ETHEKWINI MUNICIPALITY
Occupational Health & Safety Unit

Construction Health and Safety Specification in terms of the Occupational Health and Safety Act, Act 85 of 1993 and the Construction Regulations of 2014.

Document Number	SSHSS547/06/26CSA 3600/36585-1B
Document Title	Construction Health and Safety Specification
Client	E Thekwini Municipality
Project	CSA 3600/36585-1B (Integrated Infrastructure Maintenance and Construction for Buildings, Facilities and Engineering Systems Works For 36 Months.
Contract Number	CSA3600/36585-1B
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1. INTRODUCTION AND DEFINITIONS

This specification is compiled to ensure that the Principal Contractor and any other Contractors working for Ethekwini Municipality directly or through a Principal Contractor, are aware of the Occupational Health and Safety requirements when working on a ETHEKWINI MUNICIPALITY contract, as well as to make them aware of their legal liabilities and responsibilities as per the Occupational Health & Safety Act, Act 85 of 1993, and its Regulations.

The Occupational Health and Safety Act, Act 85 of 1993 and its Regulations together with SANS Codes set out minimum standards with regards to Occupational Health and Safety. eThekwini Municipality has developed this Occupational Health and Safety Specifications with these minimum standards in mind and in certain stages the requirements of eThekwini Municipality exceed the minimum legal requirements to follow best practices and to ensure a healthy and safe workplace for all.

Ethekwini Municipality in no way assumes the Principal Contractors legal liabilities and responsibilities. The Principal Contractor is and remains accountable for the quality and execution of his health and safety programme for his employees. This Health and Safety Specification reflects minimum legal and Ethekwini Municipalty requirements and should not be construed as all encompassing.

It is realized that The Principal Contractor has its own Health and Safety Management system and safe work practices. The intention of this Health and Safety Specification is not to change The Principal Contractors Health and Safety management system, but for The Principal Contractor to use its current Health and Safety management system to draw up a project specific Health and Safety Plan according to these specifications as well as to legally comply with the Construction Regulations, GNR.84 of 2014.

It is the responsibility of the Principal Contractor and other Contractors to make themselves conversant and comply with the requirements and conditions contained in the various legislation pertaining to their profession and scope of works at all times.

This specification is not exhaustive of all duties imposed by the Occupational Health and Safety Act, Act 85 of 1993 and its Regulations, governing the duties and obligations, of a Designer, Principal Contractor and Contractor performing duties in terms of an agreement with the client (ETHEKWINI MUNICIPALITY). These duties are fully described in the Occupational Health and Safety Act, Act 85 of 1993 and its

Regulations and it is the duty of every Designer, Principal Contractor and Contractor to acquaint themselves therewith before commencing work

For the purpose of this Construction Health and Safety Specification, all definitions in the Occupational Health and Safety Act and Regulations, the abbreviations and the definitions given hereunder shall apply; where definitions may overlap, the most onerous requirement shall apply:

Acronym or Definition	Meaning
Agent	Refer to the Agent appointed by the Client to act on its behalf, and who is appointed in writing
CHSS	Refers to this document as the Construction Health and Safety Specification
Client	Refers to eThekwini Municipality
COIDA	Means Compensation for Occupational Injuries and Diseases Act 130 of 1993
Construction Site	Means the premises and grounds where construction work is being performed
Principal Contractor	Means an employer appointed by the Client to perform construction works
CR	Refers to the Construction Regulations of 2014
DSTI	Refer to a documented daily safe task instruction compiled and issued by a contractor and trained to all relevant employees
H&S	Refers to Health and Safety
Medical Certificate of Fitness	Means a valid medical certificate of fitness issued by an occupational medicine practitioner, such medical testing shall be relevant to the risks of the construction work on the construction site and shall conform to the Occupational Health and Safety Act and Regulations and to the requirement of this Health and Safety Specification
Method Statement	Refer to a document detailing the key activities to be performed in order to reduce as reasonably as practicable the hazards identified in the Risk Assessment
OHSA	Refer to the Occupational Health and Safety Act
Regulations	Refer to the Regulations stipulated in the OHSA

S	Refer to a section in the OHSA
SACPCMP	Means the South African Council for the Project and Construction Management Professions
Sub-Contractor	Means an employer appointed by a contractor of the Principal Contractor

2. PROJECT DESCRIPTION AND CONSTRUCTION HEALTH AND SPECIFICATION

This project Contract no. CSA 3600/36585-1B (Integrated Infrastructure Maintenance and Construction for Buildings, Facilities and Engineering Systems Works For 36 Months.

The Architect department identify the need to undertake the Integrated Infrastructure Maintenance and Construction for Buildings, Facilities and Engineering Systems Works For 36 Months.

This Construction Health and Safety Specification is published in terms of the Ce Occupational Health and Safety Act of 1993 (OHS Act), Construction Regulations 2014, Regulation 5(1) (b)

The CHSS does not replace the Construction Regulations, 2014, but is a supplementary specification as required in terms of the Regulations. The Principal Contractor is at all times required to and will remain responsible to fully address all requirements and standards of the Occupational Health and Safety Act,
Regulations and the Construction Regulations. Inclusive of the Health and Safety Plan and implementation thereof.

The Client has appointed an Agent who will (inter alia) be responsible for the approval of all Principal Contractors H&S Plans, for the auditing and monitoring of the Principal Contractor implementation thereof and for maintaining the document control associated with the CHSS.

3. LIMITATIONS OF LIABILITY

The Client or its Agent shall not be responsible for any acts or omissions of any contractor which may directly or indirectly result from the application of the CHSS or any project specific version thereof.

All contractors must ensure that articles, work, equipment, machinery, plant and work practices are, at all times compliant to the legal requirements as these apply.

The Client or its Agent shall limit its responsibility to the application of the Construction Regulations Clients Requirements only.

The Principal Contractor shall enter into a Mandatory Agreement with the Client, as defined in Section 37(2) of the Occupational Health and Safety ACT.

The Principal Contractor shall ensure that each contractor appointed by the Principal Contractor and each sub-contractor appointed by a contractor also into a Mandatory Agreement with the Principal Contractor, as defined in Section 37(2) of the Occupational Health and Safety ACT. These agreements shall be included in the Principal Contractor's H&S File on site and be valid for the duration of the contractors' work on the construction site.

4.PURPOSE OF THE CONSTRUCTION H&S SPECIFICATION

The purpose of the CHSS is for the specification to be used as the standard on which Principal Contractors H&S Planning and safe work execution must be based

This CHSS will be applicable to all construction work and shall be implemented for the complete project until project close out.

This CHSS defines the client's standard by which all occupational health and safety risks shall be controlled at the construction site.

All employers working on the construction site shall conform to the standard in the CHSS. All the duties of a Principal Contractor in this CHSS equally apply, in full, to contractors of such Principal Contractor and sub-contractors of such contractors...

5. IMPLEMENTATION OF THE CONSTRUCTION H&S SPECIFICATION

This CHSS forms an integral part of the Contract, and Principal Contractors H&S Planning and safe work execution must be based.

The Principal Contractor shall ensure that the H&S Plan contain sufficient evidence of:

- Adequate provision for the cost of safety measures
- The Principal Contractor access to and intention to appoint persons with the necessary competencies to carry out the construction work safely.
- The Principal Contractors access to the necessary resources to carry out the construction work safely and without risk to the health of the workers.
- The Principal Contractor's planning of construction activities within the special requirement emanating from personnel deployment, time constraints and language barriers.

The Principal Contractor shall allow in their cost provision for complying with the requirements of this CHSS; resources for the following H&S controls shall be in place.

6.PROJECT HEALTH AND SAFETY COST

The Client must ensure that potential Principal Contractor submitting tenders have made adequate provision for the cost of health and safety measures.
The Principal Contractor shall allow in their cost provision for complying with the requirements of this CHSS; resources for the following H&S controls shall be in place.

