SITE SPECIFIC OCCUPATIONAL HEALTH OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION (SSHSS)

FOR

INSTALLATION OF 14 PREFAB CLASSROOMS, 1 PREFAB ADMINISTRATION, 1 PREFAB LIBRARY, 1 PREFAB SCIENCE LAB, STAFF AND LEARNERS TOILETS. CONSTRUCTION OF NEW PARKING AND WALKWAYS, NEW STORM WATER FOR PREFAB FACILITIES, 1 SEPTIC TANK FOR SCIENCE LAB, 1 BOREHOLE, WATER PUMP , WATER TANK, DIAMOND MESH FENCE AND ELECTRICITY SUPPLY FOR ENOCH MAMBA ITS (ECDOE)

Project No. RFP031/2024

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SITE SPECIFIC OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION (SSHSS) FOR INSTALLATION 14 PREFAB CLASSROOMS, 1 PREFAB ADMIN, 1 PREFAB LIBRARY, 1 PREFAB SCIENCE LAB, STAFF AND LEANERS TOILETS, CONSTRUCTION OF NEW PARKING AND WALKWAYS, NEW STORM WATER PREFAB FACILITIES, 1 SEPTIC TANK FOR SCIENCE LAB, 1 BOREHOLE, WATER PUMP, WATER TANK, DIAMOND MESH FENCE AND ELECTICITY SUPPLY FOR ENOCH MAMBA ITS (ECDoE)

1. Definitions

In this document the following expressions shall bear the meanings assigned to them below:

1.1 **Client** means any person for whom construction work is being performed and/or undertaken [i.e. DBSA for purposes of this specification];

1.2 **Construction Regulations** means the Occupational Health and Safety Act's, no 85 of 1993, new Construction Regulations that came into effect on 01 March 2014;

1.3 **Occupational health and safety plan** mean a sufficiently documented plan to the standards of the Client, which addresses hazards identified and includes safe working procedures to mitigate, reduce or control the hazards identified;

1.4 **Occupational health and safety specification** means a documented specification of all health and safety requirements pertaining to the associated works on a construction site, so as to ensure the health and safety of persons working, visiting, passing, staying and/or working close to the construction site and/or other applicable areas such as site camp;

1.5 **OHSACT** means the Occupational Health and Safety Act, no 85 of 1993, as amended; and

1.6 **Principal Contractor** means an employer, as defined by Section 1 of the OHSACT who performs construction work and is appointed by the Client to be in overall control and management of the construction site and works.

2. Introduction

In terms of Construction Regulation 5(1)(b) of the OHSACT, the Client is required to compile an occupational health and safety specification for any intended project and provide such specification to prospective tenderers/bidders.

This objective of this specification has is to ensure that the principal contractor entering into a contract with the Client achieves and maintain an acceptable level of occupational health and safety performance and compliance. The principal contractor's occupational health and safety management will be evaluated against this specification. Over and above this specification the principal contractor will be expected to comply with all legal requirements that govern occupational health and safety in the work place. The Client through its OHS Agent might imposed additional requirements based on professional judgement and the particular risk profile of the project.

This document forms an integral part of the contract between the Client and the principal contractor and the principal contractor and other contractors should make it part of any contract/s that they may have with other contractors and/or suppliers as far as this project is concerned. It is therefore imperative that the principal contractor makes an allowance for compliance with this document in their bid.

3. Scope

To develop a project specific occupational health and safety specification that addresses the reasonable and foreseeable risks, exposures and aspects of occupational health and safety as affected by the abovementioned contract work.

The specification will provide the requirements that the principal contractor and other contractors will have to comply with in order to reduce the risks associated with the abovementioned contract work and that may lead to incidents causing injury and/or ill health, to a level as low as reasonably practicable and possible.

Any contractor interested in submitting a bid in response to the Client's formal tender for any construction project, has to prepare and include a draft occupational health and safety plan based on this specification and the OHSACT in its tender submission. The Client will evaluate this plan as part of its formal tender adjudication processes to ensure compliance with Construction Regulation 5 that stipulates that the Client may only appoint a contractor who has the necessary competencies and resources to carry of the work appointed for safely.

3.1 Scope of Construction Work

The client would like to appoint a Contractor for installation 14 prefab classrooms, 1 prefab admin, 1 prefab library, 1 prefab science lab, staff and leaners toilets, construction of new parking and walkways, new storm water prefab facilities, 1 septic tank for science lab, 1 borehole, water pump, water tank, diamond mesh fence and electricity supply for Enoch Mamba (ECDoE)

The construction work will include the following:

1. Earth works and Excavations
2. Civils and Foundations
3. Formwork and Concrete casting
4. General Building works
5. Trenching for pipe laying
6. Electrical installations
7. Internal plumbing
8. Fire Services
9. Paving
10. Installation

4. General occupational health and safety provisions

4.1 Hazard identification and risk assessment (Construction Regulation 9)

4.1.1 Risk assessments

Annexure 5 of this specification contains a list of risk assessment headings that have been identified by the Client as possibly applicable to the abovementioned contract work. It is, by no means, exhaustive and is only offered as assistance to the contractors intending to tender for the applicable works. It therefore remains the overall responsibility of the principal contractor to consider all applicable risks and pro- actively undertake risk assessments and implement appropriate risk mitigation measures.

4.1.2 Development of risk assessments

Every principal contractor performing construction work shall, before the commencement of any construction work or work associated with the aforesaid construction work and during such work, ensure that risk assessments are undertaken by a competent person, appointed in writing, and the risk assessments shall form part of the occupational health and safety plan and be implemented and maintained as contemplated in Construction Regulation 9(1).

The risk assessments shall include, at least:

- The identification of the current as well as emerging risks and hazards to which persons may be exposed to;
- The analysis and evaluation of the risks and hazards identified;
- A documented plan of safe working procedures (SWP) and any method statements to mitigate, reduce or control the risks and hazards that have been identified;
- A plan to monitor the application of the SWPs; and
- A plan to review the risk assessments as the work progresses and changes are introduced, or incidents occurred which requires the re-evaluation of the processes/risk mitigation.

Based on the risk assessments, the principal contractor must develop a set of site-specific occupational health and safety rules that will be applied to regulate the occupational health and safety aspects of the construction.

The risk assessments, together with the site-specific occupational health and safety rules, must be submitted to the Client before mobilisation on site commences.

Despite the risk assessments listed in Annexure 5, the principal contractor is required to conduct a baseline risk assessment and the aforesaid risk assessments must be incorporated into the baseline risk assessment. The baseline risk assessment must further include the SWPs and the applicable method statements based on the risk assessments.

Hazard identification and risk assessments must be undertaken whilst SWPs must be developed for all out-of-scope work.

4.1.3 Review of risk assessments

The principal contractor is to review the hazards identified, the risk assessments and the SWPs at each production planning and progress report meeting as the contract work develops and progresses and each time changes are made to the designs, plans and construction methods and/or processes.

It is also proposed that should an incident occur the SWPs and all other applicable processes be re-evaluated to ensure that the mitigation measures are still applicable and appropriate and if not a revision of the risk assessments be undertaken.

The principal contractor must provide the Client, other contractors and all other concerned or affected parties with copies of any changes, alterations or amendments as soon as possible but within 14 calendar days of such changes.

