Client: OR Tambo District Municipality | Project name: Lusikisiki Sewer Reticulation | Contract number: MIS 232949

# **CLIENT OHS SPECIFICATION**

# **O.R. TAMBO DISTRICT MUNICIPALITY**

CLIENT

HATCH

CONSULTING ENGINEERS / PROJECT MANAGERS

Compiled by Trapro SHE Consulting

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# **ABBREVIATIONS**

AIA: Approved Inspection Authority CHSO: Construction Health & Safety Officer **CC: Compensation Commissioner CR: Construction Regulations 2014** DME: Department of Mineral and Energy **DMR: Driven Machinery Regulations** DoL: Department of Labour FEMA: Federated Employers Mutual Association **GAR:** General Administration Regulations **GSR:** General Safety Regulations HIRA: Hazard Identification & Risk Assessment H&S: Health and Safety OHSA: Occupational Health and Safety Act No. 85 of 1993 (as amended) **OHSS: Occupational Health and Safety Specification** PSHSS: Project Specific Health and Safety Specification **PC: Principal Contractor PPE:** Personal Protective Equipment **PPC: Personal Protective Clothing** ER: Engineer's Representative **RHCS: Regulations for Hazardous Chemical Substances** SANS: South African National Standards (Authority) SMME: Small, Micro, Medium Enterprise SWP: Safe Work Procedure

HCS: Hazardous chemical substances

#### **CS1** General Statement and Interpretations

Occupational Health and Safety Act, Act 85 of 1993 shall apply to this Contract. The Construction Regulations promulgated on 7 February 2014 and incorporated into the said Act by Government Notice R. 84, published in Government Gazette 37305 apply to any person involved in construction work. These regulations are hereinafter referred to as "the Construction Regulations" and the said Act as "the Act".

Definition as the Construction Regulations 2014 applicable to this Health and Safety Specification:

"Agent" means a competent person who acts as a representative or a client;

"angle of repose" means the steepest angle of a surface at which a mass of loose or fragmented material will remain stationary in a pile on the surface, rather than sliding or crumbling away;

"Bulk mixing plant" means machinery, appliances or other similar devices that are assembled in such a manner so as to be able to mix materials in bulk for the purposes of using the mixed product for construction work; "Client" means any person for whom construction work is being performed;

"competent person" means a person who has, in respect of the work or task to be performed, the required knowledge, training and experience and, where applicable, qualifications, specific to that work or task: Provided that where appropriate qualifications and training are registered in terms of the provisions of the National Qualification Framework Act, 2000 (Act No.67 of 2000), those qualifications and that training must be regarded as the required qualifications and training; and is familiar with the Act and with the applicable regulations made under the Act;

"construction manager" means a competent person responsible for the management of the physical construction processes and the coordination, administration and management of resources on a construction site; "construction site" means a workplace where construction work is being performed;

"construction supervisor" means a competent person responsible for supervising construction activities on a construction site;

"construction vehicle" means a vehicle used as a means of conveyance for transporting persons or material, or persons and material, on and *off* the construction site for the purposes of performing construction work" construction work" means any work in connection with-

- 1. the construction, erection, alteration, renovation, repair, demolition or dismantling of or addition to 5 a building or any similar structure; or
- 2. the construction, erection, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water reticulation system; or the moving of earth, clearing of land, the making of excavation, piling, or any similar civil engineering structure or type of work;

"construction work permit" means a document issued in terms of regulation 3;

"contractor" means an employer who performs construction work;

"demolition work" means a method to dismantle, wreck, break, pull down or knock down of a structure or part thereof by way of manual labour, machinery, or the use of explosives;

"design" in relation to any structure, including drawings, calculations, design details and specification - "designer" means a competent person who:-

- 1. prepares a design;
- 2. checks and approves a design;
- 3. arranges for a person at work under his or her control to prepare a design, including an employee of that person where he or she is the employer; or
- 4. designs temporary work, including its components;
- 5. an architect or engineer contributing to, or having overall responsibility for a design;
- 6. a building services engineer designing details for fixed plant;
- 7. a surveyor specifying articles or drawing up specifications;
- 8. a contractor carrying out design work as part of a design and building project; or

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9. an interior designer, shop-fitter or landscape architect;

"excavation work" means the making of any man-made cavity, trench, pit or depression formed by cutting, digging or scooping;

"explosive actuated fastening device" means a tool that is activated by an explosive charge and that is used for driving bolts, nails and similar objects for the purpose of providing fixing;

"fall arrest equipment" means equipment used to arrest a person in a fall, including personal equipment, a body harness, lanyards, deceleration devices, lifelines or similar equipment;

"fall prevention equipment" means equipment used to prevent persons from falling from a fall risk position, inducing personal equipment, a body harness, lanyards, lifelines or physical equipment such as guard-rails, screens, barricades, anchorages or similar equipment;

"fall protection plan" means a documented plan, which includes and provides for -

- 1. all risks relating to working from a fall risk position, considering the nature of work undertaken;
- 2. the procedures and methods to be applied in order to eliminate the risk of falling;
- 3. and a rescue plan and procedures;

"fall risk" means any potential exposure to falling either from, off or into;

"health and safety file" means a file, or other record containing the information in writing required by these Regulations "health and safety plan" means a site, activity or project specific documented plan in accordance with the client's health and safety specification;

"health and safety specification" means a site, activity or project specific document prepared by the client pertaining to all health and safety requirements related to construction work;

"material hoist" means a hoist used to lower or raise material and equipment, excluding passengers;

"medical certificate of fitness" means a certificate contemplated in regulation 7(8);

"mobile plant" means any machinery, appliance or other similar device that is able to move independently, and Is used for the purpose of performing construction work on a construction site;

"person day" means one normal working shift of carrying out construction work by a person on a construction site "principal contractor" means an employer appointed by the client to perform construction work; "Professional Engineer or Professional Certificated Engineer" means a person holding registration as either a Professional Engineer or Professional Certificated Engineer in terms of the Engineering Profession Act, 2000 (Act No. 46 of 2000);

"Professional Technologist" means a person holding registration as Professional Engineering Technologist in terms of the Engineering Profession Act, 2000.

"provincial director" means the provincial director as defined in regulation 1 of the General Administrative Regulations, 2003;

"scaffold" means a temporary elevated platform and supporting structure used for providing access to and supporting workmen or materials or both;

"shoring" means a system used to support the sides of an excavation and which is intended to prevent the cave-in or the collapse of the sides of an excavation;

"structure" means-

- any building, steel or reinforced concrete structure (not being a building), railway line or siding, bridge, waterworks, reservoir, pipe or pipeline, cable, sewer, sewage works, fixed vessels, road, drainage works, earthworks, dam, wall, mast, tower, tower crane, bulk mixing plant, pylon, surface and underground tanks, earth retaining structure or *any* structure designed to preserve or alter any natural feature, and any other similar structure;
- 2. any falsework, scaffold or other structure designed or used to provide support or means of access during construction work; or
- any fixed plant in' respect of construction work which includes installation, commissioning, decommissioning or dismantling and where any construction work involves a risk of a person falling;

"temporary works" means any falsework, formwork, support work, scaffold, shoring or other temporary structure designed to provide support or means of access during construction work;

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"the Act" means the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993);

Refer to Occupational Health and Safety Act, Act 85 of 1993 and regulations for more definitions

# **CS1.1 Health and Safety Specifications and Plans**

# (a) Employer's Health and Safety Specification

The Employer's Health and Safety Specification will be included in the tender documents as part of the Project Specifications.