	H&S cost item	Description
1.	Full time safety officer /part safety officer	Full time attendance on site of a SACPCMP registered safety officer from the start of construction until the end of project handover
2.	Competent H&S Design	Services of competent designers for temporary works, scaffolding, fall arrest and recovery systems
3.	First Aiders	Standard first aid training Special (additional) fall recovery first aid training
4.	Competent inspectors (trained, certified, competent)	Statutory inspections of height work, temporary works, fire extinguishers, lifting equipment, lifting machinery, ladders, construction vehicles and mobile plant, portable electrical equipment, etc.
5.	Mandatory training in site legal register and risk assessments	Training of all employees holding statutory appointments as competent persons ensuring that they are familiar with the Occupational Health and Safety Act and Regulations. H&S induction and Risk Assessment training all employees in Daily Safe Task Instructions
6.	Training of employees in H&S	Occupational Health and Safety Training in accordance with the skills matrix included in the approved H&S Plan.
7	Medical certificate of fitness	Medical examination of all employees and certification of fitness by an Occupational Medicine Practitioner Pre- employment, annual and exit medical examination is required

8	Supply and training for PPE	Standards set for all employees Special sets including: fall arrest, special respiratory, adapted hearing protection, adapted hand protection, adapted eye and face protection
9	Dust mitigation	To reduce dust exposure to the employees and the public
10	Public protection and barricading	To reduce risk exposure to the employees and members of the public
11	Employee facilities	Refer to the Facilities Regulations (drinking water, change facility, personal lockers, and wash facilities, eating facilities.
12	Underlying services	Relocation of underlying services
14	Other	Items not indicated in the Specification

7.SCOPE OF WORK

The scope addresses legal compliance, hazard identification and risk assessment and the promotion of a health and safety culture amongst those working on the project. This CHSS covers the client's requirements for addressing, mitigating and controlling Occupational Health and safety related risks, problems, incidents and injuries during the construction work. The CHSS contains clauses that are generally applicable to construction and imposes controls associated with activities that impact on human health and safety The Principal Contractor is required to comply with the provisions of the OHSA, all applicable Regulations and this CHSS. The client Agent will monitor the Principal Contractor's compliance with the requirements of the OHSA and the approved H&S Plan.

This project Contract no CSA3600/36585-1B
Scope of work:

General Building

- Construction and maintenance of Offices, Libraries, Museums, Art Galleries, Taxi ranks, Fire stations, Schools, Multi-level residential developments, Clinics, Hospitals, Laboratories, Multi-purpose buildings, Halls, Malls, Shopping Centres, Warehouses, Auto-hubs, Showrooms, guardhouses, ablution facilities, social housing developments, electrical sub-stations, etc.
- Projects of Similar nature will be considered for projects which fall under general building (new builds, alterations and additions, renovations to

heritage facilities), which comprise of scopes of work including but not limited to; earthworks and foundation, brickwork, concrete, formwork, structural steelwork, shopfronts, glazing, multi-storey construction, electrical installation and reticulation, mechanical installation and reticulation.
- Excluding RDP housing developments only.

Electrical Engineering Works - Buildings

- Supply, installation and maintenance of Low Voltage electrical systems (≤1000V). The systems to be considered during evaluation are, but not limited to, Electrical Distribution boards, panels, enclosures, switchgear, standby generator, uninterrupted power, system luminaires, lamps, trenching, cabling and cable accessories, wiring, wireways, light switches, switched socket outlets, power points, power-skirting, geyser spares, hydroboils, fans, hand dryers, photovoltaic, charge controllers, DC cabling, inverters, batteries, earthing and lightning protection systems and devices, sensors, energy efficiency, demand side management and etc.
- The above-mentioned systems, in terms of the scope, entails the maintenance repairs, minor alterations, electrical installation systems and improvements as well as breakdown callouts usually outside of normal working hours.

Mechanical Engineering

Supply or Installation or Servicing or Repair or Retrofitting or Maintenance of HVAC&R equipment/systems including:

- Split air-conditioning
- Variable Refrigerant Flow (VRF/V) systems
- Roof-Top’s
- Ducted air conditioning
- Air-Cooled, water Cooled
- Air chiller
- Water chiller
- Fan coil
- Close Control
- Cold rooms
- Refrigeration systems or forced ventilation systems.

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8. COMPENSATION FOR OCCUPATIONAL INJURIES AND DISEASES ACT

The Principal Contractor, each contractor and each sub-contractor shall submit proof of Good Standing with COIDA Commissioner, or a Mutual Association licensed in terms of Section 30 of COIDA, prior to starting any work on site.

A copy of the Letter of Good Standing with COIDA Commissioner must be included in the H&S Plan of each contractor working on the site and must remain updated for the duration of the construction work.

9. MANAGEMENT AND SUPERVISION OF CONSTRUCTION WORK

9.1 Construction Manager

The Principal Contractor shall appoint a full-time competent person as the construction manager with the duty of managing all construction on the site including the duty of ensuring occupational health and safety compliance.

The Construction Manager must demonstrate competence in relation to work being performed and the ability to manage construction work which may include making all statutory appointments in terms of health and safety.

9.2. Construction Safety Officer

The Principal Contractor shall appoint a competent Construction Safety Officer for the construction work. The Construction Safety Officer shall be full/part time on the construction site for this project.

The Safety Officer shall be registered with the South African Council for the Projects and Construction Management Professions. Proof of competence and registration of the appointed Construction Safety Officer must be included in the H&S Plan.

9.3. Construction Supervisor

A Construction Manager must appoint construction supervisors responsible for construction activities and ensuring occupational health and safety compliance on the construction site.

A contractor must, upon having considered the size of the project, in writing appoint one or more competent employees for different sections thereof to assist the construction supervisor contemplated in sub regulation (7), and every such employee has, to the extent clearly defined by the contractor in the letter of appointment, the same duties as the construction supervisor:
Provided that the designation of any such employee does not relieve the construction supervisor of any personal accountable for failing in his or her supervisory duties in terms of this regulation.

9.4 ORGANOGRAM

Contractor shall submit an organogram outlining the site safety, health and environmental management structure as per appointment. The organogram must reflect the project and the company name and must have legal references

It is a requirement that The Principal Contractor shall provide Ethekwini Municipality with an organogram of all subcontractors that he/she has appointed or intends to appoint and keep this list updated and prominently displayed on site.

10. PRINCIPAL CONTRACTOR'S HEALTH AND SAFETY PLAN

The Principal Contractor shall submit a suitable, sufficiently documented and coherent specific health and safety plan and start-up H&S file for this construction project, in accordance with the legal requirement prior to work starting.H&S file

This H&S plan and file must be presented to and approved by the Agent prior to the site being handed over to the Principal Contractor prior to the Principal Contractor being allowed on site. No work may start by any Principal or other Contractor unless the relevant health and safety plan is approved.

The H&S plan shall be presented as part of the start-up H&S file; all evidence of controls which are documented in the H&S plan must be placed in the H&S file

The H&S file and plan must follow index: The health and safety plan shall include but not limited to the following

- Objectives
- Scope of work
- Notification of construction work
- Management of construction and supervision
- Monitoring and review plan
- Sub-Contractor Management
- Risk Assessment & Written Safe Working Procedures
- Roof work planning/method statement
- Structural procedure
- Electrical services as per scope of work
- Incident Management & First Aid
- Fall Protection Plan/ Working at elevated position
- Emergency Evacuation Plan/Procedures
- Fire Prevention & Protection
- Public Safety
- PPE Provision
- Health & Safety Signage

- Construction Vehicles and Mobile Plants
- Hand & Electrical Tool Management
- Construction Employees Facilities
- Health & Safety Policies
- Health and Safety Training & Competencies
- Housekeeping
- Site Barricading
- Traffic Accommodation/Management
- Induction
- Medicals
- Site Security
- Stacking and Storage
- Heat stress
- Transportation of Employees
- Internal Audit
- Inspection Registers
- Toolbox Talks
- SHE Meetings and Committees

Besides the legal requirements, the site-specific health and safety plan for approval shall include:

A cover page indicating:

- The contract reference
- The name and address of the Contractor and the name of the CEO
- The name and signature of the designated person in terms of Section 16(2)
- The name and signature of the Construction manager
- A space for the Client Agent to sign for final approval.