4.2 Legal Requirements

All Contractors entering into a contract with the Client shall, as a minimum, comply with the -

- OHSACT and a current, up-to-date copy of the OHSACT and its Regulations must be available on site at all times; and
- Compensation for Occupational Injuries and Diseases Act, no 130 of 1993 (COIDAct) as amended. The principal contractor will be required to submit a letter of registration and "good-standing" from the Compensation Commissioner or compensation insurer before being awarded the contract. A current, up-to-date copy of the COIDAct must be available on site at all times.

4.3 Structure and responsibilities

4.3.1 Overall supervision and responsibility for occupational health and safety

a. The principal contractor [appointed in terms of Construction Regulation 5(1)(k)] is responsible to implement and maintain the occupational health and safety plan approved by the Client.

b. The Chief Executive Officer (in terms of Section 16(1) of the OHSACT) of the principal contractor is to ensure that the Employer (as defined in the OHSACT) complies with the OHSACT. Annexure 1 "Legal Compliance Checklist" may be used for this purpose and assistance.

c. The principal contractor's Chief Executive Officer may appoint any person reporting to him/her as Designated Person in terms of Section 16(2) of the OHSACT. Such Designated Person is responsible to assist the Chief Executive Officer to ensure that the Employer complies with the requirements of the OHSACT.

d. The construction manager, assistant construction manager, construction supervisor and assistant construction supervisor(s) appointed in terms of Construction Regulation 8 are responsible for supervising the construction work and in specific to ensure that all work undertaken comply with the requirements of the OHSACT, its Regulations and the Client's specifications.

4.3.2 Operational responsibilities for occupational health and safety

The principal contractor shall appoint designated competent employees and/or other competent persons as outlined in the following list to assist with the operational responsibilities for occupational health and safety. This list is only the minimum requirement and is therefore in no way exhaustive.

Appointment description	Appointment required in terms of
Construction manager	Construction Regulation 8(1)
Assistant construction manager	Construction Regulation 8(2)
Construction supervisor	Construction Regulation 8(7)
Assistant construction supervisor	Construction Regulation 8(8)
Full-time Construction Health and Safety Officer (Pr.CHSO SACPCMP)	Construction Regulation 8(5)
Construction vehicle, mobile plant and machinery supervisor	Construction Regulation 23
Drivers of construction vehicles and operators of plant	Construction Regulation 23
Electrical installation and appliances inspector	Construction Regulation 24
Emergency, security and fire coordinator	Construction Regulation 29
Excavation supervisor	Construction Regulation 13
Fall protection supervisor	Construction Regulation 10
First-aiders	General Safety Regulation 3
Firefighting equipment inspector	Construction Regulation 29
Hazardous chemical substances supervisor	Hazardous Chemicals Substances Regulations 10
Incident investigator	General Administrative Regulation 9

Ladder inspector	General Safety Regulation 13(a)
Lifting machines and equipment inspector	Construction Regulation 22
Occupational health and safety committee	OHSACT Section 19
Occupational health and safety representatives	OHSACT Section 17
Person responsible for machinery	General Machinery Regulation 2
Risk assessor	Construction Regulation 9(1)
Scaffolding supervisor	Construction Regulation 16
Stacking and storage supervisor	Construction Regulation 28
Traffic management supervisor	OHSACT Section 9(1)
Pressure equipment supervisor	Pressure Equipment Regulations
Welding supervisor	General Safety Regulation 9

These appointments must be in writing and the responsibilities clearly stated together with the period for which each appointment is made. This information must be communicated to and agreed with the appointees.

Copies of appointments must be submitted to the Client together with concise CV's of the appointees as part of the principal contractor's health and safety plan and if appointed copies of the appointments included in the occupational health and safety file. All appointments must be approved by the Client and any changes of appointees or appointments must be communicated to the Client and agreed upon before being implemented.

The principal contractor must, furthermore, provide the Client with an organogram of all contractors that he/she has appointed or intends to appoint and keep this list updated on a weekly basis.

4.3.3 Construction health and safety officer (Construction Regulation 8(5))

This project requires the appointment of a full-time construction health and safety officer, appointed in terms of Construction Regulation 8(5). This appointee should be duly registered and in good standing with a statutory body approved by the Chief Inspector as is required by Construction Regulation 8(6).

The South African Council for Project and Construction Management Professions (SACPCMP) is currently the statutory body responsible for the professional registration of construction health and safety officers and a copy of the appointee's SACPCMP's registration certificate should be submitted as part of the principal contractor's health and safety plan and also be readily available in the health and safety file to be kept and maintained on site.

4.3.4 Designation of occupational health and safety representatives (Section 17 of the OHSACT)

Where the principal contractor employs more than 20 persons [including the employees of other contractors (sub-contractors) and its supervisors] he has to appoint one occupational health and safety representative for every 50 employees or part thereof. General Administrative Regulation 6 requires that the election, appointment and subsequent designation of the occupational health and safety representatives be executed in consultation with employee representatives or employees. (Section 17 of the OHSACT as well as General Administrative Regulation 6 and 7 refer).

Occupational health and safety representatives must be designated in writing and the designation must include the area of responsibility of the person and term of the designation.

4.3.5 Duties and functions of the occupational health and safety representatives (Section 18 of the OHSACT)

a. The principal contractor must ensure that the designated occupational health and safety representatives conduct a weekly inspection of their respective areas of responsibility, using a checklist, and report thereon to the principal contractor.
b. Occupational health and safety representatives must be included in accident and/or incident investigations.
c. Occupational health and safety representatives must attend all occupational health and safety committee meetings.

4.3.6 Appointment of occupational health and safety committee (Section 19 of the OHSACT)

The principal contractor must establish an occupational health and safety committee consisting of all the designated occupational health and safety representatives together with a number of management representatives that are not allowed to exceed the number of occupational health and safety representatives on the committee and a representative of the Client who shall act as the chairperson without voting rights. The members of the occupational health and safety committee must be appointed in writing and copies of the appointments included in the occupational health and safety file.

The occupational health and safety committee must meet as a minimum on a monthly basis and consider, at least, the following agenda items:

1. Opening and welcome.
2. Members present, apologies and absent.
3. Minutes of previous meeting.
4. Matters arising from the previous meeting.
5. Occupational health and safety representatives' reports.
6. Incident and/or accident reports and investigations.
7. Incident, accident and/or injury statistics.
8. Other matters.
9. Endorsement of registers and other statutory documents by a duly authorised representative of the principal contractor.
10. Close and next meeting.

4.4 Mandataries

It is a requirement that the principal contractor, when he appoints contractors or sub-contractors in terms of Construction Regulations 7(1)(c) includes an OHSACT Section 37(2) agreement (i.e. Agreement with Mandatary) in his agreement with such contractor.

4.5 Administrative controls and the occupational health and safety file

4.5.1 The occupational health and safety file [Construction Regulation 7(1)(b)]

As required by Construction Regulation 7(1)(b), the principal contractor and other contractors will each keep an occupational health and safety file on site containing the following documents as a minimum:

1. Copy of the construction work permit (for applicable projects) (Construction Regulation 3)
2. Notification of construction work (Construction Regulation 4.).
3. Updated copies of the OHSACT and its Regulations as well as the COID Act

(General Administrative Regulation 4.).