# PURPOSE:

The Employer is obligated to implement measures to ensure the health and safety of all people and properties affected under its custodianship or contractual commitments, and is further obligated to monitor that these measures are structured and applied according to the requirements of these Health and Safety Specifications.

The purpose of this specification document is to provide the relevant Principal Contractor (and his /her contractor) with any information other than the standard conditions pertaining to construction sites which might affect the health and safety of persons at work and the health and safety of persons in connection with the use of plant and machinery; and to protect persons other than persons at work against hazards to health and safety arising out of or in connection with the activities of persons at work during the carrying out of construction work. The Principal Contractor (and his /her contractor) is to be briefed on the significant health and safety aspects of the project and to be provided with information and requirements on inter alia:

1) Safety considerations affecting the site of the project and its environment;

2) Health and safety aspects of the associated structures and equipment;

3) Submissions on health and safety matters required from the Principal Contractor (and his /her contractor); and

4) the Principal Contractor's (and his /her contractor) health & safety plan.

Serve to ensure that the Principal Contractor (and his /her contractor) is fully aware of what is expected from him/her with regard to the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) and the Regulations made there-under including the applicable safety standards, and in particular in terms of Section 8 of the Act.

To inform the Principal Contractor that the Occupational Health and Safety Act, 1993 (Act 85 of 1993) in its entirety shall apply to the contract to which this specification document applies.

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# (b) The Contractor's Health and Safety Plan

The successful Tenderer shall, on receipt of notification that he has been awarded the contract, submit without delay his own documented Health and Safety Plan for the execution of the work under the contract. His Health and Safety Plan must at least cover the following:

- (i) a proper risk assessment of the works, risk items, work methods and procedures in terms of Construction Regulations 2014;
- (ii) Pro-active identification of potential hazards and unsafe working conditions;
- (iii) Provision of a safe working environment and equipment;
- (iv) Statements of methods to ensure the health and safety of subcontractors, employees and visitors to the site, including safety training in hazards and risk areas; monitoring health and safety on the site of works on a regular basis, and keeping of records and registers as provided for in the Construction Regulations;

(v) Details of the Construction manager, alternate construction manager, Construction Supervisor, Risk assessor, Construction Safety Officer, First aider and other competent persons he intends to appoint for the construction works in terms of Construction Regulation and other applicable regulations; and details of methods to ensure that his Health and Safety Plan is carried out effectively in accordance with the Construction Regulations 2014.

The Contractor's Health and Safety Plan will be subject to approval by the Employer, or amendment if necessary, before commencement of construction work. The Contractor will not be allowed to commence work, or his work will be suspended if he had already commenced work, before he has obtained the Employer's written approval of his Health and Safety Plan.

Time lost due to delayed commencement or suspension of the work as a result of the Contractor's failure to obtain approval for his safety plan, shall not be used as a reason to claim for extension of time or standing time and related costs

**CS1.1.1** The Contractor shall, in submitting his tender, demonstrate that he has made provision for the cost of compliance with the specified health and safety requirements, the Act and the Construction Regulations.

**CS1.1.2** The Contractor shall consistently demonstrate his competence and adequacy of resources to perform the duties imposed on the Contractor in terms of this Specification, the Act and the Construction Regulations.

# CS1. 2 Indemnity of Employer and his Agents (Mandatory agreement OHS Act 37(2))

a) The annexures to this Contract Document contain a "Mandatory Form of Authority and Agreement in terms of Section 37(2) of the Occupational Health and Safety Act, No. 85 of 1993" which agreement shall be entered into and duly signed by both the Employer and Contractor prior to commencement with work. A copy of the signed agreement shall be included in the Contractor's health and safety plan.

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b) Any acceptance, approval, check, certificate, consent, examination, inspection, instruction, notice, observation, proposal, request, test or similar act by either the Employer, any of his agents or the Engineer (including absence of disapproval) shall not relieve the Contractor from any responsibility he has under the Contract, the Act and the Construction Regulations, including responsibility for errors, omissions, discrepancies and non-compliances.

# CS1.3 Scope

The scope of this Occupational Health and Safety Specification is to address the reasonable and foreseeable aspects of occupational health and safety management which will be affected by the contract work.

The specification will provide the requirements that the Principal Contractor and other contractors shall comply with in order to reduce the risks associated with the contract work which may lead to incidents causing injury and/or ill health or degradation of the environment, to a level as low as reasonably practicable and possible.

# The Contractor shall ensure that it is fully conversant with the requirements of this Specification.

This Specification is not intended to supersede the Act nor the Construction Regulations. Those sections of the Act and the Construction Regulations, which apply to the scope of work to be performed by the Contractor in terms of this Contract, continue to be a legal requirement of the Contractor. The principal Contractor will be appointed in writing to be in overall control of the Construction site.

# Extent of works

- a) A rectangular reinforced concrete biological reactor complete with reinforced concrete aerator bridges and stainless steel hand railing, access stairs and platforms where necessary. The capacity of biological reactor calculated based on the flow. The tank is rectangular in shape, 5m deep, 32.250m long and has a value of 48.75m<sup>3</sup>
- b) Once circular reinforced concrete settling tank with nominal diameter of 14.20m and depth of 3.4m.
- c) 7 days water tight test for two concrete structure
- d) Roads and bulk earthworks
- e) Pavement for parking
- f) Sludge drying beds access road
- g) All necessary bulk earth works
- h) Pipe work to connect the new structures to existing (HDPE)
- i) Landscaping of the treatment plant
- j) Hand railing of the treatment plant
- k) Concrete palisade fence
- I) Guard house

# **CS1.4** Responsibilities

# CS1.4.1 Client

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- The Client or his appointed Agent on his behalf will appoint each Principal Contractor for this project or phase/section of the project in writing for assuming the role of Principal Contractor as intended by the Construction Regulations and determined by the Bills of Quantities.

- The base line risk assessment will be issued to the appointed contractor on request

- The Client or his appointed Agent on his behalf shall discuss and negotiate with the Principal Contractor the contents of the health and safety plan of the both Principal Contractor and Contractor for approval.

- The Client or his appointed Agent on his behalf will take reasonable steps to ensure that the health and safety plan of both the Principal Contractor and Contractor is implemented and maintained. The steps taken will include periodic audits at intervals of at least once every month and such visits may be done without any form of notification to the PC to ensure continuous compliance.

- The Client or his appointed Agent on his behalf will prevent the Principal Contractor and/or the Contractor from commencing or continuing with construction work should the Principal Contractor and/or the Contractor at any stage in the execution of the works be found to:

• have failed to have complied with any of the administrative measures required by the Construction Regulations in preparation for the construction project or any physical preparations necessary in terms of the Act;

- have failed to implement or maintain their health and safety plan;
- have executed construction work which is not in accordance with their health and safety plan; or

• act in any way which may pose a threat to the health and safety of any person(s) present on the site of the works or in its vicinity, irrespective of him/them being employed or legitimately on the site of the works or in its vicinity.

# Note: Trapro SHE Consulting as the Client SHE agent reserves the right to stop any construction activities which may pose a threat to the health and safety of persons on site.

# **CS1.4.2** Principal Contractor:

- The Principal contractor is urged to conduct its base line risk assessment during the briefing session/clarification meeting.