The Principal Contractor's Occupational Health and Safety Policy signed by the CEO.

A detailed site-specific overview of the scope and activities of the project; this overview must include all work controlled by the Principal Contractor

This project Contract CSA3600/36585-1B

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- Roof-Top’s
- Ducted air conditioning
- Air-Cooled, water Cooled
- Air chiller

- Water chiller
- Fan coil
- Close Control
- Cold rooms
- Refrigeration systems or forced ventilation systems.

11. HAZARD IDENTIFICATION AND RISK ASSESSMENT

The Principal Contractor shall appoint competent person(s) to perform a sitespecific baseline risk assessment and thereafter, ongoing issue-based hazard identification and risk assessments. There may be more than one risk assessor appointed if this is required.

The competent risk assessor(s) shall form part of the team working on the site

The risk assessment must be based on the scope of work, the site-specific materials required, and the site-specific machinery, equipment and structures applied during the construction.

Risk Assessments of all sites specific risk activities identified in the scope of work, including those performed by contractors and sub-contractors, shall form an integral part of the H&S Plan and all risks controls (including those executed by contractors and sub-contractors) shall be documented. The baseline assessment will be included in the H&S Plan

Additional risk assessments shall be conducted when:

- A new machine is introduced on the site
- A system for work is changed or operations altered
- After an accident or near miss has occurred
- New knowledge comes to light and information is received which may influence the level of risk to employees onsite.

Issue based risk assessment, risk monitoring and risk review shall be done at the hand of pre task risk assessment communicated to all employees; a system of daily safe task instructions may be used. The risk assessment must include:

- A daily documented listing of hazardous events
- A daily documented listing of H&S risk controls
- Proof of communication of the above to all employees, the Client requires that the Principal Contractor shall ensure that all employees on site are

conversant with the content of all relevant risk assessments, the appropriate measures to either eliminate or reduce the identified risk. The Principal Contractor shall outline to employees what role they are expected to play in the risk assessment and control measure process.

Continuous risk assessment

In order to maintain a safe and risk-free environment continuous risk assessments (e.g. Daily Safety Task Instructions (DSTIs) must be undertaken on a daily basis for all activities undertaken

The Principal Contractor shall include a method for risk review ensuring that all the risks on site are adequately managed

All risk assessments must document all H&S controls which any contractor plans to put in place.

12. HEALTH AND SAFETY FILE

The Client must discuss and negotiate with a Principal Contractor the content of the Health and Safety Plan and thereafter finally approve the Health and Safety plan for implementation. The recommended Health and Safety file shall include the following:

- Client Health & Safety Specification
- Principal Contractor Health & Safety Plan
- Updated letter of good standing with Commissioner
- Section 37.2 Mandatory Agreement
- Contractor appointment letter in terms of CR 5.1(k)
- Risk Assessments
- Written Safe Working Procedures
- Applicable Inspection Registers
- Incident/Accident Management
- Award letter from SCM
- Organogram
- Copy of OHS Act and COID Act
- Environmental Management Plan if applicable
- Health and Safety Induction programme
- Site Emergency Evacuation Plan
- Key Personnel contact numbers
- Site Safety Rules
- Medical Records – Medical Fitness Certificate
- Toolbox Talks Programme
- HIV/AIDS Awareness Programme
- Fall Protection Plan
- Material Safety Data Sheets

- SHE Policy
- First Aid box and competent first aider

- Appointment letters and competencies
- Application for construction work

The Principal Contractor shall provide and maintain an H&S File, containing all relevant documents as prescribed in the OHSA and applicable Regulations and all forms or records referred to in the H&S Plan.

The startup H&S File shall be presented together with the H&S Plan for approval prior to work starting.

The H&S File shall be kept on the construction site and available for inspection by the Client Agent or the Department of Labor Inspectors

The H&S File becomes the property of the Client after completion of the project. The Principal Contractor is also required to scan the file in an electronic format and hand over the electronic format.

13. LEGAL COMPLIANCE AND DOCUMENT CONTROL

The Principal Contractor is required to implement systems and procedures to ensure legal compliance through:

- Identification of all relevant HSE legislation, standards and codes applicable to its operations
- Have available copies of all relevant HSE legislation, standards and codes for reference purposes
- Update legislation, standards and codes with any changes
- Communicate to all employees any changes that may affect their accountabilities and conformances
- Incorporate any legal requirements into their HSE management system Monitor and review their HSE management system for effectiveness

The Principal Contractor shall, as a minimum, comply with:

- The Occupational Health and Safety Act and Regulations (Act 85 of 1993), an up-todate copy of which shall be available on site at all times.
- The Compensation for Occupational Injuries and Diseases Act (Act 130 of 1993), an up-to-date copy of which shall be available on site at all times.

Wherever in the Construction Regulations or this specification there is reference to other regulations (e.g. Construction Regulation 24: Electrical Installations and Machinery on Construction Sites) The Principal Contractor shall be conversant with and shall comply with these regulations.

All legal appointments of The Principal Contractor regarding the Health and Safety of his employees who are to work on the project are addressed and governed by the OHS Act and applicable Regulations. Legal appointments must be in place and must reflect in the project safety file before work commences.

a) Overall Supervision and Responsibility for OH&S

ETHEKWINI MUNICIPALITY will appoint the Principal Contractor in terms of Construction Regulation 5(1)(k). A Mandatary Agreement as per Section 37.2 of the OHS Act, shall be signed between ETHEKWINI MUNICIPALITY and the Principal Contractor.

It is a requirement that the Principal Contractor, when he appoints other Contractors in terms of Construction Regulations 7(1)(c), 7(1)(d), 7(1)(f) and 7(3) includes in his agreement with such Contractors the following:

- OH&S Act (85 of 1993), Section 37(2) agreement: “Agreement with Mandatary”.
- OH&S Act (85 of 1993), Section 16(2) appointee(s) as detailed in his/her/their respective appointment forms. (Where applicable).

The signed Mandatary Agreements shall be placed in the project file for reference and for audit trail purposes.

(b) Specific Supervision Responsibilities for OH&S

The Principal Contractor shall appoint designated competent employees and/or other competent persons as required by the OHS Act and Regulations, as well as this specification. Appointments shall be in writing and the responsibilities clearly stated together with the period for which the appointment is made. This information shall be communicated to and agreed with the appointees. Where applicable, the training certificate must be attached to the appointment. Notice of appointments shall be submitted to the Employer. All changes shall also be communicated to the Employer.

Below is a list of possible appointments for the project, which is not an all-inclusive list, but for reference purposes only:

Appointment description	**Appointment required in terms of**
Assistant construction manager	Construction Regulation 8(2)
Assistant construction supervisor	Construction Regulation 8(8)
Construction health and safety officer	Construction Regulation 8(5)
Construction manager	Construction Regulation 8(1)
Construction supervisor	Construction Regulation 8(7)
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 risk 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
Structure's supervisor	Construction Regulation 11
Temporary works supervisor	Construction Regulation 12
Traffic management supervisor	OHSACT Section 9(1)
Traffic safety officer	OHSACT Section 9(1)

Pressure equipment supervisor	Pressure Equipment Regulations
Welding supervisor	General Safety Regulation 9

c) **Designation of OH&S Representatives (Section 17 of the OH&S Act)**

Where The Principal Contractor employs more than 20 persons (including the employees of sub- contractors) he has to appoint 1 (one) OH&S representative for every 50 employees or part thereof. This is a minimum (legal) requirement. The Principal Contractor may at his own discretion or based on the recommendations of the Client's Construction H&S Agent appoint more OH&S representatives according to site specific requirements. General Administrative Regulation 6 requires that the appointment or election of the OH&S representatives be conducted in consultation with employee representatives or employees (Section 17 of the Act and General Administrative Regulation 6 & 7). OH&S representatives shall be designated in writing, and the designation shall include the area of responsibility of the person and term of the designation. OH&S representatives must be experienced, permanently employed by The Principal Contractor or his sub-contractors, formally trained and able to move freely within their designated area of responsibility.