4. Proof of registration and good standing with the Compensation Commissioner or a COID Insurer [Construction Regulation 5(1)(j)].
5. Occupational health and safety plan agreed with the Client including the underpinning risk assessment(s) and method statements [Construction regulation 7(1)].
6. Copies of occupational health and safety committee meetings and other relevant minutes.
7. Designs and/or drawings [Construction Regulation 7(1)(b)].
8. A list of contractors (sub-contractors) including copies of the agreements between the parties, proof of good standing with the Compensation Commissioner or COID Insurer, and the type of work to be undertaken by each contractor (Construction Regulation 7).
9. Appointment and designation forms as per paragraphs 4.3.1 and 4.3.2 above.
10. Copy of the construction health and safety officer's SACPCMP registration certificate.
11. The following registers:
    - Accident and/or incident register (Annexure 1 of the General Administrative Regulations);
    - Occupational health and safety representative's inspection register;
    - Construction vehicles and mobile plant inspections by controller;
    - Daily inspections of vehicles, plant and other equipment by the operator, driver and/or user;
    - Designer's inspections and structures record;
    - Inspection and maintenance of explosive actuated fastening devices;
    - Inspection of electrical installations (including inspection of portable electrical tools, electrical equipment and other electrical appliances);
    - Fall protection inspections;
    - First-aid box content;
    - Record of first-aid treatment;
    - Fire equipment inspections and maintenance;
    - Record of hazardous chemical substances kept and used on site;
    - Ladder inspections;
    - Machine safety inspections (including machine guards, lock-outs etcetera);
    - Inspection registers and logbooks for lifting machines and – tackle (including daily inspections by drivers/operators);
    - Inspections of scaffolding;
    - Inspections of stacking and storage;
    - Inspections of structures;
    - Pressure equipment inspections; and
    - Inspections of welding equipment.
12. All other applicable records.

The Client will conduct and evaluation of the principal contractor's occupational health and safety file from time to time.

4.6 Occupational health and safety goals and objectives and arrangements for monitoring and review of occupational health and safety performance

The principal contractor is required to maintain a Lost Time Incidents (LTI) of not more than two a month and cumulative of not more than four for the duration of the project (12 months) and report on this to the Client on a monthly basis.

4.7 Construction Work Permit (Construction Regulation 3)

The Client's Agent shall, as the contract meets the requirements laid down in Construction Regulations 3, prior to commencement of the works, apply to the Department of Employment and Labour for a Permit to do Construction Work at least 30days before planned commencement.
A copy shall be kept on the OH&S file and the construction work permit number shall be displayed at the entrance to the Construction Site. No Construction activities may take place before Permit has been issued by the Department of Employment and Labour.

4.8 Medical certificates of fitness (Construction Regulation 7)

As required by Construction Regulation 7(1)(g), the principal contractor must ensure that all employees have a valid medical certificate of fitness specific to the construction work to be performed. These certificates must be issued by an occupational health practitioner in the form of Annexure 3 (i.e. Annexure 3 in the Construction Regulations).

4.9 Training, awareness and competence

The contents and syllabi of all training required by the OHSACT and Regulations must be included in the principal contractor's occupational health and safety plan.

4.9.1 General induction training

All members of the contractor's site management as well as all the persons appointed as responsible for occupational health and safety in terms of the Construction and other Regulations will be required to attend a general induction session.

All employees of the principal and other contractors must be in possession of proof of general induction training.

All subsequent and newly appointed employees must also be subjected to the induction training as soon as possible after the appointment but prior to starting work on site.

4.9.2 Site-specific induction training

The principal contractor will be required to develop a contract work project specific induction training course based on the risk assessments for the contract work and train all employees and other contractors and their employees in this.

All employees of the principal and other contractors must be in possession of proof that they have attended a site-specific occupational health and safety induction training at all times.

4.9.3 Other training

1. All operators, drivers and users of construction vehicles, mobile plant and other equipment must be in possession of valid proof of training and where applicable licenses or proof of competency.
2. All employees in jobs requiring training in terms of the OHSACT and Regulations must be in possession of valid proof of training.
3. Occupational health and safety training requirements [as required by the Construction Regulations and as indicated by the occupational health and safety specification and the risk assessment(s)] i.e. -
   a. General induction (Section 8 of the OHSACT);
   b. Site and job specific induction, including visitors (Sections 8 and 9 of the OHSACT);
   c. Site and project manager;

d. Construction supervisor;
e. Occupational health and safety representatives [Section 18 (3) of the OHSACT];
f. Training of the appointees indicated in paragraphs 4.3.1 and 4.3.2;
g. Operators and drivers of construction vehicles and mobile plant (Construction Regulation 23);
h. Basic fire prevention and protection (Environmental Regulations 9 and Construction Regulation 29);
i. Basic first-aid (General Safety Regulations 3);
j. Storekeeping methods and safe stacking (Construction Regulation 28); and
k. Emergency, security and fire coordinator.

4.9.4 Awareness and promotion

The principal contractor is required to have a promotion and awareness programme in place to create an occupational health and safety culture within employees as well as sub-contractors. The following are some of the methods that may be used:

- Toolbox talks
- Posters
- Videos
- Competitions
- Suggestion schemes
- Participative activities such as employee "occupational health and safety circles".

4.9.5 Notices and signs

The following notices and signs are, where applicable, compulsory on the construction site as well as the contractors' yards:

Area and/or activity where notice or sign is required	Notice or sign required in terms of
Display of notices and signs	General Safety Regulation 2B and SABS Code 1186
Entry	General Safety Regulation 2C (2)
First-aid	General Safety Regulation 3(6)
Toilets and change rooms	Facilities Regulation 2 (5) 4(2)(f)
Storage of flammable materials	General Safety Regulation 4(8)(a)(i) and (ii) [10(e) only applicable to contractor's yards]
Grinding wheels	Driven Machinery Regulation 8(1)(7)
Machinery	General Machinery Regulation 9 (Schedule D)
Explosive actuated fastening devises	Construction Regulation 21(2)(f)
Prohibition on smoking and eating or drinking at the workplaces where high risk substances [FR5 (1)] are stored or handled	Facilities Regulation 6(b)
Non-potable water	Facilities Regulation 7(B)
Construction Works Permit	Construction Regulation 3(4)

4.9.6 Competence

The principal contractor shall ensure that his and other contractors' employees appointed are competent and that all training required to undertake the work safely and without risk to health of their or other persons, has been successfully completed before work commences.

The principal contractor shall ensure that follow-up and refresher training is conducted on a regular basis as well as the contract work progresses, and the work situation or requirements changes.

Records of all training must be kept on the occupational health and safety file for auditing purposes.

4.10 Consultation, communication and liaison

The following arrangements will apply-

4.10.1 Occupational health and safety liaison between the Client, the principal contractor, the other contractors, the designer and other concerned parties will be through the occupational health and safety committee. In the absence of a health and safety committee, the Client and principal contractor will agree on an alternative communication forum to be implemented.

4.10.2 In addition to the above, communication may be directly to the Client or his appointed Agent, verbally (followed up in writing within 14 calendar days) or in writing, as and when the need arises.

4.10.3 Consultation with the workforce on occupational health and safety matters will be through their supervisors, occupational health and safety representatives, the occupational health and safety committee and their elected trade union representatives, if any.