- The Principal Contractor shall accept the appointment under the terms and Conditions of Contract. The Principal Contractor shall sign and agree to those terms and conditions and shall, before commencing work, notify the Department of Labour of the intended construction work in terms of Regulation 4 of the Construction Regulations. Annexure 2 of the Construction regulations 2014 contains a "Notification of Construction Work" form. The Principal Contractor shall submit the notification in writing prior to commencement of work and inform the Client or his Agent accordingly.

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- The Principal Contractor shall ensure that he is fully conversant with the requirements of this Specification and all relevant health and safety legislation. This Specification is not intended to supersede the Act nor the Construction Regulations or any part of either. Those sections of the Act and the Construction Regulations which apply to the scope of work to be performed by the Principal Contractor in terms of this contract (entirely or in part) will continue to be legally required of the Principal Contractor to comply with. The Principal Contractor will in no manner or means be absolved from the responsibility to comply with all applicable sections of the Act, the Construction Regulations or any Regulations proclaimed under the Act or which may perceivable be applicable to this contract.

- The Principal Contractor shall provide and demonstrate to the Client a suitable and sufficiently documented health and safety plan based on this Specification, the Act and the Construction Regulations, which shall be applied from the date of commencement of and for the duration of execution of the works. This plan shall, as appendices, include the health and safety plans of all Sub-contractors for which he has to take responsibility in terms of this contract.

- The Principal Contractor shall provide proof of his registration and good standing with the Compensation Fund or with a licensed compensation insurer prior to commencement with the works.

- The Principal Contractor shall consistently demonstrate his competence and the adequacy of his resources to perform the duties imposed on the Principal Contractor in terms of this Specification, the Act and the Construction Regulations.

- The Principal Contractor shall ensure that a copy of his health and safety plan is available on site and is presented upon request to the Client, an Inspector, Employee or Sub-contractor.

- The Principal Contractor shall ensure that a health and safety file, which shall include all documentation required in terms of the provisions of this Specification, the Act and the Construction Regulations, is opened and kept on site and made available to the Client or Inspector upon request. Upon completion of the works, the Principal Contractor shall hand over a consolidated health and safety file to the Client.

- The Principal Contractor shall, throughout execution of the contract, ensure that all conditions imposed on his Sub-contractors in terms of the Act and the Construction Regulations are complied with as if they were the Principal Contractor.

- The Principal Contractor shall from time to time evaluate the relevance of the Health and Safety Plan and revise the same as required, following which revised plan shall be submitted to the Client and/or his/her Agent for approval.

# **CS1.5** Policies and Procedures

The Contractor shall submit their Health and Safety Policy, prior to construction commencement, signed by the Chief Executive Officer. The Policy must outline objectives and how they will be achieved and. implemented within the company operations. The PC shall also ensure that the following policies and procedures but not limited to, are included in the OHS file:

- Substance abuse policy
- Disciplinary procedure
- Smoking policy
- HIV/AIDS policy
- PPE & PPC policy

# CS1.6 Organogram

The Contractor shall submit an organogram, prior to construction commencement, outlining the Health and Safety Site Team that will be assigned to the project, if successful with the tender. In cases where appointments have not been made, the organogram shall reflect the position. The organogram shall be updated, when there is a change in the site team.

# **CS1.7** Compensation Commissioner

The Contractor shall provide **a valid** proof of registration and good standing with the Compensation Fund or with a licensed compensation insurer prior to commencement of construction activities.

# CS1.8 Notification of Construction Work – CR 4

The Contractor shall notify the Provincial Director of the Department of Labour of the intention to commence construction work at least 7 days prior to the works commencing if the intended construction work will:

- Include excavation work
- Include work at height where there is a risk of falling
- Include the demolition of a structure, or
- Include the use of explosives to perform construction work.

If the construction work involves construction of a single storey dwelling for a client, and such dwelling he will be residing in such dwelling upon completion, the contractor must also notify the Provincial Director of the Department of Labour at least 7 days before the works commence. This must be done on a form similar to an Annexure 2 (template of which can be found in the Construction Regulations, 2014). A copy of the notification letter to the Provincial Director shall be forwarded to the Client for record purposes.

# CS1.9 During the construction period

Continuous/Issue-based Risk Assessments shall be done during the construction period as and when the scope of work changes indicating new introduced hazards.

Additional appointments shall follow as required by the Risk Assessment.

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The Employer's H & S Agent will take reasonable steps to ensure that the Contractor's Health and Safety plan is implemented and maintained. The steps taken will include periodic audits at mutually agreed intervals at least once every month, however, **if the Employer's Agent determines that the Principal Contractor does not comply with the provisions of the ACT or only complies when the Audit date approaches, HE/SHE reserves the right to visit the site without any form of notification to verify continuous compliance on site.** 

Protective clothing as determined by the Risk Assessment shall be issued and the employees shall sign the issue register to indicate the type and number of equipment received by each employee

Proof of training in the form of a register signed by the trained employees shall be kept in the H&S file. The contents of the training shall also be displayed in the H&S file.

# Please note: The SHE agent may randomly select employees on site and assess their knowledge against the material they have been trained on.

Appointments of people/workers related to Health and Safety as required by law and the Risk Assessment shall be done prior to the commencement of any work. Letters of appointment shall be kept in the H&S file for inspection by the Client, Agent or any Inspector.

Prior to builder's holiday PC shall develop a shutdown procedure and submit it to the Client agent for approval

# CS1. 10 Health and Safety Program/File

The following documentation shall be included in the Health and Safety File but not limited to:

- a) Copy of OHSAct and applicable Regulations.
- b) Copy of Client Health and Safety specification, Principal contractor's Health & Safety Plan.
- c) Copy of all Drawings Schematics, Detail Drawings, etc.
- d) Copy of Notification of Construction work to the Department of Labour.

e) Company Safety Policies (OHS policy, smoking policy, substance abuse policy, PPE policy, HIV/AIDS policy etc.) – To be signed by the Chief Executive Officer of the Company.

f) Organogram indicating site specific organizational structure with reference to requirements of the construction regulations.

g) Proof of Registration with Compensation Fund of Principal Contractor and Contractors.

h) Method statements, risk Assessments and safe work procedures for all activities on site as per construction works programme (project scope of work).

I) Letters of Appointment and proof of competence.

- j) Inspection registers
- k) Material safety data sheets

I) The contents of all Training Material e.g. Formal training, Informal training, induction, DSTI's Toolbox talks, HIV/AIDS etc.

- m) Emergency preparedness and response plan with site specific telephone numbers
- n) Section 37(2)/Mandatory agreement
- o) Site specific Fall protection plan
- P) Waste management Plan

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- q) List of Contractors (Sub-Contractors)
- r) List of Local Labours with ID copies
- s) Environmental management plan
- t) All applicable permits
- u) Disciplinary procedures
- v) H & S budget
- w) Scope of work
- x) Committee meetings and SHE audit reports

# CS1. 11 Appointments

The following appointments are required for the project. Deviations will only be allowed with the approval of the Agent. Appointment of an employee for more than one responsibility may be allowed on approval by the Agent.