Duties and Functions of the OH&S Representatives (Section 18 of the OH&S Act)

The Principal Contractor shall ensure that the designated OH&S representatives perform their functions in respect of the workplace or section of the workplace for which they have been appointed. These functions include conduct continuous monitoring and monthly inspections of their respective areas of responsibility, focusing on unsafe acts and unsafe conditions and report thereon to The Principal Contractor. OH&S representatives shall participate in accident or incident investigations. OH&S representatives shall attend all OH&S committee meetings. The complete list of functions can be found in Section 18 of the OHS Act.

Appointment of OH&S Committee (Sections 19 and 20 of the OH&S Act)

The Principal Contractor shall establish an OH&S committee, which shall meet at least once a month, where two or more Health and Safety Representatives

have been appointed. OH&S representatives must be appointed as OH&S committee members. The number of managements appointed members may not exceed the number of OH&S representatives on the committee.

14. CLOSE- OUT CONSOLIDATED HEALTH AND SAFETY FILE

The Principal Contractor shall compile a consolidated H&S file and hand over to the Agent at the end of the project handover this shall be applicable to all contractors and sub-contractors as well.

The Principal Contractor shall therefore submit a consolidated close out file inclusive of all contractor information

The consolidated H&S File shall be in hard copy and in CD format The

consolidated file shall include:

- A copy of the approved H&S Plan of the Principal Contractor
- Project H&S management plans, H&S Plan, Fall Protection Plan, Emergency
  Plan, Storm Water Management, Traffic Management
- Project baseline risk assessment
- Designer inspections/assessments and confirmation of conformance
- Monthly risk and Incident reports
- Incident registers & IOD investigation record
- COIDA Claim incidents and supporting medical treatment record
- The completed final register required in the Staffing on Site chapter of this CHSS
- Monthly H&S performance report
- Monthly H&S audit reports from the Agent and the enjoining corrective action reports
- Endorsed minutes of H&S committee meetings Employee list as required in this CHSS Records of exit medical records.

A reference record of all drawings, designs and materials used

A reference record of H&S statutory certificates required by the owner; this reference record shall indicate the designated person at the Principal Contractor, who is responsible for the document and the client-designate to whom the document has been handed.

The comprehensive list of all the contractors on site accountable to the Principal Contractor

An index of all inspections and reference to the inspection registers on site

A list of responsible persons appointed in statutory positions for the duration of the project

A list of all occupational injuries and diseases including the name of the injured, the reference number of the Annexure 1 document and the reference number of the COIDA notification of the injury (if any)

All documents relating to any reportable injury disease during the construction work, as defined in Section 24 and 25, of the Occupational Health and Safety Act, Act 85 of 1993.

15. INDUCTION AND HEALTH AND SAFETY AWARENESS

Each employee working on site shall be inducted in Health and Safety and the operating rules on site.

The Principal Contractor shall develop project specific induction training programme in Health and Safety for the site, to ensure that all employees are conversant with:

- The risk of the Construction project
- The controls documented in the H&S Plan
- The role of employees in ensuring health and safety on the construction site
- The emergency arrangements on site
- The general health and safety rules applicable to the site, considering the works is being performed with great exposure to any member of the public.

The Principal Contractor shall ensure that all employees have gone through the induction training before commencing duties on site.

The induction must include exposure to snakes while working in a greenfield site, adequate control mitigation must be implemented by the Principal Contractor. Control measures must be pro-active such as animal and plant search and rescue, active monitoring of animal movement on site. Wearing of appropriate personal protective equipment and sourcing the services of the snake catcher if required.

16.HEALTH AND SAFETY TRAINING

Competency of employees and ongoing training in H&S matters shall be documented by including a training and compency matrix in the H&S Plan.

The matrix in the H&S Plan shall be a training needs matrix and shall indicate competency requirements safe working processes:

- Each applicable safe work instruction must be included in the H&S Plan
- The method of training and ensuring competence must be included in the H&S Plan

The Principal Contractor shall ensure that specific pre-task health and safety instructions are given to all employees.

The methods for ensuring that training in safe work instructions and that pre-task instructions occur shall be described in the H&S Plan.

17.INSPECTION, MONITORING AND REPORTING

The Principal Contractor shall carry out regular safety planned task observations on high-risk activities and planned H&S inspections on the site and shall take steps to rectify any unsafe acts or condition.

The appointed Construction Manager and the Safety Officer shall perform regular inspections and document these in the H&S File.

The relevant inspection templates and the frequency of inspections shall be included in the H&S Plan.

The H&S Plan shall contain a list of all the inspection registers which shall be on site and templates of such must be available in the H&S File:

- The templates must correlate with the machinery and equipment listed on the site
- The inspector responsible for the inspection and maintenance of the register must be appointed in writing. Proof of training and competency in the performance of the inspections must be documented.

18.INCIDENTS, ACCIDENTS, NEAR MISSES AND EMERGENCIES

All incidents and accidents as per Section of the Act must be reported, recorded and investigated as per General Administration Regulation 8 & 9

Where a fatality or permanent disabling injury or incident occurs on the Construction site, the Client must ensure that the Principal Contractor provides the Provincial Director with a report contemplated in Section 24 of the Act and the report includes the measures that the Principal Contractor intends to implement to ensure a safe construction site.

(a) Incidents and Accidents

The Principal Contractor and his Contractors shall coordinate their investigation of all accidents/incidents where employees and non-employees were injured to the extent that he had to be referred for medical treatment by a doctor, hospital or clinic. The results of the investigation shall be entered into an accident/incident register, which must be updated with each accident/indent.

The Principal Contractor shall notify the relevant ETHEKWINI MUNICIPALITY Project Manager and or ETHEKWINI MUNICIPALITY OHS Specialist of any incident/accident within the Principal Contractors or his Contractors area of responsibility in writing as soon as possible.

Although the accident/incident is reported to the Client, the Principal Contractor has a responsibility and is required by law to report any Section 24 accidents and incidents to the Department of Labour. Any road traffic accident must be reported to the relevant authorities.

It is essential that The Principal Contractor demonstrate that corrective and preventative action has been taken to prevent a similar incident in future and that it is communicated to all The Principal Contractors affected staff. A copy of the investigation, corrective and preventative action taken as well as the attendance register of the employees who attended the discussion of the incident and the action implemented to prevent a similar incident, must be forwarded to the ETHEKWINI MUNICIPALITY Project Manager and or the ETHEKWINI MUNICIPALITY OHS Specialist.

Investigations must be completed for:

(a) Near Miss Incidents (To prevent it from becoming an incident)
(b) First Aid case Incidents

(c) Medical treatment case Incidents

(d) Fatalities

(b) Incident Reporting

The Principal Contractor shall provide the Employer with copies of all statutory reports required in terms of the Act within 7 days of the incident occurring. In addition, The Principal Contractor shall update monthly the Disabling Injury Frequency Ratio (DIFR) and display this information on a signboard at the site office.

The Principal Contractor is responsible for collecting, recording, calculating, and reporting his and his sub-contractors Health & Safety statistics to the ETHEKWINI MUNICIPALITY OHS Specialist.