4.10.4 The principal contractor will be responsible for the dissemination of all relevant occupational health and safety information to the other contractors, for example design changes agreed with the Client and the designer, instructions by the Client and/or his Agent, exchange of information between contractors, the reporting of hazardous and/or dangerous conditions and/or situations etcetera.

4.10.5 The principal contractor will be required to do site safety walks with the Client and/or his Agent on a basis to be determined and agreed between the parties.

4.10.6 The principle and other contractors will be required to conduct toolbox talks with their employees on at least a weekly basis and records of these including the topics discussed must be kept on the occupational health and safety file. Employees must acknowledge the receipt of toolbox talks which record must, likewise, be kept on the occupational health and safety file.

4.10.7 The principal contractor's most senior manager on site will be required to attend all the Client's occupational health and safety meetings.

4.10.8 The Client or his Agent and the principal contractor will agree on the dates, times and venues of the occupational health and safety meetings.

4.11 Checking, reporting and corrective actions

4.11.1 Monthly compliance assessment by Client [Construction Regulation 5(1)(0)]

The Client will be conducting a periodic assessment to comply with Construction Regulation 5(1)(*o*) and to confirm that the principal contractor has implemented and is maintaining the

agreed and approved occupational health and safety plan.

4.11.2 Other assessments and inspections by the Client

The Client reserves the right to conduct other ad-hoc assessments and inspections as deemed necessary. This could include among others site safety walks.

4.11.3 Conducting an assessment

A representative of the principal contractor must accompany the Client on all assessments and inspections and may conduct his/her own inspection at the same time. Each party will, however, take responsibility for the results of his/her own assessment and/or inspection.

4.11.4 Contractor's assessments and inspections

The principal contractor is to conduct his own internal assessments and inspections to verify compliance with his own occupational health and safety plan and management system as well as the requirements of this specification and the compliance of other contractors under his/her control.

4.11.5 Inspections by occupational health and safety representatives and other appointees

Occupational health and safety representatives must conduct weekly inspections of their areas of responsibility and report thereon to their foreman or supervisor whilst other appointees must conduct inspections and report thereon as specified in their appointments for example vehicle, plant and machinery drivers, operators and users must conduct daily inspections before start-up.

4.11.6 Recording and review of inspection results

All the results of the abovementioned inspections must be in writing, reviewed at occupational health and safety committee meetings, endorsed by the chairperson of the meeting and placed on the occupational health and safety file.

4.11.7 Reporting of inspection results

The principal contractor is required to provide the Client with a monthly report in the format as per the attached Annexure 3: "Safety, Health and Environment Risk Management Report".

4.12 Incident reporting and investigation

4.12.1 Reporting of accidents and incidents (Section 24 and General Administrative Regulation 8 of the OHSACT)

The principal contractor must report all incidents where an employee is injured on duty to the extent that he/she:

- dies
- becomes unconscious
- loses a limb or part of a limb
- is injured or becomes ill to such a degree that he/she is likely either to die or to suffer a permanent physical defect or likely to be unable for a period of at least 14 days either to work or continue with the activity for which he/she was usually employed or where -
- a major incident occurred
- the health or safety of any person was endangered
- where a dangerous substance was spilled

- the uncontrolled release of any substance under pressure took place
- machinery or any part of machinery fractured or failed resulting in flying, falling or uncontrolled moving objects
- machinery ran out of control

to the Client within two calendar days and to the Provincial Director of the Department of Labour within seven calendar days from date of incident (Section 24 of the OHSACT and General Administrative Regulation 8), **except** that, where a person has died, has become unconscious for any reason or has lost a limb or part of a limb or may die or suffer a permanent physical defect, the incident must be reported to both the Client and the Provincial Director of the Department of Labour forthwith by telephone, telefax or e-mail. All other reports should still be completed and provided as required.

The principal contractor is required to provide the Client with copies of all statutory reports required in terms of the OHSACT within seven calendar days of the incident occurring.

The principal contractor is required to provide the Client with copies of all internal and external accident/incident investigation reports, including the reports contemplated in 4.11.2 (3) and (4) below, within seven calendar days of the incident occurring.

4.12.2 Accident and incident investigation (General Administrative Regulation 9)

1. The principal contractor is responsible for the investigation of all accidents and/or incidents where employees and non- employees were injured to the extent that he, she and/or they had to be referred for medical treatment by a doctor, hospital or clinic.

2. The results of the investigation to be entered the accident and/or incident register.

3. The principal contractor is responsible for the investigation of all minor and non-injury incidents as described in Section 24 (1) (b) and (c) of the OHSACT and keeping a record of the results of such investigations including the steps taken to prevent similar accidents/incidents in future.

4. The principal contractor is responsible for the investigation of all road traffic accidents, related to the construction activities, and keeping a record of the results of such investigations including the steps taken to prevent similar accidents in future.

5. The Client reserves the right to hold its own investigation into an incident or call for an independent external investigation.

5. Operational control

5.1 Emergency preparedness, contingency planning and response

5.1.1 The Contractor must appoint a competent person to act as emergency controller and/or coordinator.

5.1.2 The principal contractor must conduct an emergency identification exercise and establish what emergencies could possibly develop. He/she must then develop detailed contingency plans and emergency procedures, considering any emergency plan that the Client may have in place.

5.1.3 The principal contractor and the other contractors must hold regular practice drills of contingency plans and emergency procedures to test them and familiarise employees with them.

5.2 First-aid (General Safety Regulation 3)

5.2.1 The principal contractor must provide first-aid equipment and have qualified first-aider(s) on site as required by General Safety Regulation 3 of the OHSACT.

5.2.2 The contingency plan of the principal contractor must include arrangements for the speedily and timeously transportation of injured and/or ill person(s) to a medical facility or getting emergency medical support to person(s) who may require it.

5.2.3 The principal contractor must have firm arrangements with his contractors in place regarding the responsibility of these contractor's first-aid arrangements as well as treatment of injured and/or ill employees.

5.3 Security

5.3.1 The principal contractor must establish site access rules and implement and maintain these throughout the construction period. Access control must, among others, include the rule that non- employees will not be allowed on site unaccompanied.

5.3.2 The principal contractor must develop a set of project applicable security rules and procedures and maintain these throughout the construction period.

5.4 Fall protection [Working in fall risk positions (Construction Regulation 10)]

5.4.1 A pre-emptive risk assessment will be required for any work to be carried out from a fall risk position and will be classified as "work in elevated positions".

5.4.2 As far as is practicable, any person working in an elevated position will work from a stable platform, ladder or other device that is at least as safe as if he or she is working at ground level and whilst working in this position be wearing suitable fall arrest equipment to prevent the person falling from the platform, ladder or other device utilised. This fall arrest equipment will be, as far as is possible, secured to a point away from the edge over which the person might fall and the lanyard must be of such a length and strength that the person will not be able to move over the edge.

Alternatively, any surface forming an edge over which a person may fall may be fitted with suitable guard rails at two different heights as prescribed in SANS 10085 code of practice for the design, erection, use and inspection of access scaffolding.

5.4.3 Where the requirement in paragraph 5.5.2 is not practicable, the person will be provided with a full body harness that will be worn and attached above the wearer's head at all times and the lanyard must be fitted with a shock absorbing device or the person must be attached to a fall arrest system that is approved by the Client.

5.4.4 Where the requirements in paragraph 5.5.3 are not practicable, a suitable catch net, which must be able to sustain the weight of at least the average person working in the elevated position, must be erected.