# **Basic Appointments:**

- Appointment of Principal Contractor by Client.
- Appointment of Contractors (Sub Contractors) by Principal Contractor (where applicable)
- Appointment of Construction manager (Full time)
- Appointment of Alternate construction manager
- Appointment of Construction Work Supervisor (Full time)
- Appointment of Assistant Construction Work Supervisor
- Appointment of Health & Safety Officer (Full time)

# Appointments of Specialists (Refer to a Specialist Company):

- Appointment of Safety Manager
- Appointment of Risk Assessor and plan developer
- Appointment of a Health and Safety Induction Trainer
- HIV/AIDS trainer
- Traffic Safety Officer (where applicable)
- Fall protection plan developer
- Troxler operator
- Blasting competent person

# Appointments of full time employees on site:

- Appointment of a SHE Representative (Competent employee to control/monitor all H&S activities).
- Appointment of Emergency co-ordinator
- Appointment of an Accident and Incident Investigator.
- Appointment of the Safety Committee Members (Employees actively involved in H&S).
- Appointment of an Excavation Inspector.
- Appointment of Construction Vehicle and Mobile Plant Inspector.
- Appointment of Construction Vehicle and Mobile Plant Operators.
- Appointment of batch plant/Concrete Mixer Operator (if required).
- Appointment of Hand Tool Inspector.
- Appointment of a Portable Electrical Equipment Inspector (If required).

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- Appointment of a Fall protection supervisor
- Appointment of a Ladder Inspector (If ladders are used).
- Appointment of scaffold inspector.
- Appointment of scaffold erector
- Appointment of formwork supervisor
- Appointment of demolition supervisor
- Appointment of hazardous chemical controller
- Appointment of stacking and storage supervisor
- Appointment of Flagmen
- Appointment of a Hygiene and Facility Inspector (Ablutions and eating places).
- Appointment of Fire Equipment Inspector.
- Appointment of Fire Team Members (employees trained in firefighting awareness).
- Appointment of First Aid Equipment Inspector.
- Appointment of First Aid Team Members (employees trained in first aid awareness)

# CS1.11.1 Safety Officer (CR 8.7)

Due to the nature of the activities on site it is required to appoint a full-time competent Health and Safety Officer with at least 2 years' experience in SHE management. The Safety Officer shall be in possession of a minimum qualification of SAMTRAC or any other equivalent safety management programmes

The Safety Officer shall be employed by the Principal Contractor on a full time basis for the duration of the project.

The functions of the Safety Officer will be to monitor all H&S Activities on site on a daily basis.

# CS1. 11.2 Contractor's SHE Representative - OHSAct 17

The Contractor shall designate a competent Safety, Health and Environmental representative (SHE Rep) who shall be acceptable to the Agent, to represent and act for the Contractor. The Contractor shall inform the Agent in writing of the name and address of the Contractor's SHE Rep and of any subsequent changes in the name and address of the SHE Rep, together with the scope and limitations of the SHE Rep's authority to act for the Contractor. The Contractor's SHE Rep shall make available to the Employer an all-hours telephone number at which the SHE Rep can be contacted at any time in the event of an emergency involving any of the Contractor's employees, or other persons at the Works.

# CS1.11.3 Health & Safety Committee- OHSAct 20

Where two or more health and safety representatives have been elected and appointed on site, the Contractor shall ensure that monthly health and safety meetings are held with such representatives and minutes are kept on record. Meetings must be organized and chaired by the Contractor's Health and Safety Committee Chairperson. Minutes of these meetings must be available for the employees of the contractor to refer to.

CS1. 8.4 Supervision of Construction Work-CR 8 (5)

The Principal Contractor as well as his Contractors (Sub Contractors) shall appoint competent full time employees in writing as the construction supervisors.

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# CS1. 12 Training and Competence

The Contractor shall quarterly conduct a training needs analysis to ascertain what health and safety training is required. A plan of action should be devised and forwarded to the Client for records, once the identified people have attended the training, the Contractor must provide the Client with copies of certificates obtained.

# Induction

No Contractor may allow or permit any employee or person to enter site unless they have undergone health and safety induction training pertaining to the hazards prevalent on site at the time of entry. This includes visitors to site. The Contractor must ensure that visitors to site have the necessary protective equipment. A copy of attendance registers of all employees who attend inductions shall be kept.

# Awareness

The Contractor shall conduct periodic toolbox talks on site, preferably weekly or before any hazardous work takes place. The talks shall cover the relevant activity and an attendance register must be signed by all attendees. This record of who attended and the content of the topic will be kept on the site health a safety file as evidence of training.

# Competency

After the Contractor has identified the training to be conducted as part of the competency requirement, and based on Risk Assessment, he shall send the relevant persons- on appropriate courses and keep certificates of training for reference. Familiarity with the Health and Safety Act and Regulations is an integral part of the definition of competence.

# CS1. 13 Risk Assessment – CR 9

The Principal Contractor as well as all other Contractors shall appoint a competent person in writing to carry out a risk assessment before any construction work is started. The Risk Assessment shall form part of the Health and Safety Plan.

The Risk Assessment shall include:

- Risk assessment procedure
- Identification of hazards and risks.
- Rating matrix
- Control measures to mitigate risks.
- A monitoring and review plan

Copies of the risk assessment shall be available on each site for inspection.

All employees shall be informed, instructed and trained by an appointed competent person regarding all hazards and work related procedures.

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# **CS1. 14 Existing Services**

Contractor must establish all local services in area of excavations. Plan of local services shall be documented in the Health and Safety file. Local services include: *Pipe lines, Electricity Supplies and other similar services.* 

# CS1. 15 Safe Working Loads

The Contractor shall ensure that -

- a) The safe working loads of hoists, load-bearing beams and cranes are prominently displayed at all times.
- b) The safe working loads are not exceeded under any circumstances.
- c) All lifting gear is marked with a unique identity number and recorded in register.

# CS1. 16 Machine Guarding

All power tools and machinery driven by belts, gears, ropes, chains, couplings and similar drives shall be adequately guarded. The Contractor shall prohibit the use of any equipment with a damaged, missing or inadequate guard.

# CS1. 17 Construction Vehicles and Mobile Plant – CR 23

The Contractor shall ensure that drivers of motor vehicles are in possession of a driver's licence, valid for the class of vehicle which they are required to drive, and shall produce the licence on request.

The Contractor shall not permit any driver to be in control of a vehicle at the Works while under the influence of alcohol, drugs or other substance.

All vehicles of the Contractor shall display a name board bearing the Contractor's name. Hired vehicles shall bear an identifying sticker.

A register shall be kept of workers operating construction vehicles and mobile plant.

The register shall contain proof of training of operators to operate construction vehicles and mobile plant, certification of competency and authorization of operators to operate machinery, vehicles or plant.

Names of operators and their relevant training with date and time stamps together with name of course instructor shall be kept in the Health and Safety File on site.

Physical and psychological fitness shall be proved by way of a medical certificate of fitness of the said operators before allowing operators to operate machinery, vehicles or plant. Medical fitness certificates shall only be issued by a registered occupational medical practitioner.

The Health and Safety File shall include the written training material offered to operators for the different construction vehicles and mobile plant.

Each and every driver shall be trained on risks involved and safety procedures.

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All Construction vehicles and mobile plant must be of acceptable design and construction and used according to their design.

All construction vehicles and mobile plant must be maintained in good working order.

A register of all vehicles and plant shall be kept on site together with names of operators responsible for each.

The register shall report all maintenance activities performed on these vehicles and plant as well as signatures certifying the condition of the vehicles as in a good working order.

All requirements on the vehicles and mobile plant with regard to safety and health shall be inspected and certified.