The statistics should contain at least the following for all employees of all contractors working on the project:

- Total Number of workers
- Total Number of hours worked (on the ETHEKWINI MUNICIPALITY project)
- Total Number of Near Miss Incidents
- Total Number of First Aid case Incidents
- Total Number of Medical Treatment case Incidents (Excluding Section 24 type incidents)
- Total Number of Section 24 type Incidents
- Preventative actions taken on incidents that have occurred.
- Communication to employees and contractors of incidents and preventative actions.

19. AUDITS AND INSPECTIONS

The Client must ensure that periodic health and safety audits are conducted at intervals mutually agreed upon between the Principal Contractor and the Client at least every 30 days, the copy of the health and safety audit report must be provided to the Principal Contractor within seven days after the audit.

20. HOT WORK, FIRE RISKS, FIRE EXTINGUISHERS AND FIRE FIGHTING EQUIPMENT

No open fires are allowed on the site

No smoking is allowed on site, except in designated smoke areas, identified by the Principal Contractor. The H&S Plan shall include the Principal Contractor's arrangements for managing smoking on site.

All flammable products must be stored in an adequate storage facility; this process shall be documented in a method statement in the H&S Plan

The Principal Contractor shall provide suitable fire extinguishers which shall be serviced regularly in accordance with the manufacture's recommendations.

Safety signage shall be prominently displayed in all areas where fire extinguishers are are located. The Principal Contractor shall arrange for training of the relevant personnel, in the use of fire extinguishers.

The fire extinguisher inspection registers and the letter of appointment of the competent inspector shall be included in the H&S Plan.

No hot work is permitted on site unless appropriate screens, fire prevention, fire extinguishing and documented safe work permit system are all in place to prevent risk of veld fires and other related fires on the site.

The Principal Contractor shall include a hot work method statement in the H&S Plan for approval. Each person that performs hot work shall be trained in the use of a fire extinguisher and this training shall be documented in the H&S File.

21. LIVE ENERGY WORK AND ELECTRICAL RETICULATIONS AND MACHINERY.

The Principal Contractor shall appoint a competent electrician who shall ensure zero potential of all electrical reticulations worked on and who shall ensure that dedicated power sources are safely installed for the use during construction. A registered competent electrician shall also be responsible to ensure safe and compliant electrical installations

The Principal Contractor shall appoint a competent person to identify and inspect all exposed underground cables, overhead cables or any other electrical installations to ensure that these are not a hazard to any person.

The competent person shall certify and inspect all temporary electrical installations and machinery the frequency shall be determined in the H&S PLAN

The letters of appointment, proof of competency and registers applicable to these inspections shall be included in the H&S Plan

All electrical cables shall be assumed “alive” and where applicable, the Principal Contractor shall take adequate steps to ensure that all persons are prevented from accessing any electrical installations.

All existing electrical services must be assumed live at all times.

No live energy work shall be performed. Contractors will ensure that all energy is brought to zero potential that residual energy is purged that energy sources care switched off and locked out by all employees working in the danger zone and are tagged, prior to any work being performed on the energy source or reticulation

The Contractor shall include a zero Potential Lock out Tag Out method statement and safe instruction(s) in the H&S Plan.

The Principal Contractor shall ensure that all electrical testing equipment to be used on site has a valid calibration and that the calibration sticker is affixed to the equipment, clearly indicating the calibration date and the next due date.

Any unsafe condition shall be reported immediately to the Client and the Principal Contractor shall take immediate steps to prevent employees or members of the public from gaining access to the dangerous installation and the area surrounding it.

The Principal Contractor shall appoint a competent person to inspect all portable electrical tools including the leads. The letter of appointment and template of this inspection register shall be included in the H&S Plan

The Principal Contractor shall include a method statement for the safe use of portable electrical tools including the management of the hazards of extension leads

Where temporary installations are installed a C.O.C for these installations shall be included in the H&S File.

Where applicable the contractor shall include any electrical dangerous work procedure in the H&S Plan

Wayleave or permits must be obtained in those work sections whereby works are executed close to railway lines, underground service lines where applicable

Works is located between the PRASA and Transnet railway lines, the driveway access lies between the two existing rail bridges on Sea Cow Lake Road.

22. WORKING UNDER OR CLOSE TO OVERHEAD POWER LINES

The principal contractor shall ensure that the following requirements are duly considered and adhere to:

Passing underneath overhead lines to access the site

Some construction work and movement on site (i.e., employees and construction vehicles) may require work close to or passing under the overhead power line feeding to and from the adjacent electric sub- station. To ensure that vehicles passing under do not damage these lines and to reduce the risk of accidental contact the principal contractor should erect ground-level barriers to establish a safety zone to keep employees, other persons as well as construction vehicles and plant away from the wires.

These barriers should be constructed out of large steel drums filled with rubble, concrete blocks, wire fence earthed at both ends, or earth banks marked with posts.

a) If steel drums are used, they should be highlight by painting them with red and white horizontal stripes.

b) If a wire fence is used, put red and white flags on the fence wire posts.

c) Make sure the barriers can be seen at night, by using white or fluorescent paint or attaching reflective strips.

The principal contractor has to –

a) keep the number of passageways to a minimum.

b) define the route of the passageway using fences and erect goalposts at each end to act as gateways using a rigid, non- conducting material, for example timber or plastic pipe, for the goalposts, highlighted with, for example, red and white stripes. If the passageway is too wide to be spanned by a rigid non- conducting goalpost, the principal contractor has to use tensioned steel wire, earthed at each end, or plastic ropes with bunting attached. These should be positioned further away from the overhead line to prevent them being stretched and the safety clearances being reduced by plant moving towards the line;

c) ensure the surface of the passageway is levelled, firmed up and well maintained to prevent undue tilting or bouncing of the vehicles and/or equipment.

d) put warning notices at either side of the passageway, on or near the goalposts and on approaches to the crossing giving the crossbar clearance height and instructing

drivers to lower booms, tipper bodies etcetera and to keep below this height while crossing.

e) enforce strict speed control measures.

and f) make sure that the barriers and goalposts are maintained.

Working underneath overhead lines A part of the excavation work required to connect the new reservoir to the existing water in and outlet may be close to or underneath the overhead power line.

The following requirements shall apply before this work commences –

The principal contractor must confirm with the local authority what the standard is for working close to and under these overhead lines.

A risk assessment should be undertaken taking into account any situations that could lead to danger from the overhead wires, for example, consider whether someone may need to stand on top of a machine and lift a long item above their head, or if the combined height of a load on a low truck breaches the safe clearance distance.

If this type of situation could exist, applicable precautionary measures have to be taken.

⎪ Where there is a risk of contact from, for example, the upward movement of tipper trucks or employees carrying tools and equipment, the principal contractor should carefully assess the risks and precautionary measures.

⎪ Vehicles, plant, machinery, equipment, or materials that could reach beyond the safe clearance distance should not be taken near the line.

⎪ Under no circumstances may any part of plant or equipment such as ladders, poles and hand tools be able to be utilised within the danger zone or make contact with the lines.

⎪ The principal contractor should allow for uncertainty in measuring the distances and for the possibility of unexpected movement of the equipment due, for example, to wind conditions.

⎪ Long objects should be carried horizontally and close to the ground and vehicles positioned so that no part can reach into the danger zone, even when fully extended.

⎪ Construction vehicles and plant working underneath overhead lines such as excavators and TLBs should be modified by the suppliers with the addition of suitable physical restraints so that they cannot reach beyond the safe clearance distances,

measures should be put in place to ensure these restraints are effective and cannot be altered or tampered with.

⎫ Operators of high machinery should be instructed not carry out any work on top of the machinery near overhead power lines.

⎫ Make sure that employees, including any sub-contractors, understand the risks and are provided with instructions about the risk prevention measures.