5.4.5 Employees working in elevated positions must be trained to do this safely and without risk to their or other person's health and safety.

5.4.6 Where work on roofs is carried out, the risk assessment must take into account the possibility of persons falling through fragile material, i.e. skylights and openings in the roof.

5.4.7 Updated records confirming the physical and psychological fitness of employees working at elevated positions should be kept on the health and safety file at all times.

5.5 Access scaffolding (Construction Regulation 16)

Access scaffolding must be erected, used and maintained safely in accordance with Construction Regulation 16 and SA Bureau of Standards Code of Practice, SANS 10085 entitled, "The Design, Erection, Use and Inspection of Access Scaffolding".

Detailed consideration must be given to all scaffolding to ensure that it is properly planned to meet the working requirements, designed to carry the necessary loadings and maintained in a sound condition. It must also be ensured that there is sufficient material available to erect the scaffolding properly and safely.

Scaffolding must be erected, altered, maintained or dismantled by person(s) who has/have adequate training and experience in this type of work or under the continuous and direct supervision of such a person.

5.6 Lifting equipment (Construction Regulation 22)

Lifting equipment must be designed and constructed in accordance with the manufactures/designer's specifications as well as generally accepted technical standards and operated, used, inspected and maintained in accordance with the manufactures requirements as well as that of the Driven Machinery Regulation 18 of the OHSACT:

The Driven Machinery Regulation requires that:

a. Lifting equipment to be clearly and conspicuously marked with the maximum mass load (MML) that it is designed to carry safely. When the MML varies with the conditions of use, the table of maximum loads should be used by the driver/operator;
b. Each winch on a lifting machine must at all time have, at least, three full turns of rope on the drum when the winch has been run to its lowest limit;
c. Lifting equipment be fitted with a brake or other applicable device capable of holding the MML. This brake or device must automatically prevent the downward movement of the load when the lifting power is interrupted;
d. Lifting equipment fitted with a load limiting device that automatically arrest the lift when the load reaches its highest safe position or when the mass of the load is greater than the MML;
e. Every chain or rope on a lifting machine that forms an integral part of the machine must have a factor of safety as prescribed by the manufacturer of the machine and where no standard is available the factor of safety must be:
    - chains – 4 (four)
    - steel wire ropes - 5 (five)
    - fibre ropes- 10 (ten)
f. Every hook or load attaching device must be designed as such or fitted with a device that will prevent the load from slipping off or disconnecting;
g. Every lifting machine must be inspected, and load tested by a competent person every time it has been dismantled and re-erected and every 12 months after that. The load test must be in accordance with the manufacturer's prescription or to 110% of the MML in addition all ropes, chains, hooks or other attaching devices, sheaves, brakes and safety devices forming an integral part of a lifting machine must be inspected every 6 months by a competent person;
h. All maintenance, repairs, alterations and inspection results must be recorded in a log book and each lifting machine must have its own log book; and
i. No person may be lifted by a lifting machine not designed for lifting persons unless in a cradle approved by an inspector of the Department of Labour.

5.7 Lifting tackle

The following requirements will apply to lifting tackle:

a. Manufactured of sound material, well-constructed and free from latent defects;
b. Clearly and conspicuously marked with an identity number;
c. Maximum mass load factor of safety:
   - Natural fibre ropes - 10(ten)
   - Man-made fibre ropes and woven webbing - 06(six)
   - Steel wire ropes – single rope - 06(six)
   - Steel wire ropes – combination slings - 08(eight)
   - Mild Steel chains - 05(five)
   - High tensile/alloy steel chains - 04(four)
d. Steel wire ropes must be discarded (not used any further for lifting purposes) when wear and corrosion is evident and must be examined by a competent person every three months for this purpose and the results recorded in a designated log book.

5.8 Construction vehicle and mobile plant operators

The following requirements will apply to construction vehicle and mobile plant operators:

a. Only certified and/or competent employees may be allowed to operate any construction vehicle and mobile plant.
b. Every lifting machine operator must be trained specifically for the type of lifting machine that he or she is operating.
c. Only employees duly authorised to do so may operate any construction vehicle and mobile plant.
d. Only employees physically and psychologically fit, i.e. in possession of a medical certificate of fitness, may be allowed to operate any construction vehicle and mobile plant.

5.9 Construction vehicles and mobile plant (Construction Regulation 23)

Construction vehicles and mobile plant will initially during the competency evaluation process be inspected by the Client prior to being allowed on a project site and suppliers of hired vehicles, plant and equipment will be required to comply with this specification as well as the OHSACT and Regulations.

Construction vehicles and mobile plant must be:

a. Of acceptable design and construction;
b. Maintained in good working order;
c. Used in accordance with their design and intention for which they were designed;
d. Operated and/or driven by trained, competent and authorised operators/drivers. No unauthorised persons to be allowed to drive construction vehicles and mobile plant;
e. Provided with safe and suitable means of access;
f. Fitted with adequate signalling devices to make movement safe including reversing;
g. Excavations and other openings must be provided with sufficient barriers to prevent construction vehicles and mobile plant from falling into same;
h. Provided with roll-over protection;
i. Inspected daily before start-up by the driver, operator and/or user and the findings recorded

in a register/log book and any defects addressed as matter of urgency;

j. Fitted with two head and two tail lights that is in good working condition whilst operating under poor visibility conditions; and
k. Used for transporting persons must have seats firmly secured and sufficient for the number of persons being transported.

No loose tools, material etcetera is allowed in the driver and/or operators compartment/cabin nor in the compartment in which any other persons are transported.

No person may ride on construction vehicles and mobile plant except for in a safe place designed and provided for this purpose.

The construction site must be organised to facilitate the movement of construction vehicles and mobile plant in such a manner that pedestrians and other vehicles are not endangered. Traffic routes to be suitable, sufficient in number and adequately demarcated.

Construction vehicles and mobile plant left unattended after hours adjacent to roads and areas where there is traffic movement must be fitted with lights, reflectors or adequate barricades to prevent moving traffic from a sudden emergency, or to come into contact with the parked construction vehicles and mobile plant.

In addition, construction vehicles and mobile plant left unattended after hours must be parked with all buckets, booms etc. full lowered, the emergency brakes engaged and, where necessary, the wheels chocked, the transmission in neutral and the motor switched off and the ignition key removed and stored safely.

All construction vehicles and mobile plant daily inspection records must be kept in the occupational health and safety file.

5.10 Electrical installations (Construction Regulation 24)

Any electrical work undertaken as part of the project, including the installation of temporary electricity for construction use shall be in accordance with Construction Regulation 24 and the Electrical Installation Regulations.

The principal contractor must ensure that:

a. Existing services are to be located and clearly marked before construction commences and during the progress thereof;
b. Where the abovementioned is not possible, employees with jackhammers etc. will be protected against electric shock using suitable protective equipment e.g. rubber mats, insulated handles etcetera;
c. Electrical installations and -machinery are sufficiently robust to withstand normal working conditions on site;
d. Temporary electrical installations must be inspected at least once per week by a competent person and a record of the inspections kept on the occupational health and safety file;
e. Electrical machinery used on a construction site must be inspected daily before start-up by the competent driver/operator or any other competent person and a record of the inspections kept on the occupational health and safety file; and
f. A competent person appointed in writing must control all temporary electrical installations.