These requirements include:

- a) Portable fire extinguishers mounted in specified positions on construction vehicles 4kg dry powder fire extinguisher
- b) Inspection for leaking fuel or gasses which can cause a fire hazard
- c) Safe and suitable means of access
- d) Adequate signalling or other control arrangements to guard against the dangers relating to movement of vehicles and plant.
- Attention must be paid to
  - i) Turn indicators
  - ii) Stop lights x 2 where poor visibility conditions warrant
  - iii) Reverse siren or acoustic device
  - iv) Tail lights
  - v) Reflectors
  - vi) Head lights x 2 where poor visibility conditions warrant
  - vii)Rotating amber flashing light with lens heights of at least 200mm and an

Output of at least 100Watt on roof or other visible position

- viii) Warning boards mounted at least 1.5m above ground level to be clearly visible.
- ix) Inspections of appropriate structures fitted to protect the operator from falling material or from being crushed should the vehicle or mobile plant overturn
- x) Appropriate seats must be firmly secured and adequate in number on vehicles used to transport employees

During use of Construction vehicles or mobile plant the following rules shall be adhered to:

- 1. Construction vehicles or mobile plant must be prevented from falling into excavations, water or any other area lower than the working surface. This protection must consist of adequate edge protection e.g. guard rails and/or crash barriers.
- 2. No person shall be allowed to or require to ride on any Construction Vehicle or Mobile Plant in a position otherwise than a safe place provided for on the construction vehicle or mobile plant as designed for that purpose.

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- 3. The construction site must be organized in such a way that as far as is reasonable practical, pedestrians and vehicles can move safely and without risks to health and safety.
- 4. Traffic routes shall be of sufficient size, sufficient in number and in suitable positions to be used safely by construction vehicles, mobile plant and pedestrians.
- 5. Each and every traffic route shall be indicated by suitable signs for reasons of safety and health.
- 6. No tools and/or material shall be transported in the same compartment as the operators/drivers/employees unless the said are secured against movement during transportation.
- 7. All Construction Vehicles and Mobile Plant left unattended at night adjacent to a public roads in normal use or adjacent to construction areas where work is in progress, shall have appropriate lights or reflectors, or barricades equipped with appropriate lights or reflectors, in order to identify the location of vehicles or plant.
- 8. TLB's, Excavators and other similar mobile plant are, when being repaired or when not in use, fully lowered or blocked with controls in a neutral position, motors stopped and brakes set.
- 9. Reflective indicators must be provided to workers in the form of reflective yellow jackets or vests as specified and worn by workers working on/or adjacent to public roads.
- 10. No major plant repairs may be carried out on site

# **CS1. 18 Signs and Notices**

The use of colour codes, symbolic signs and notices are means of communication whereby information is visually conveyed to people and also provides early warning of dangers.

Safety signs provide for immediate recognition of danger, information, actions allowed or not allowed and procedures that have to be done.

There are 5 types of safety signs:

1. Black triangle on yell	low background=>	WARNING	
2. Red (round) on white	e background =>	PROHIBITORY	
3. White on blue backg	round =>	MANDATORY	
4. White on green back	(ground =>	INFORMATION	
5. Red (square) on whit	te background =>	FIRE	
The following signs shall be	e provided for on the	e site:	
Warning signs -	DANGER - MEN	NAT WORK	
Prohibitory signs -	NO ENTRY, NO	SMOKING	
Fire -	POSITION OF E	QUIPMENT ARROWS	
First Aid -	INFORMATION	SIGNS	
Emergency Signs -	ASSEMBLY POI	NT, ESCAPE ROUTES SIGNS	
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All signs shall be new or in good condition and approved by the Engineer.

All temporary signs shall be mounted on portable supports to facilitate moving.

Defective or missing items shall be replaced immediately.

All signs shall be inspected at least twice a day.

Signs to be displayed will be determined by the H&S Plan and the Risk Assessments.

Compulsory signs will include:

Prohibited area

Men at work

A H&S board shall be displayed at the entrance with all the relevant H&S instructions and symbols eg:

Construction Site – No Entry

Hard hat area

Safety shoes shall be worn

The size of the board shall be at least 1.5m wide by 1.2m high

#### CS1.19 Excavation Work – CR 13

Excavation:

Definition: A space made by digging.

- 1. An excavation could be a hole or trench of any size and shape.
- 2. A Risk Assessment must be done prior to making an excavation.
- 3. The following must be taken into consideration when doing the Risk Assessment:
  - $\Rightarrow$  Depth of the excavation
  - ⇒ Length of the excavation
  - ⇒ Existing services
  - ⇒ Barricading and demarcation

Depth of the excavation:

1. Should an excavation be more than chest deep (1.5m), it must be adequately shored or braced.

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2. Slopes or trenches shall be as flat as possible, 1 x vertical to 2 x horizontal must be considered maximum for dry conditions. In wet conditions either a much lower slope shall be used, or if space is a constraint, shoring and de-watering shall be applied.

A competent person shall be appointed to supervise excavation work.

Stability evaluation of ground must be done by the Principal contractor and a consulting Engineer shall be notified in writing for certification.

A plan for prevention of persons being trapped due to collapse shall be provided by Contractor.

The design of shoring shall be documented by Contractor in the Health and Safety file as provided by the competent designer of shoring.

The maximum loading of sides of an excavation must be documented in a usable format.

If adjacent structures and buildings are present and can be affected a design and construction of supporting details shall be represented.

Provision shall be made for access routes to the excavation. Routes must not be more than 6 meters away from worker.

Contractor must establish all local services in area of excavations.

Plan of local services shall be documented in the Health and Safety file.

Local services include:

Telkom, Water, Electricity Supplies and other similar services.

Inspection shall be done on all bracing and shoring on a

- daily basis
- prior to each shift
- after every blasting operation
- after an unexpected fall of ground
- after substantial damage to supports
- after rain

An inspection register shall be completed by the Excavation Inspector during each and every inspection.

Excavations must be provided with clearly visible boundary indicators and illuminated at night or where/when visibility is poor.

Excavations must be adequately barricaded and such barricading material shall be periodically maintained.

It is advised to use 1.2m high PVC net (barrier netting) and erected as close to the excavation as possible, when accessible by public or other employees, or adjacent to public roads or thoroughfares, NO danger tape shall be used.

Explosives regulations must be adhered to if explosives are required to carry out the excavation. Competent persons with blasting certificates must be in charge.

Warning signs must be posted next to an excavation in which persons are working or carrying out inspections or tests.

# CS1.20 Blasting

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PC shall appoint a competent person approved by relevant Departments to perform blasting operation.

Transportation, storage and use of explosives shall be shall be carried out as per explosive regulations.

PC to obtain all permits applicable to explosive regulations prior to commencement of blasting activities.

# CS 1.21 Radiation (Troxler)

PC shall apply for an authority from the Dept. of health, Radiation control, Radioactive nuclides in terms of section 3A of hazardous substances Act, 1973 (Act 15 of 1973) to use convey, process and cause to convey radioactive nuclides.

The operation, storage and transportation of radioactive nuclides shall be carried out as per Hazardous substance Act of 1973 and manufacture's specification.

Only trained personnel shall use, store or transport radioactive nuclides

Inspections shall be carried out as per manufacturer's specification

# CS1. 22 Barricading and Demarcation

The construction site shall be sealed off with a fence of at least 2 m covered with mash nett to contain dust. Signage must be displayed in all four corners of the site to prevent unauthorized entry by members of the public and vehicles.