⎫ Arrange for the work to be directly supervised by a competent person at all times who is familiar with the risks and can make sure that the required safety precautions are observed.

23. PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING.

The Principal Contractor shall ensure that every employee is issued with, and wears SANS-approved P.P.E. as per the conducted risk assessment.

Failure to use protective equipment as per the risk assessment shall require disciplinary intervention and this process shall be documented in the induction.

No employer shall in respect of anything which he is in terms of this Act required to provide or to do in the interest of health or safety of an employee make any deductions from any employee's remuneration or require or permit any employee to make any payment to him or to any other person

The H&S Plan shall contain an outline of the PPE to be used and the management of such PPE on site including the issuing of PPE, overnight storage and all disposal of PPE.

Disposal of PPE must conform to the Environmental Regulations.

24.OCCUPATIONAL HEALTH AND SAFETY SIGNAGE

The Principal Contractor shall erect and maintain quality safety signage The

signage shall include but is not limited to:

- The construction work permit number displayed at the entrance
- Access restrictions
- A sign indicating that all visitors must report to the site office and must be accompanied by the Principal Contractor when accessing the site

- The name and telephone number of the responsible person(s)
- Emergency telephone number(s)
- PPE to be worn at the particular site
- When falling objects may occur, relevant barricading and warning signs must be erected
- Excavations, heights structures, temporary structures and all risk areas must be indicated as per the specific methods defined in the H&S Plan.

25. DUTIES OF PRINCIPAL CONTRACTORS AND SUB-CONTRACTORS

Contractors and sub-contractors must be given a copy of the H&S specification and any additional specification issued by the Client and shall comply with these specifications integrally. All employers working on the site shall conform to the standard in the CHSS. All the duties of the Principal Contractor in this CHSS equally apply, in full, to contractors of such Principal Contractor and to sub-contractors of such contractors.

The Principal Contractor shall ensure that the comprehensive and updated list of all the contractors and sub-contractors on site includes:

- A reference to the agreements between the parties, including all contractors Section 37(2) agreements with the Principal Contractor
- The type of work being done
- The date of the approval of the H&S Plan
- The date of expiry of the COIDA certificate of good standing
- The date of the last monthly audit

The provisions of Regulation 7 of the Construction Regulations shall be followed in every detail.

26.FALL PROTECTION / FALL RISK WORK AND ROOF WORK

The construction work includes fall risk work

The Principal Contractor shall submit the name and curriculum vitae of the competent person who has been appointed to prepare the fall protection plan together with the signed letter of appointment in the H&S Plan.

The fall protection plan shall strictly comply with the requirements of the OHSA and the planning shall be commensurate with the fall risk work.

The fall protection plan shall include all fall risk work which is planned to be performed by contractors or sub-contractors

The Principal Contractor and any sub-contractor shall ensure that:

a. All risk work is planned and forms part of the safe task instructions; note that:

1. Work from a ladder or where ladders are used as access tool are potential exposures of employees to falling fro, off or into and such work is considered 'heights work'
2. There is no minimum or maximum height defining fall risk
3. Fall risk work done on an ad hoc basis of which or which form part of abnormal, or emergency processes shall be risk assessed, and employees shall be instructed in the safe work process prior to work commencing.

b. Only trained and competent persons with a valid certificate of fitness are permitted to perform fall risk work.
c. All medical certificates for fall risk work are issued by a registered occupational practitioner and are included in the H&S File.
d. Where the use of harnesses is indicated in the fall protection plan, the H&S Plan shall include the following:

The need for the use of fall prevention – or fall arrest harness
The safe application, attachment and maintenance process for harnesses
The type of harness and the type of hook to be used
The specific attachments point applicable to the fall risk work; any safety attachment shall be risk assessed by a competent person appointed in writing who shall also inspect and finally approve the attachment
The method of storing the harness when not in use
The method and register for the safety inspection and harness. A fall recovery method statement.

e. A method statement shall be included to control the safe placement of sheeting on the roof structure during construction; the number of sheets per pack, the method of strapping packs for lifting and for the placement on site and the attachment of packs to the roof structure in such a manner that inclement weather risk is mitigated.

26.(a)LADDERS

f. Ladders shall be compliant to statutory requirements
g. Ladders shall only be used for the purpose for which they are designed for.
h. Ladders shall be inspected regularly, and the record of the inspection shall be kept in the H&S File
i. A-Frame ladders shall have a patent spreader bar system
j. Ladders shall extend at least 900mm above any level or opening accessed with a ladder.
k. No vertical ladders shall be accessed by any person unless firmly attached at the bottom or top or held in place by a fixed installation or buddy.

27. PUBLIC HEALTH AND SAFETY

The site shall at all times be secured to prevent the unauthorized access of persons to construction risk areas and processes taking in consideration the ----------proposed alignment

Appropriate health and safety signage shall be posted and access control to site must be exercised via a single access point.

All members entering the site must indicate in what capacity they are visiting the site.

The access point must be designed and constructed to allow for temporary parking, entry of construction vehicles, entry of personnel transport vehicles and entry of individual workers and other persons.

The principal Contractor shall ensure that each person visiting the site shall be inducted to the site and such abridged induction shall outline the hazards from onsite activities and the precautions to be observed to avoid or minimize those risks

Visitors must only enter when accompanied by a responsible person designated by the Principal Contractor.

28. NIGHT; WEEK –END WORK AND FATIGUE

No night or weekend work shall be performed unless authorized by the Principal Agent or Lead Engineers

Where weekend work is planned the Principal Contractor shall ensure that its construction supervisor is on site, this applies even if only contractors or subcontractors are working on the site

Where weekend work is planned each contractor or sub-contractor shall ensure that its construction supervisor is on site, this applies even if the Principal Contractor's manager or supervisor is on the site.

The site risk assessment shall include a fatigue risk assessment. Abnormal working hours shall be included in the risk assessment. A fatigue management procedure shall be defined in the H&S Plan

29.CRANES AND LIFTING OPERATIONS

The following shall be applied to any crane used on the site, including truck mounted cranes on delivery vehicles:

Each shall have (in the cab or operating are) the following legal documents on site at all times:

- The latest and up-to-date load certificate of the crane
- A record of the 6 monthly inspection of the crane by a registered inspector
- The crane operator(s) current crane licence
- The crane operator(s) medical certificate of fitness, issued by an occupational medical practitioner
- The inspection registers or certification of 3 monthly inspections of all lifting equipment used with the crane.

Where applicable, the H&S Plan shall include the method statement for each erection, maintenance, inspection and dismantling of the crane.

The H&S Plan shall include the method statement for safe use of the crane, including the method of communication, the protection of fall zones and the method of determining whether the weather permits safe crane work.

Any fixed crane's load test certificate shall be included in the H&S File

All lifting equipment and gear used on site shall be identified, SWL-indicated and listed in the register contained in the H&S File

A template inspection register of the lifting gear shall be included in the H&S Plan

The H&S Plan shall include a specific method statement listing the planned lifts and the planned methods of attachment and rigging

Where man-lift equipment is used, the Principal Contractor shall ensure compliance with Driven Machinery Regulation 18 and that competent persons are appointed in writing to ensure:

- That all scissors lifts, cherry pickers, forklift with man- cage or any other lifting machine used to lift personnel are used only by a trained and competent operator in possession of a competency certificate issued by an accredited provider who holds a valid accreditation issued by an authorised body, in terms of the SAQA Act, and is approved by the Chief Inspector in terms of the Driven Machinery Regulation 18
- That all lifting machines are load tested and inspected as required in the Driven Machinery Regulation 18 and that the records thereof are either with the machine or in the Principal Contractor's H&S File.

The Principal Contractor shall ensure that deliveries using cranes comply with the above requirements and that all legal documents are kept in the cab of the delivery truck whilst on the Client's site.