5.11 Electrical and mechanical lockout

An electrical and mechanical lockout procedure must be developed by the principal contractor and submitted to the Client for approval before construction commences. All contractors on site

must be informed of and adhere to this lockout procedure.

5.12 Use and storage of flammables (Construction Regulation 25)

The principal contractor must ensure that:

a. No person is required or permitted to work in a place where there is the danger of fire or an explosion due to flammable vapours being present unless adequate precautions is taken;
b. Flammables stored on a construction site are stored in a well-ventilated, reasonably fire-resistant container, cage or room that is kept locked with consistent access control measures in place and enough firefighting equipment installed and fire prevention methods practiced for example proper housekeeping;
c. Only one day's quantity of flammable is to be kept in the workplace;
d. Containers (including empty containers) to be kept closed to prevent fumes/vapours from escaping and accumulating in low lying areas; and
e. Welding and other flammable gases to be stored segregated as to the type of gas and empty and full cylinders.

5.13 Hazardous chemical substances

The principal contractor must ensure that:

a. Employees receive the necessary information and training to be able to use, handle and store hazardous chemical substances safely;
b. The risk assessments required in terms of Construction Regulation 9 include employee exposure to hazardous chemical substances and that the necessary measures be taken to protect persons from being detrimentally affected by hazardous chemical substances present or used in the workplace;
c. Suppliers provide the necessary information in the form of material safety data sheets regarding hazardous chemical substances required to ensure the safe use, handling and storage of these substances;
d. An up-to-date list is kept on site of hazardous chemical substances stored and used together with the material safety data sheet of the said hazardous chemical substances;
e. Hazardous chemical substances containers be clearly marked as to the contents and main hazardous category e.g. "Flammable" or "Corrosive" and the reference number of the hazardous chemical substances on the list indicated above;
f. Hazardous chemical substances for example asbestos dust is not cleared by using compressed air but should be vacuumed;
g. No person eats or drinks in an area where hazardous chemical substances are stored or utilised; and
h. Hazardous chemical substances waste is disposed of safely in terms of hazardous waste disposal requirements.

5.14 Storage of flammable and hazardous chemicals (Hazardous Chemical Substances Regulations)

See paragraphs 5.13 and 5.14 above.

5.15 Fire prevention and protection

The principal contractor must ensure that:

a. The risk of fire is avoided;
b. Enough and suitable storage of flammables is provided;

c. All employees are instructed in the use of the firefighting equipment and know how to attempt to extinguish a fire;
d. Enough employees are appointed and trained to act as an emergency team to deal with fires and other emergencies;
e. Employees are informed regarding emergency evacuation procedures and escape routes;
f. Emergency escape routes are kept clear at all times and clearly marked;
g. Evacuation assembly points are demarcated and made known to employees;
h. Evacuation is regularly practiced ensuring that all persons are evacuated timeously and;
i. Roll call is held after evacuation to account for all employees and to ensure that no-one including visitors and disabled persons have been left behind; and
j. A clearly audible, to all persons on site, siren or alarm is fitted and regularly tested.

5.16 Housekeeping (Construction Regulation 27)

The principal contractor must ensure that:

a. Housekeeping is continuously implemented and maintained;
b. Materials and equipment is properly stored;
c. Scrap, waste and debris is removed off site regularly;
d. Materials placed for use are placed safely and not allowed to accumulate or cause obstruction to the free-flow of pedestrians and vehicular traffic;
e. Waste and debris not to be removed by throwing from heights but by chute or crane;
f. Where practicable, construction sites are fenced off to prevent entry of unauthorised persons;
g. Catch platforms or -nets are erected over entry and exit ways or over places where persons are working to prevent them being struck by falling objects;
h. An unimpeded work space is maintained for every employee;
i. Every workplace is kept clean, orderly and free of tools and the likes that are not required for the work being done;
j. As far as is practicable, every floor, walkway, stair, passage and gangway is kept in good state of repair, skid-free and free of obstruction, waste and materials;
k. The walls and roof of every indoor workplace be sound and leak-free; and
l. Openings in floors, hatchways, stairways and open sides of floors or buildings are barricaded, fenced, boarded over or provided with protection to prevent persons from falling.

5.17 Stacking and storage (Construction Regulation 28)

The principal contractor must ensure that:

a. A competent person is appointed in writing to supervise all stacking and storage on a construction site;
b. Adequate storage areas are provided and demarcated;
c. The storage areas are kept neat and under control;
d. The base of any stack is level and capable of sustaining the weight exerted on it by the stack;
e. The items in the lower layers can support the weight exerted by the top layers;
f. Cartons and other containers that may become unstable due to wet conditions are kept dry;
g. Pallets and containers are in good condition and no material is allowed to spill out;
h. The height of any stack does not exceed 3 times the base unless stepped back at least half the depth of a single container at least every fifth tier or the approval of an inspector of the Department of Labour has been obtained to build the stacks higher with the aid of a machine. (The operator of the machine must be protected against items falling from

overhead or off the stack and no items may overhang);

i. The articles that make up a single tier are consistently of the same size, shape and mass;
j. Structures for supporting stacks are structurally sound and able to support the mass of the stack;
k. No articles are removed from the bottom of the stack first but from the top tier first;
l. Anybody climbing onto a stack can and does do it safely and that the stack is sufficiently stable to support him or her;
m. Stacks that are in danger of collapsing are broken down and restacked;
n. Stability of stacks are not threatened by vehicles or other moving plant and machinery;
o. Stacks are built in a header and stretcher fashion and that corners are securely bonded; and
p. Persons climbing onto stacks do not approach unguarded moving machinery or electrical installations.

5.18 Eating, changing, washing and toilet facilities (Construction Regulation 30)

5.18.1 Toilets

a. The provision of toilets for each sex is required in terms of the National Building Regulations and Construction Regulation 30.
b. Chemical toilets are allowed instead of the water borne sewerage type. Toilets must be provided at a ratio of at least 1 toilet per 30 employees.

5.18.2 Showers

At least cold-water showers of some sort for each sex have to be provided at a ratio of at least 1 shower per 15 employees.

5.18.3 Change rooms

Some form of screened off changing facility must be provided separately for each sex.

5.18.4 Eating facility

Some form of eating facility sheltered from the sun, wind and rain must be provided.

5.18.5 Living accommodation

Where the site is in a remote location and transport to home is not readily available, reasonable and suitable living accommodation must be provided after obtaining of the necessary permission from authorities and adhering to requirements such as Bylaws of the local municipality.

5.19 Personal and other protective equipment (Sections 8, 15 and 23 of the OHSACT)

The principal contractor is required to proactively identify the hazards in the workplace and deal with them on an ongoing basis. He/she must either remove them or, where impracticable take steps to protect employees and make it possible for them to work safely and without risk to health under the hazardous conditions.

Personal protective equipment should, however, be the last resort and there should always first be an attempt to apply re-engineering and other solutions to mitigating hazardous situations before the issuing of personal protective equipment is considered.

Where it is not possible to create an absolutely safe and healthy workplace the principal

contractor is required to inform employees regarding this and issue, free of charge, suitable equipment to protect them from any hazards being present and that allows them to work safely and without risk to health in the hazardous environment.