# CS1. 23 Ladders – GSR 13A

You are only to use ladders that are undamaged and are of sound construction.

Ladders must be placed on a register and inspected on a monthly basis by an appointed person.

Ladders are to be secured during use. If it is necessary to use a ladder before it can be secured, a second person must hold it steady at all times. Place the ladder's feet on a level base. (wooden blocks or bricks are not to be used).

Ladders are not to be used as scaffolds or work platforms.

When used as access to trenches and work areas, the ladder must extend one meter above the step off point and be placed at an angle where the base of the ladder is one quarter of the ladder height away from the base of the structure, and must be fitted with non-skid devices.

Ladders must not be used nearer than 3m to any exposed electrical power source and never in substations or on electrical installation work.

Ladders are not to be used in a horizontal position.

Maintain 3-point contact by keeping two hands and one foot or two feet and one hand on the ladder at all times.

Do not carry objects in your hands while on a ladder.

Ladders must be fitted with non-skid devices at the bottom ends and hooks or similar devices at the upper ends.

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Ladders with damaged stiles, or damaged or missing runs should never be used.

Ladders must never be fastened together to increase the reach.

Wooden ladders must never be painted.

# CS1. 24 Bulk mixing/Concrete Mixers – CR 20

The Contractor shall ensure that all concrete mixers are operated and supervised by a competent person who has been appointed in writing.

The Contractor shall ensure that all devices to start and stop the concrete mixers are provided and that these devices are:

- 1. Placed in an easily accessible position; and
- 2. Constructed in such a manner to prevent accidental starting

All dangerous moving parts of a mixer must be placed beyond the reach of persons by means of covers.

No person shall be permitted to remove or modify any guard or safety component unless authorized to do so by the appointed person

A Contractor shall ensure that all persons authorized to operate the concrete mixers are fully:

- 1. Aware of all dangers involved in the operation thereof
- 2. conversant with the precautionary measures to be taken in the interest of health and safety

No person supervising or operating a concrete mixer shall authorize any other person to operate the plant, unless such a person is competent to operate such machinery.

In case the concrete is supplied by the an external service provider PC shall ensure that there are fully inducted and compliant with the provisions of the OHS act and its regulation. Furthermore, PC's employees shall not be allowed to operate the ready mix truck chutter in any circumstances

# CS1. 25 Scaffolding – CR 16

All scaffolding must be in compliance to SANS 10085.

A competent person shall be appointed in writing to supervise the erection of all scaffolding operations. The Scaffolding erecter shall have the required accredited qualifications for scaffold erecting.

A competent scaffold inspector shall be appointed in writing to inspect the erected scaffolds and shall not be the same person as the erector.

An Inspection Register on scaffolding shall be kept in the Health and Safety File.

A copy of SANS 10085 as amended shall be available on site and kept in the Health and Safety File.

# CS1. 26 House Keeping and Construction Sites – CR 27

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The Contractor shall at all-time carry out the Works in a manner to avoid the risk of bodily harm to persons or risk of damage to any property. The Contractor shall take all precautions, which are necessary and adequate to eliminate any conditions, which contribute to the risk of injury to persons or damage to property. The Contractor shall continuously inspect all work, materials and equipment to discover and determine any such conditions and shall be solely responsible for the discovery, determination and elimination of such conditions.

During the period of this Contract, the Contractor shall be responsible for the safe storage of all materials and equipment required for execution of the Contract, and for disposal of all non-usable waste material in an orderly manner.

All materials, whether stored on the construction site or within the Contractor's designated area, shall be stored neatly and safely to prevent possible injury to any personnel. The material shall be stored to facilitate safe access to, and removal of the material from the storage area.

Any flammable material, such as paint, diesel fuel and oil, shall be stored in lockable non-combustible structures, which shall be clearly marked to indicate the hazardous nature of the materials stored within. The flammable materials stores shall be located in safe areas away from hazardous surroundings and adequate and suitable fire-fighting equipment shall be provided within easy reach of the materials stores.

Loose material need for use shall not accumulate so as to obstruct means of access to and egress from the workplace.

Scrap and waste shall not be allowed on site and must be removed daily.

The construction sites adjacent to build up area or public way shall be effectively fenced and controlled with access points.

HCS stored on site shall be stored in containers located in a dedicated area. The area shall be surrounded by a band wall.

# CS1. 27 Stacking and Storage on Construction Sites – CR 28

A competent person shall be appointed in writing with the duty of supervising all stacking and storage of material on site.

Adequate storage areas shall be provided which includes demarcated areas.

All storage areas shall be kept neat and under control.

# CS1. 28 Fall Protection – CR 10

A contractor shall cause-

- a) The designation of a competent person, responsible for the preparation of a fall protection plan;
- b) The fall protection plan contemplated in paragraph (a) to be implemented, amended where and when necessary and maintained as required;

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c) Steps to be taken in order to ensure the continued adherence to the fall protection plan.

The fall protection plan contemplated in sub-regulation (1), shall include-

- a) Scope
- b) A risk assessment of all work carried out from an elevated position which shall include the procedures and methods used to address all the risks identified per location;
- c) Fall prevention outlook: Fall elimination, fall prevention, fall arrest equipment
- d) Emergency response and fall rescue plan
- e) Appointments and training need analysis
- f) Site activities/conditions e.g. open holes, excavations, ladders, scaffolds, lifting equipment etc.
- h) Monitoring and review
- I) Medical surveillance procedure
- j) Accident/incident reporting, investigation and record keeping
- k) Approvals and reviews
- I) fall protection training register

# NOTE:

The wearing of an approved type of safety harness fitted with a shock absorber and correctly secured to any approved anchorage is compulsory for personnel working at heights.

Safety harnesses must be worn where a leaning bar cannot be installed, where handrails are not available, in instances where there is a risk of injury due to falling, and generally whenever work is undertaken at a height of more than "a person's height".

It is the contractor's responsibility to train his employees on the correct use of harnesses.

Safety belts may only be used as a fall restraint and not as a fall protection device.

On windy/rain days, special precautions are to be taken when working at.

No workers are to be allowed to work at height during inclement weather

# CS1. 29 Structures – CR 11

1. A contractor shall ensure that:

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- a) all reasonable 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: and
- b) No structure or part of a structure is loaded in a manner which would render it unsafe.

2. A contractor shall ensure that all drawings pertaining to the design of the relevant structure are kept on site and are available on request by an inspector, contractors, client, client's agent or employee.

3. Any owner of a structure shall ensure that inspections of that structure upon completion are carried out periodically by competent persons in order to render the structure safe for continued use: Provided that the inspections are carried out at least once every six months for the first two years and thereafter yearly and records of such inspections are kept and made available to an inspector upon request.

4. Any owner of a structure shall ensure that the structure upon completion is maintained in such a manner that the structure remains safe for continued use and such maintenance records shall be kept and made available to an inspector upon request.

# CS1.30 Temporary Works – CR 12

A competent person shall be appointed in writing to supervise all formwork and support work.

The name and address of such a person shall be included in the Health and Safety Plan of the Principal Contractor.

The contractor must ensure that all formwork and support work structures are adequately designed, erected, supported, braced and maintained so that they will be able to support all anticipated loads.

All drawings pertaining to formwork and support work must be kept on site and available for inspection by an inspector, contractor, client, client's agent or employee.

