERED**

**TOTAL TENDER PRICE (ALL INCLUSIVE)**

**TENDERING PROCEDURE ENQUIRIES MAY BE DIRECTED TO:**

**TECHNICAL INFORMATION MAY BE DIRECTED TO:**

DEPARTMENT/ PUBLIC ENTITY  
CONTACT PERSON  
TELEPHONE NUMBER  
FACSIMILE NUMBER  
E-MAIL ADDRESS

CONTACT PERSON  
TELEPHONE NUMBER  
FACSIMILE NUMBER  
E-MAIL ADDRESS

PART B				
TERMS AND CONDITIONS FOR TENDERING - SBD 1				
<b>1. TENDER SUBMISSION:</b>				
1.1. TENDERS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE TENDERS WILL NOT BE ACCEPTED FOR CONSIDERATION.				
1.2. ALL TENDERS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED (NOT TO BE RE-TYPED) OR ONLINE				
1.3. TENDERERS MUST REGISTER ON THE CENTRAL SUPPLIER DATABASE (CSD) TO UPLOAD MANDATORY INFORMATION NAMELY: ( BUSINESS REGISTRATION/ DIRECTORSHIP/ MEMBERSHIP/IDENTITY NUMBERS; TAX COMPLIANCE STATUS; AND BANKING INFORMATION FOR VERIFICATION PURPOSES). B-BBEE CERTIFICATE OR SWORN AFFIDAVIT FOR B-BBEE MUST BE SUBMITTED TO TENDERING INSTITUTION.				
1.4. WHERE A TENDERER IS NOT REGISTERED ON THE CSD, MANDATORY INFORMATION NAMELY: (BUSINESS REGISTRATION/ DIRECTORSHIP/ MEMBERSHIP/IDENTITY NUMBERS; TAX COMPLIANCE STATUS MAY NOT BE SUBMITTED WITH THE TENDER DOCUMENTATION. B-BBEE CERTIFICATE OR SWORN AFFIDAVIT FOR B-BBEE MUST BE SUBMITTED TO TENDERING INSTITUTION.				
1.5. THIS TENDER IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2022, THE GENERAL CONDITIONS OF CONTRACT ARE THE CLAUSES CONTAINED IN THE GENERAL CONDITIONS OF CONTRACT (2010) (SECOND EDITION) PUBLISHED BY THE SOUTH AFRICAN INSTITUTION OF CIVIL ENGINEERING. COPIES OF THESE CONDITIONS OF CONTRACT MAY BE OBTAINED THROUGH MOST REGIONAL OFFICES OF THE SOUTH AFRICAN INSTITUTION OF CIVIL ENGINEERING, OR BY VISITING THEIR WEBSITE AT <a href="http://WWW.SAICE.ORG.ZA">WWW.SAICE.ORG.ZA</a> ; AND, IF APPLICABLE, ANY OTHER LEGISLATION OR SPECIAL CONDITIONS OF CONTRACT.				
<b>2. TAX COMPLIANCE REQUIREMENTS</b>				
2.1 TENDERERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.				
2.2 TENDERERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VIEW THE TAXPAYER'S PROFILE AND TAX STATUS.				
2.3 <a href="#">APPLICATION FOR TAX COMPLIANCE STATUS (TCS) OR PIN MAY ALSO BE MADE VIA E-FILING. IN ORDER TO USE THIS PROVISION, TAXPAYERS WILL NEED TO REGISTER WITH SARS AS E-FILERS THROUGH THE WEBSITE <a href="http://WWW.SARS.GOV.ZA">WWW.SARS.GOV.ZA</a>.</a>				
2.4 TENDERERS MAY ALSO SUBMIT A PRINTED TCS TOGETHER WITH THE TENDER.				
2.5 IN TENDERS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE PROOF OF TCS / PIN / CSD NUMBER.				
2.6 WHERE NO TCS IS AVAILABLE BUT THE TENDERER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.				
2.7 NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE.				
<b>3. QUESTIONNAIRE TO TENDERING FOREIGN SUPPLIERS</b>				
3.1.	IS THE TENDERER A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?	YES		NO
3.2.	DOES THE TENDERER HAVE A BRANCH IN THE RSA?	YES		NO
3.3.	DOES THE TENDERER HAVE A PERMANENT ESTABLISHMENT IN THE RSA?	YES		NO
3.4.	DOES THE TENDERER HAVE ANY SOURCE OF INCOME IN THE RSA?	YES		NO
IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN, IT IS NOT A REQUIREMENT TO OBTAIN A TAX COMPLIANCE STATUS / TAX COMPLIANCE SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 ABOVE.				
NB: FAILURE TO PROVIDE ANY OF THE ABOVE PARTICULARS MAY RENDER THE TENDER INVALID.				