It is a further requirement that the principal contractor maintain the said equipment, that he/she instructs and trains the employees in the use of the equipment and ensures that the prescribed equipment is used by the employee/s in a consistent and correct manner.

Employees do not have the right to refuse to use and/or wear the equipment prescribed by the employer and, if it is impossible for an employee to use or wear prescribed protective equipment through health or any other valid reason, the employee cannot be allowed to continue working under the hazardous condition(s) for which the equipment was prescribed but an alternative solution has to be found that may include relocating the employee.

The principal contractor may **not charge any fee** for protective equipment prescribed by him or her **but may charge for equipment under the following conditions**:

- Where the employee requests additional issue in excess of what is prescribed;
- Where the employee has blatantly abused or neglected the equipment leading to early failure; and
- Where the employee has lost the equipment.

Please note: Bullet points two and three above should form part of a formal disciplinary process, i.e. following a disciplinary hearing.

5.20 Portable electrical tools and equipment (Electrical Machinery Regulation 9)

Portable electrical tools and equipment includes every unit that takes electrical power from a 15 ampere plug point and is moved around for use in the workplace i.e. drills, saws, grindstones, portable lights, etcetera. In addition, electrical appliances such as fridges, hotplates, heaters, etcetera must be inspected regularly but at least on a weekly basis and maintained to the same standards as portable electrical tools and appliances.

The use, inspection and maintenance of portable electrical tools and equipment must be governed by the following:

- Regular inspections by a competent person appointed in writing;
- Inspection results must be recorded in a register;
- Only competent authorised persons are allowed to use portable electrical tools and equipment; and
- The correct protective equipment is worn/used whilst operating portable electrical tools and equipment.

This equipment -

- Must be maintained in good condition at all times to prevent an electrical shock to the user;
- The main source should incorporate an earth leakage protection device or receive power through a double wound transformer or be double insulated and clearly marked as such; and
- All equipment must be fitted with a switch to allow for safe and easy starting and stopping.

5.21 Public health and safety (Section 9 of the OHSACT)

The principal contractor is responsible for ensuring that non-employees affected by the construction work are made aware of the dangers likely to arise from said construction work as

well as the precautionary measures to be observed to avoid or minimise those dangers. This includes among others:

a. Non- employees entering the site for whatever reason;
b. The surrounding community; and
c. Passers-by by the site.

Appropriate signage must be posted to this effect and all employees on site must be instructed to ensure that non-employees are protected at all times.

All non-employees entering the site must receive site applicable induction into the hazards and risks and the control measures for these.

5.22 Excavations (including piling) (Construction Regulation 13)

All excavation work, such as for example the replacement of the water and sewer connections) has to comply with the following:

5.22.1 Excavation work must be carried out under the supervision of a competent person with at least two years' practical experience in excavation work who has been appointed in writing.

5.22.2 Before excavation work begins the stability of the ground must be evaluated.

5.22.3 Whilst excavation work is being performed, the principal contractor must take suitable and sufficient steps to prevent any person from being buried or trapped by a fall or dislodgement of material.

5.22.4 No person may be required or permitted to work in an excavation that has not been adequately shored or braced.

5.23.5 Where the excavation is in stable material or where the sides of the excavation are sloped back to at least the maximum angle of repose measured relative to the horizontal plane, shoring or bracing may be left out **but only after** written permission has been obtained from the appointed competent person.

5.23.6 Shoring and bracing must be designed and constructed to safely support the sides of the excavation and prevent it from collapsing.

5.23.7 Where uncertainty exists regarding the stability of the soil the opinion of a competent professional engineer or professional technologist must be obtained, before excavation proceeds, whose opinion will be decisive. The opinion must be in writing and signed by the engineer or technologist as well as the appointed excavation supervisor.

5.23.8 No load or material may be placed near the edge of an excavation if it is likely to cause a collapse of the excavation, unless suitable shoring has been installed to be able to carry the additional load. Best practice requires a one-meter clearance so as to reduce the pressure on the side walls as well as risk of material falling onto persons inside the excavation. Neighbouring/adjoining buildings, structures or roads that may be affected or endangered by the excavation must be suitably protected.

5.23.9 Every excavation must be provided with means of access that must be within 6 metres of any employee within the excavation at any time. Should ladders be utilised for this purpose they should be duly secured.

5.23.10 The location and nature of any existing services such as water, electricity, gas, telecommunication etcetera must be established before any excavation is commenced with and any service that may be affected by the excavation must be protected and made safe for

employees working in or near in the excavation.

5.23.11 Every excavation, including the shoring and bracing or any other method to prevent a possible collapse, must be inspected by the appointed competent person as follows:

- Daily before work commences
- After an unexpected collapse of the excavation or part thereof
- After substantial damage to any support
- After rain

5.23.12 The results of any inspections must be recorded in a register kept on site in the health and safety file.

5.23.13 Every excavation accessible to the public or that is adjacent to a public road or thoroughfare or that threatens the safety of persons, must be adequately barricaded or fenced off, on all sides, to at least one-meter-high and as close to the excavation perimeter as practicable. All such excavations must also be provided with warning lights or visible boundary indicators after dark or when visibility is poor.

5.24 Welding, flame cutting or similar operations

Should any welding work be undertaken as part of emergency repairs to plant and equipment on site or as part of the construction activities, the principal contractor must ensure that:

5.24.1 A competent person will be appointed to supervise welding, flame cutting or similar operations on site.

5.24.2 The following rules will govern all welding and flame cutting or similar operations:

a. The welder will be trained regarding the safe use/operation of the equipment.
b. The welder and his assistant will be provided with effective and appropriate personal protective equipment and/or clothing.
c. Cables and electrode holders will be effectively insulated.
d. The workplace will be effectively screened off to prevent bystanders from being affected by the welding rays or they will be provided with personal protective equipment.
e. Special precautions will be taken where welding is undertaken in confined spaces e.g. proper and sufficient ventilation will be provided.
f. In wet or damp conditions, the welding equipment and the welder will be properly insulated and someone will be on standby to assist in the event of any emergency.
g. A qualified person will certify in writing that it is safe to enter and work in a specific confined space before welding or flame cutting is undertaken.
h. No welding, flame cutting, grinding, soldering or similar work shall be undertaken in respect of any drum, vessels or similar object or container where such object or container-

- is completely closed, unless the rise in internal pressure cannot render it dangerous; or
- contains any substance which, under the action of heat may explode or react to form dangerous or poisonous substances.

i. Where pressure vessels/welding cylinders containing oxygen or acetylene are transported or used, the proper precautionary measures will be taken against bumping, falling, rolling etcetera.
j. Gas welding hoses may only be joined with approved connectors and clamps.
k. No oil or grease may be applied to oxygen valves and fittings.
l. It is a sound practice to store pressure vessels and/or welding cylinders vertically and to secure them by means of a chain.
m. Acetylene cylinders may never be inclined in excess of 45º.
n. Proper and adequate fire prevention measures will be instituted and maintained for as

long as the welding continues.

o. Where explosive and/or flammable vapours are present welding will only be done under "hot work" permits.

5.25 Transportation of employees

5.25.1 Any vehicle used to transport employees must have seats firmly secured and adequate for the number of employees to be carried.