All formwork and support work must be inspected and checked for suitability by a competent person under the following conditions:

- 1. Before use
- 2. During placement of concrete or any other imposed load
- 3. After placement of concrete or any other imposed load
- 4. On a daily basis after placement of concrete until the structure is removed.
- 5. Ensure that concrete gains sufficient strength before the support work is removed.

Record must be kept of these inspections.

Weakened formwork or support work must be immediately reinforced.

Persons must be prevented from slipping on support work.

Persons must not be affected by the use of solvents or any other similar substances.

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Safe access must be provided for all support work.

Employees involved must be adequately trained and instructed to perform the work in a safe manner.

Foundations of formwork must be adequate to sustain the applied load.

# C1.31 Material Hoisting – CR 19

A contractor must ensure that every material hoist and its tower have been constructed in accordance with the generally accepted technical standards and are strong enough and free from defects.

A contractor must ensure that the tower of every material hoist is

- erected on firm foundations and secured to the structure or braced by steel wire guy ropes, and extends to a distance above the highest landing to allow a clear and unobstructed space of at least 900 mm for over travel;
- enclosed on all sides at the bottom, and at all floors where persons are at risk of being struck by moving parts of the hoist, except on the side or sides giving access to the material hoist, with walls or other effective means to a height of at least 2100 mm from the ground or floor level; and
- Provided with a door or *gate* at least 2100mm in height at each landing, and that door or gate must be kept closed except when the platform is at rest at such a landing.

A contractor must cause-

- the platform of every material hoist to be designed in a manner that it safely contains the loads being conveyed and that the combined mass of the platform and the load does not exceed the designed lifting capacity of the hoist;
- the hoisting rope of every material hoist which has a remote winch to be effectively protected from damage by any external cause to the portion of the hoisting rope between the winch and the tower of the hoist; and
- Every material hoist to be provided with an efficient brake capable of holding the platform with its maximum load in any position when power is not being supplied to the hoisting machinery.

No contractor may require or permit barrows or material to be conveyed on the platform of a material hoist and no person may so convey barrows or material unless those articles are secured or contained in a manner that displacement thereof cannot take place during movement.

A contractor must cause a notice, indicating the maximum mass load which may be carried at any one time and the prohibition of persons from riding on the platform of the material host, to be affixed around the base of the tower and at each landing.

A contractor of a material hoist may not require or permit any person to operate unless a hoist, person is competent in the operation of that hoist.

No contractor may require or permit any person to ride on a material hoist. A contractor must ensure that every material hoist-

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- is inspected on daily basis by a competent person appointed in writing by the contractor and such competent person must have the experience pertaining to the erection and maintenance of material hoists or similar machinery;
- inspection contemplated above, includes the determination of the serviceability of the entire material hoist, including guides, ropes and their connections, drums, sheaves or pulleys and all safety devices;
- inspection results are entered and signed in a record book by a competent person, which book must be kept on the premises for that purpose;
- Is properly maintained and the maintenance records in this regard are kept on site.

# CS1. 32 CRANES - CR 22

Where tower cranes are used:

- PC shall ensure that they are designed and erected under the supervision of a competent person
- All relevant risk assessments and method statements are developed and applied
- account must be taken of the effects of wind force on the crane and a wind speed device is fitted that provides the operator with a audible warning when the wind speed exceeds the design engineer's specification;
- account must be taken of the bearing capacity of the ground on which the tower crane is to be erected;
- the bases for the tower crane and tracks for rail mounted tower crane must be firm and level and secured;
- shall be erected at a safe distance from excavations;
- clear space must be provided and maintained for erection, operation, maintenance and dismantling;
- Tower crane operators must be competent to carry out the work safely;
- Tower crane operators must be in possession of a valid medical certificate testifying that the holder is physically and psychologically fit.

A competent person shall plan all lifting operations where the lift will exceed 2000 kg and the plan submitted to the Client for approval and permission to carry out the lift.

# CS1.33 Temporal Electrical Installations on Construction Site office – CR 24

Electrical installations shall be carried out by a competent installer in possession of **registration certificate** issued by the Dept. of labour.

COC's shall be issued on completion of electrical installations in site offices

Before construction commences or any other related works and during the progress thereof adequate steps must be taken to establish the presence of and guard against any danger to the workers in respect to electrical cables or apparatus.

Any temporary electrical installation set up by the principal contractor or contractor must be inspected at least once a week by a competent person. The inspections shall be recorded in a register and kept in the Health and Safety File.

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When working on or next to live electrical Machinery the Principal Contractor or Contractor must provide insulated stands, trestles and mats.

When Distribution Boards are removed the incoming power supplies shall be cut by the client's authorized Electrician. The incomer electricity supply feeder shall be earthed by a suitable earth wire or spike to prevent cable of becoming live during the installation of new Distribution Boards.

A register shall be kept on site in which all daily checks of portable electric tools are performed and signed by the responsible person. Checks shall include condition of plug top, power cord, on-off switch and insulation condition of electric tool. All tools shall be numbered and entered accordingly into the register. Condition of tools as listed in the register shall be inspected and signed by the construction supervisor at regular intervals as required by the nature of the equipment.

# CS1. 34 First Aid - GSR 3

# • Safety Notice Board

The Contractor shall provide a Safety Notice Board where safety notices, site regulations concerning safe working practices and information on the location of the nearest first aid station, can be conspicuously displayed to all staff. The size of the notice board shall be at least 600 mm x 800 mm.

# • First Aid Equipment

The Contractor shall provide for its employees a stretcher for emergencies and an approved first aid box. The first aid box shall be checked monthly by a responsible person, who shall be appointed by the Contractor, and a record shall be kept of the contents. Any deficient medical supplies shall be promptly replenished by the Contractor.

# • Hazard Notices

The Contractor shall display hazard notices in all areas where hazardous conditions prevail or may occur.

# • Reporting of Incidents and/or Injuries

All incidents in respect of damage to Works, property or machinery, or injury to persons, shall be reported by the Contractor's SHE Rep by the quickest means possible.

A mandatory incident report form, containing full details of the incident, shall be completed and submitted to the Site Agent within twenty four (24) hours of the occurrence of the incident.

# CS1. 35 Fire Precautions on Construction Sites – CR 29

A register shall be kept on all Acetylene and Oxygen cylinders used on the site.

Condition of components, sub-components and safety components (e.g. Flame back arrestors) shall be listed in the register and signed by the construction supervisor at regular intervals as required with time and date stamp.

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Acetylene, Oxygen and LP Gas cylinders shall be stored in suitable places to minimize the risk of fire.

Suitable storage to be provided for flammable liquids, e.g. petrol, diesel, paraffin.

Smoking shall be prohibited in the workplace and notices posted accordingly.

Suitable and sufficient firefighting equipment shall be placed in strategic positions in the work place.

(On vehicles and other positions as deemed necessary).

A register shall be kept on type and number of equipment for each site in the Health and Safety File.

A competent person shall inspect all firefighting equipment.

A sufficient number of employees shall be trained in the use of firefighting equipment.

A register shall be kept in the Health and Safety File on site with names of employees and type of firefighting training completed with date.

Suitable signs shall be erected in work places indicating escape routes.

Escape routes shall be kept clear. Evacuation plans shall be in Health and Safety File as part of Induction Training.

Combustible materials shall not accumulate on site.