Complex lifting or heavy lifts may require a documented lifting plan.

30.STORAGE AND USE OF FLAMMABLE LIQUIDS

No flammable substances must be stored on site unless these are stored in a flammable store or cabinet approved by the Municipal Chief Fire Officer, no other materials shall be stored in the flammable store or cabinet

Where required the H&S Plan shall include a method statement detailing the safe use, storage, decanting and spill controls for all flammable liquids used and stored on site.

31. EXPLOSIVE FASTENING DEVICE

The principal Contractor shall submit proof of competency and the appointment letter of the person in charge of explosives actuating fastening devices and of the person in charge of the issuing and collection of cartridges and nails. This shall be placed in the H&S Plan.

The H&S Plan shall include the method statement for the safe use of explosives actuating fastening devices including the type PPE, barricading and warning notice which the Contractor intends to use and the method of accounting for cartridges and nails.

The H&S Plan shall include proof of training and competency of all operators using explosive actuating fastening devices.

A template inspection register of explosive actuating fastening device shall be included in the H&S Plan.

A template record for the issuing and collection of cartridges and nails shall be included in the H&S Plan.

For the purpose of acquisition / transport of the cartridges the Principal Contractor is required to hold a permit in terms of the Explosive's Act. This permit for the transportation of Blank cartridges used in Power-Actuated Tools shall be placed in the H&S Plan:

- Application for registration, licenses and permits must be submitted by the Chief Inspectors Office in Pretoria.
- The Principal Contractor is required to be in possession of a continuous transport license but is not required in terms of the Explosives Act to hold a permit for the use of the blank cartridges.
- Once the cartridges are delivered to the appointed responsible person is then required to ensure that the Regulations governing the safe use of explosive powered tools in terms of the Construction Regulation 21 of the Occupational Health and Safety Act, Act 85 of 1993 are complied with.

32. STRUCTURES

A contractor must ensure that all reasonably practicable steps are taken to prevent the uncontrolled collapse of any new or existing structure or any part thereof, which may become unstable or is in a temporary state of weakness or instability due to the carrying out of construction work.
*N*o structure or part of a structure is loaded in a manner which would render it unsafe.
All drawings pertaining to the design of the relevant structure are kept on site and are available on request to an inspector, other contractors, the client and the client's agent or employee.

33. OCCUPATIONAL HEALTH AND HYGIENE

The H&S Plan shall include:

- The Occupational Hygiene surveys which are planned as a result of the baseline risk assessment if required
- All medical certificates of fitness for all employees working on the site.

- All placements of medical surveillance records of employees who are or required to be under medical surveillance, the record may be the latest periodical medical examination report.

Medical fitness for duty

A Principal Contractor must ensure that all his or her employees have a valid medical certificate of fitness specific to the construction work to be performed and issued by an Occupational Health Practitioner in the form of Annexure 3.

All contractor employees shall undergo medical examinations and be certified fit for duty by an Occupational Health Practitioner before they are allowed to work on site.

It is recommended and in the best interest of The Principal Contractor to implement pre- employment as well as exit medical surveillance, especially with regards to Section 8 of the Noise Induced Hearing Loss Regulation.

First Aid

According to GSR 3(4), where more than 10 employees are employed at a workplace/worksite, The Principal Contractor shall ensure that there is at least one trained first aider for every group of 50 employees at the workplace/site. First Aid boxes must be provided where more than 5 employees are employed and must be readily available and accessible for the treatment of injured persons at the workplace.

To ensure immediate treatment of an injured person, it is recommended that all work crews have at least one trained level 1 First Aider, with a fully stocked first aid box, irrespective of the number of people in the work crew. This is especially important when contractors work at great distances from the nearest emergency facility or town. These people shall be appointed in writing as the First Aiders with their certificates attached as proof of competency.

The minimum contents of the first aid box shall be as per the list supplied in the General Safety Regulations.

All treatments done must be recorded on a register and kept with the first aid box. A trained and appointed First Aider must be responsible for the first aid box and its content. Used content must be replenished as soon as possible.

In order to ensure prompt response at the emergency facility it is recommended that the W.Cl 2 forms be partially completed with the Employers' details.

Hygiene Facilities

The Principal Contractor and his Contractors shall ensure compliance to Section 30 of the Construction Regulations with regards to facilities on the construction site as well as where accommodation is provided to employees on remote sites. The Principal Contractor shall ensure that the facilities are kept clean at all times, either through a service provider or self-employed persons. The Principal Contractor shall provide employees with at least one sanitary facility for each sex and for every 30 workers, changing facilities for each sex and sheltered eating areas. The sheltered eating areas shall be suitably constructed and in close proximity to the workforce. Under no circumstances will workers be allowed to eat or rest in bushy areas or under poorly constructed make-shift shelter.

34. STACKING AND STORAGE ON CONSTRUCTION SITE

A Principal Contractor must, in addition to compliance with the provisions for the stacking of articles in the General Safety Regulations, 2003, ensure that—

A competent person is appointed in writing with the duty of supervising all stacking and storage on a construction site;

*A*dequate storage areas are provided; *T*here are demarcated storage areas; and *s*torage areas are kept neat and under control.

35.Weather conditions

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:
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 employees being restricted to:
c. eating area fitted with a lightning mast workshops
d. inside buildings

e. No work is allowed in electrical storms on top of open structural steel, even when earthed.
f. No work is allowed on heights when the lightning is within a 10-kilometer radius.
g. After inclement weather on-site risk assessments will be reviewed to include wet conditions.

Lifting equipment operations during inclement weather

a) Lifting operations will stop during lightning within a 10 kilometre radius and wind above 28 km/h, and the lifting equipment operator will not be allowed to leave the lifting equipment with the booms extended.
b) Lifting operations will stop during rain, rigging and hand lifts.
c) Booms on all lifting equipment will be retracted.
d) All rigging operations will stop and employees will be removed from site.

Construction work done during rain

- During rainy conditions all work on steel structures will stop.
- No electrical tools will be used during rainy weather in open areas.
- Work can be done in waterproof areas where there is a zero risk for electrocution.
- Areas that may be cleared for work during rain includes workshops offices work on ground level with the provision that the area is maintained in a safe dry condition

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
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.

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:

1. route planning
2. speed reduction
3. planning for emergencies
4. driving precautions for slippery surfaces
5. visibility hazards

Heat Stress

Working in very hot conditions can cause illness when heat stress overcome the body's temperatures regulatory system resulting in heat strokes, heat exhaustion, dehydration, heat syncope, heat cramps and heat rash.

Considering the elevated temperatures experienced in the KwaZulu Natal region and the arid and drought like conditions, it is imperative that the PC develop a Heat Stress Management Plan in order to reduce the risk associated with heat stress

36. WASTE MANAGEMENT

The Principal Contractor shall comply with all applicable and relevant Waste management legislation, as well as municipal bylaws applicable to waste management.

The Principal Contractor shall remove all waste generated at the construction site on a daily basis or as soon as possible after generation to ensure good housekeeping at all times. The Principal Contractor shall have a Waste Management Plan which must be implemented on the construction site and which will have the objective to ensure that waste is managed according to the Waste Management Hierarchy: o Reduce what you can. If you cannot reduce then, o Re-use what you can. If you cannot re-use then, o Recycle what you can. What you cannot recycle, o Convert into energy sources. If it cannot be converted to an energy source, o Dispose of in a landfill – this is only to be done as a last resort and disposed without endangering human health and without using processes or methods which could harm the environment.

37.ACCESS, TRAFFIC MANAGEMENT AND CAMP SITE

All employees of all contractors working at the construction site shall access the site in vehicles which have seats firmly secured and adequate for the number of employees to be transported this means personnel may be transported in the load body of a LDV or a truck and that all construction personnel must be brought to site in a bus, taxi or inside the cab of a vehicle.