5.25.2 Regulation 247 of the National Road Traffic Act, Number 93 of 1996 (NRTA) stipulates that the principal contractor shall not allow employees to be transported in a vehicle unless the portion of the vehicle in which the employees are being conveyed is enclosed to a height of –

a. at least 350 mm above the surface on which employees are seated; or
b. at least 900 mm above the surface on which employees are standing,

in a manner and with a material of sufficient strength to prevent employees from falling from such vehicle when it is in motion.

5.25.3 Regulation 247 of the NRTA also stipulates that the principal contractor shall also not allow any employees to be conveyed in the goods compartment of a vehicle together with any tools or goods, except their personal effects, unless that portion in which the employees are being conveyed is separated by means of a partition, from the portion in which such goods are being conveyed.

5.26 Working in inclement weather

The principal contractor shall implement an early warning system to identify inclement weather and to prevent such weather from posing negative implications on the safety of employees and other persons visiting.

The early warning system shall as a minimum provide for the following:

5.26.1 Construction work done during electrical storms

a. The principal contractor shall ensure that all employees are removed from heights and all employees are as safe as possible, in inclement weather conditions.
b. No work is allowed on the construction site during electric storms where employees cannot be protected from it. Protection involves:
   - eating area fitted with a lightning mast
   - workshops
   - inside buildings
c. No work is allowed in electrical storms on top of open structural steel, even when earthed.
d. No work is allowed on height where the lightning is within a 10 kilometre radius.
e. After inclement weather on-site risk assessments will be reviewed to include wet conditions.

5.26.2 Construction work done during rain

a. During rainy conditions all work on steel structures will stop.
b. No electrical tools will be used during rainy weather in open areas.
c. Work can be done in water proof areas where there is a zero risk for electrocution.
d. Areas will be cleared for work during rain:
   - workshops

- offices
- work on ground level with the provision that the area is maintained in a safe dry condition

5.26.3 Scaffolding activities during inclement weather conditions

During inclement weather only limited scaffolding actions will be permitted i.e. erecting and dismantling activities.

Guidelines for safe choices:

Weather type	Building and dismantling of scaffolding
Lightning	Stop all activities
Light rain	Stop all activities
Heavy rain	Stop all activities

Weather type	Building and dismantling of scaffolding
Wind <28 km/h	Full use
Wind >40 km/h	Stop all activities
Light mist	Full use
Heavy mist	Full use
Hail	Stop all activities

All scaffold users will:

a. Ensure that scaffolding is inspected immediately after inclement weather conditions.
b. Ensure that the risks associated with working at heights during inclement weather are identified and reasonably mitigated.
c. Be cautious of slip/trip hazards when performing activities during inclement weather.
d. Take note of the weather when completing the daily safe task instructions on site, where applicable.

5.26.4 Driving in inclement weather

The principal contractor shall ensure that the danger of driving in wet conditions is adequately covered in a risk assessment.

The risk assessment will include, but not limited to:

a. route planning
b. speed reduction
c. planning for emergency situations
d. driving precautions for slippery surfaces
e. visibility hazards

6. Health and safety policy

The principal contractor has to provide the Client, as an annexure to the health and safety plan, with a detailed health and safety policy outlining the principal contractor's stance on and principles adopted for health and safety.

7. Cost for health and safety measures during the construction process

To enable the Client to comply with Construction Regulation 5(1)(g), all potential principal contractors submitting tenders/bids have to demonstrate to the Client that sufficient provision has been made for the cost to implement and maintain the health and safety plan proposed by the principal contractor to meet the requirements of this health and safety specification as well as that of the OHSACT and its Regulations.

A detailed schedule of costs has to be included in the health and safety plan submitted as part of the potential principal contractor's tender document. Failure by the principal contractor to adhere to this requirement will force the Client to reject the tender/bid in terms of Construction Regulation 5(1)(h).

8. Project specific risk assessment requirements

8.1 Guide to risk assessment

8.1.1 Nine steps to effective risk assessments

Step 1 : Identifying the current as well as emerging hazard, risks or exposures.
Step 2 : Aim to identify major hazards, don't waste time on the minor and detail except if such hazard has the potential be repeat itself on a frequent basis.
Step 3 : Involve as many people as possible in the ongoing risk assessment process especially those at risk.
Step 4 : Gather all the information and analyse it.
Step 5 : Look at what actually could or has occurred including non-routine operations.
Step 6 : Use a systematic approach to ensure all hazards are adequately addressed.
Step 7 : Assess the risks identified or the risk has occurred by taking into account the effectiveness of current as well as controls under consideration.
Step 8 : Ensure the process is practical, realistic, cost and business effective.
Step 9 : Always record the assessment in writing including i.e. assumptions, date and why a particular decision has been made.

8.1.2 How serious is it?

Probability	Consequences
A Common	1 Fatality or permanent disability.
B Has Happened	2 Major injury.
C Could Happen	3 Average Lost Time Injury.
D Not Likely	4 Minor Injury.
E Practically impossible	5 Medical Treatment or less.

Probability

Consequence	A	B	C	D	E
1	1	2	3	4	5
2	2	3	4	5	6
3	3	4	5	6	7
4	4	5	6	7	8
	5	6	7	8	9

5

	Risk rating	Action
1 - 3 =	Serious	Immediate (within 1 week).
4 - 5 =	High	Within 1 month.
6 - 7 =	Moderate	> 4 weeks.
8 - 9 =	Acceptable	No action but will consider from time to time.

8.2 List of Risk Assessments

i. Aggregate/Sand Delivery
ii. Brickwork
iii. Compressed gas cylinders-handling
iv. Compressors – Air
v. Cutting of pipes Demolition
vi. Distribution boards – Electrical
vii. Drivers – of vehicles
viii. Electrical installation – Maintenance of
ix. Excavation work
x. Fire prevention and protection Front end loader
xi. Fuel supply
xii. Gas welding-cutting operations
xiii. Hand and spray painting
xiv. Hand tools Laying of pipes
xv. Levelling – of materials
xvi. Loading supervisor Loading/unloading - of trucks
xvii. Machine operator
xviii. Making of steel items
xix. Material delivery Material Handling Placing Concrete Plastering
xx. Portable ladders Refuelling vehicles/plant Scaffolding
xxi. Site establishment Tile stacking
xxii. Trenches – Digging of
xxiii. Use of portable electrical tools
xxiv. Work in elevated positions
xxv. Working close to existing services i.e. electrical, waste water etc

Approvals:

ACTION	REPR.	DESIGNATION	SIGNATURE
Prepared By:	Ms. Debra Matlhoma	**Health and Safety Officer**	
Reviewed By:	Mr. Godfrey Maake	**Health Safety Manager**	
Approved By:	Mr. Tigere Mhiti	**Health and Safety Agent**	

Acknowledgement of receipt of this specification

I THE UNDERSIGNED CERTIFY THAT I HAVE RECEIVED A COPY OF THE ABOVE-MENTIONED DOCUMENT. WE HAVE TAKEN THE REQUIREMENTS THEREOF IN THE PREPARATION OF OUR TENDER RESPONSE DOCUMENTS INCLUDING ADEQUATELY PROVIDING FOR HEATLH AND SAFETY BUDGET DURING THE PROJECT.

COMPANY REPRESENTATIVE		WITNESS	
FULL NAMES		FULL NAMES	
COMPANY NAME		COMPANY NAME	
JOB TITLE/POST		JOB TITLE/POST	
DATE		DATE	
SIGNATURE		SIGNATURE	