No employee shall be transported together with goods or tools.

Each vehicle shall have a serviced portable fire extinguisher at all times

The Principal Contractor shall ensure that all employees and visitors are aware and comply with the sites safe speed restriction defined by the Principal Contractor at the hand of the risk assessment.

All activities planned to occur in the campsite shall be risk assessed and planned, this include risk controls for the parking of staff and visitors' vehicles parking of mobile plant and machinery dedicated storage areas, planned and compliant stacking practices, traffic controls, including the safe separation of pedestrians (employee) transport from risk areas...

When working in or near the road where change of traffic of flow or warning of motorist is needed in SADC Road Traffic Signs Manual Volume 2 Part 13 must be used, in order to warn oncoming traffic with the appropriate display of signage. The contractor shall

submit a Traffic Management Plan and Pedestrian Control Plan indicating relevant measures for all construction work areas. Such Plan must be approved before any road works may commence. Specific emphasis to be placed on vehicle as well as pedestrian traffic signage.

Prior to commencement of road works the contractor shall have all the required road traffic warning signage available as stipulated in his approved Traffic Management Plan. Such measures shall also include warning signage, reflectors and signals at night. Where needed water filled yellow Jersey Barriers / steel barriers or concrete shall be used. Where required flag person(s) to be trained and appointed. The implementation of the Traffic Management Plan must be monitored continuously, and daily inspections need to be carried out by a competent appointed person.

38.STAFFING ON SITE

The Principal Contractor shall compile a list of all employees on site indicating:

- Name and ID number
- Designation (job title)
- Date of OHS Induction on site
- Date of expiry of medicals

The employee list shall be included in the start-up H&S File and maintained thereafter.

The H&S Plan shall include a method statement on communication on site this shall address:

- Language and any transition methods
- Communication methods within and between teams (radio controls and permits)
- Emergency communication methods
- Regular planned meeting and communication sessions planned by the Principal Contractor.

39. DESIGN RISK MANAGEMENT

The PC must ensure that they have the latest designs on file i.e. Drawings, Loadings, Specifications. The PC must further ensure that a competent temporary works designer is appointed to inspect and approve the temporary works.

Design – ***in relation to any structure, includes drawings, calculations, design detail and specifications'***

Temporary works must be properly designed and signed off by a competent person who has sufficient experience in the design of the type of temporary work in question to be able to assess the design. The competent person/(s) appointed must either be a registered professional engineer or technologist. The appropriate competent person is to be appointed to manage and monitor such works to the satisfaction of the engineer and the H&S Agent. Records and registers are to be kept properly completed and kept in the H&S file. If temporary works are to be erected by a Contractor, this must be notified to the Engineer / H&S Agent.

As per the Government Gazette, 2 June 2017, no. 40883, guidelines, Regulation 12 (1) is three functions competent person(s) appointment. The temporary works designer could be one person or different persons to design, inspect and or approve [read with Regulation 6 (g); (h) and (i). Temporary works designer(s) must be mandated by the Contractor to perform any or all the three functions. A risk bases methodology should be applied in respect of competencies for temporary works.
Failure to do so will be considered serious offence

40. ENVIRONMENTAL MANAGEMENT

A Project Environmental Management Plan (EMP) shall be developed which must be adhered to. The objective of the EMP is to manage the impacts of construction identified during the course of the Environmental Impact Assessment (EIA) process, as well as during the course of construction. This is document and will be continuously updated in order to reflect current site conditions and address any issues identified during the course of construction. The EMP therefore serves as an action plan for the implementation of mitigation measures proposed for the construction work.

41. NOTIFICATION OF CONSTRUCTION WORK

The Principal Contractor must at least 7 days before that work is to be carried out notify the provincial director in writing in a form similar to Annexure 2 if the intended construction work will—
Include excavation work.

Include working at a height where there is risk of falling.

Include the demolition of a structure; or

Include the use of explosives to perform construction work.

A contractor who intends to carry out construction work that involves construction of a single storey dwelling for a client who is going to reside in such dwelling upon completion, must at least 7 days before that work is to be carried out notify the provincial director in writing in a form similar to Annexure 2

42.LIFT, ESCALATOR AND PASSENGER CONVEYOR

South African legal framework (mandatory)Lift, Escalator and Passenger Conveyor Regulations, 2010 (OHS Act) These regulations:

- Require safe design, installation, operation, maintenance, and inspection
- Define competent persons, inspections, and certification requirements
- Make compliance with SANS standards compulsory

These are the following Key SANS Safety Standards (MANDATORY IN SA)

The 2022 Government Gazette formally incorporates the following:

Lifts (Elevators)

- SANS 1545-1 → Electric lifts (passenger & goods)
- SANS 1545-2 → Hydraulic lifts
- SANS 1545-3 → Lifts for persons with disabilities
- SANS 1545-5 → Goods-only lifts
- SANS 1545-6 → Rack and pinion lifts
- SANS 1545-9 → Fire resistance of landing doors
- SANS 50081-20 & 50081-50 → Modern safety requirements & testing for lifts

- **Escalators & Passenger Conveyors (Moving Walks)**

- SANS 1543 → Escalators and passenger conveyors
- SANS 21-1 → Safety rules for construction & installation

These standards are legally enforceable under OHS regulations., Contractor must follow all above requirements

Key International Standards (Best Practice / Referenced)

Even in South Africa, these are widely used for design and auditing:

Lifts

- EN 81 series
  - EN 81-20 → Passenger & goods passenger lifts

    - EN 81-50 → Design rules, calculations, testing
    - EN 81-70 → Accessibility for disabled persons
      → Covers design, installation, safety devices, and accessibility
- **ISO 22201-1**
    - Safety-related programmable electronic systems (SIL compliance)

Escalators & Passenger Conveyors

- EN 115 (series)
    - EN 115-1 → Construction and installation
    - EN 115-2 → Safety improvement for existing units
      → Includes emergency stops, sensors, load limits, structural integrity
- ISO 8103-1
    - Safety requirements and hazard identification

Energy & Performance

- **ISO 25745**
    - Energy performance of lifts and escalators

Core Safety Requirements (Practical Summary)

Across all these standards, the following must be ensured:

Design & Installation

- Adequate structural strength and load capacity
- Safe access, guarding, and emergency exits
- Fire protection (doors, shafts, materials)
- Accessibility (disabled-friendly design)

Safety Devices

- Emergency stop buttons (escalators & conveyors)
- Overspeed governors (lifts)
- Door interlocks and safety edges
- Obstruction sensors and automatic shutdown systems
- Alarm and communication systems

Electrical Safety

- Proper earthing and insulation
- Protection against electrical faults
- Compliance with wiring codes (e.g., SANS 10142)

Operation & Maintenance

- Routine inspections and testing
- Preventive maintenance programme
- Use of competent lift service providers
- Record keeping (logbooks, inspection reports)

Inspection & Certification

- Initial commissioning inspection
- Periodic inspection (typically every 12 months)
- Load testing and safety verification
- Issuing of a Certificate of Compliance

Employer / User Responsibilities

As per OHS regulations:

- Ensure equipment is safe and maintained
- Appoint a competent lift service provider
- Ensure regular inspections and tests
- Keep records and certificates on-site
- Report incidents / failures that may endanger safety

Safety Officer Focus (Important for Your Role)

Valid inspection certificates displayed
Maintenance contract in place
No overdue inspections
Emergency systems functional
Safe access to machine rooms
Lock-out / isolation procedures during maintenance
Incident reporting and investigation procedures

In **Conclusion**

To comply legally and ensure safe operation:

- Follow OHS Act + Lift Regulations (2010, amended 2022)
- Apply SANS 1545, SANS 1543, SANS 21-1 (mandatory)
- Align with EN 81 and EN 115 (best practice)
- Implement strict inspection, maintenance, and certification system as per client requiremen