# CS1. 36 Construction Welfare Facilities – CR 30

PC shall provide clean drinking water for its workers

On each site where existing facilities are not present, at least one sanitary facility shall be erected for every 30 workers, a changing facility for each sex and sheltered eating areas.

Separate toilets shall be erected for each sex.

Mobile toilets with bucket system shall be installed at the site.

Cleaning of buckets shall be arranged with an approved service provider approved by the municipality. To be at least once every week and disposal certificate shall be kept in the file.

# CS1. 37 Portable electrical tools & equipment - EMR 9

Portable electrical tools and equipment includes every unit that takes electrical power from a 15 amp. plug point and is moved around for use in the workplace i.e. drills, saws, grindstones, portable lights, etc. In addition electrical appliances such as fridges, hotplates, heaters, etc. shall be inspected 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:

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

PORTABLE ELECTRICAL TOOLS shall be maintained in good condition at all times to prevent an electrical shock to the user. The main source shall incorporate an earth leakage protection device.

All equipment shall be fitted with a switch to allow for safe & easy starting and stopping.

# CS1. 38 Use & storage of flammables & HCS - CR 25

The Principal Contractor / Contractor to ensure that:

- No person is required or permitted to work in a place where there is the danger of fire or an explosion due to flammable vapors being present unless adequate precautions are taken;
- The workplace is effectively ventilated. Where this cannot be achieved:
  - Employees must wear suitable respiratory equipment
  - No smoking or other sources of ignition is allowed in the area
  - o The area is conspicuously demarcated as "flammable"
- Flammables stored on a construction site are stored in a well-ventilated, reasonably fireresistant container, cage or room that is kept locked with access control measures in place and sufficient fire-fighting equipment installed and fire prevention methods practiced e.g. proper housekeeping;
- Flammables stored in a permanent flammables store are stored so that no fire or explosion is caused i.e.:
  - stored in a locked well-ventilated reasonably fire resistant container, cage or room conspicuously demarcated as "Flammable Store – No Smoking or Naked Lights";
  - the flammables store to be constructed of two-hour fire retardant walls and roof and separated from adjoining rooms or workplaces by means of a two-hour fire retardant fire wall;
  - Adequate and suitable fire-fighting equipment installed around the flammables store and marked with the prescribed signs;
  - o All electrical switches and fittings to be of a flameproof design;
  - Any work done with tools in a flammables store or work areas to be of a non-sparking nature;
  - No Class A combustibles such as paper, cardboard, wood, plastic, straw etc. to be stored together with Flammables;
  - The flammable store to be designed and constructed to, in the event of spillage of liquids in the store, to contain the full quantity + 10% of the liquids stored;
  - o A sign indicating the capacity of the store to be displayed on the door;

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- Containers (including empty containers) to be kept closed to prevent fumes/vapors from escaping and accumulating in low lying areas;
- Metal containers to be bonded to earth whilst decanting to prevent build-up of static;
- Welding and other flammable gases to be stored segregated as to type of gas and empty and full cylinders.

Hazardous Chemicals and Materials

- a) The Contractor shall provide suitable and adequate protective equipment when work in an area where hazardous chemicals and materials are being used.
- b) The Contractor shall ensure that its employees have familiarised themselves with the hazardous material data sheets applicable to the specific site as well as the location of firefighting equipment, safety showers/baths and other washing facilities, prior to commencement of work
- c) Hazardous chemical substances shall be stored in a well ventilated area.
- d) Spillage procedures shall be developed and spill kits shall be provided.
- e) All HCS containers shall be labelled
- f) Where HCS are stored PC to ensure that there are serviced fire extinguisher in close proximity

# CS1. 39 Public H & S

The Contractor shall ensure that each person working on or visiting a site, and the surrounding community, shall be made aware of the dangers likely to arise from onsite activities and the precautions to be observed to avoid or minimize those dangers. Appropriate health and safety signage shall be posted at all times.

# CS1. 40 Night work

The Contractor shall not undertake any night work without prior arrangement and a written permit from the Client. The Contractor shall ensure that adequate lighting is provided for all night work and failure to do so shall result in' work being stopped.

# **CS1. 41 Environmental Conditions**

The Contractor must be mindful of adverse weather conditions upon the health and safety of the workforce. This includes inclement weather, strong wind, heat stress, extreme cold, etc. The Contractor's risk assessment process must take into account the risks associated with such weather conditions. The same is true when working in an environment where there is a risk to employees' health and safety from presence of poisonous flora, or wildlife (including bees, snakes, etc.). The Contractor's risk assessment process must take these risks into account.

Furthermore the Contractor shall ensure that the environmental specification is adhered to at all times.

# CS1. 42 Occupational Health

Exposure of workers to occupational health hazards and risks are very common in any work environment, especially in construction. Occupational health hazards and risks exposure is a major problem and all Contractors are to ensure that proper health and hygiene measures are put in place to

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prevent exposure to these hazards and risks. The occupational hazards and risks may enter the body in four ways:

- Inhalation through breathing e.g. cements dust;
- Ingestion through swallowing maybe through food intake;
- Absorption through the skin (pores) e.g. hazardous chemicals.

The contractor is required to ensure that all his personnel are medically fit prior to being allowed onto the work site. All Contractors should ensure that Occupational Hygiene surveys are conducted as per the Occupational Health and Safety Act to ensure employees are not exposed to hazards. Risk Assessments should identify areas where survey has been conducted.

# - Noise induced hearing loss

Where noise is identified as a hazard the requirements of the NIHL regulations must be complied with and the following must be included / referred to in the Health and Safety Plan:

- Proof of training with regards to these regulations.
- Risk assessment done within 1 month of commencement of work,
- That monitoring carried out by an AIA and done according to SABS 083.
- Medical surveillance programme established and maintained for the necessary employees.
- Control of noise by referring to:
- Engineering methods considered
- Admin control (number of employees exposed) considered
- Personal protective equipment considered/decided on
- Describe how records are going to be kept for 40 years.

# **CS1. 43** Commissioning and Safety Precautions

The Contractor shall ensure that wherever repairs, adjustments or any other work are undertaken on any plant or machinery, the power supply is switched off, disconnected or the plant / machinery disengaged until the work or repairs have been completed.

# CS1. 44 Monitoring and Review: Registers Required on Site

# PERSONAL PROTECTIVE CLOTHING AND EQUIPMENT

Personal Protective Clothing and Equipment issued, PPE condition Monthly checklist

# MACHINERY

- Daily Checklist Compaction Machinery
- Daily Checklist Concrete mixer
- Daily Checklist Generator/pump
- Daily checklist (before and after use) Troxler (If applicable)
- Daily Construction Vehicle Pre-ignition Checklist Excavator (If applicable)
- Daily Construction Vehicle Pre-ignition Checklist TLB

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- Daily Construction Vehicle Pre-ignition Checklist Truck
- Daily Construction Vehicle Pre-ignition Checklist LDV
- Operators on Construction Vehicles and Mobile Plant Training and Fitness Register

#### EQUIPMENT

- Ladder Inspection Register
- Daily Stacking Inspection Register
- Daily Scaffold Inspection Register
- Daily Formwork Inspection Register

#### TOOLS

- Monthly Checklist on Hand Tools
- Monthly Checklist on Portable Electrical Equipment

#### GENERAL

- Monthly Environmental Checklist and Deviation
- Weekly Hygiene Facility Inspection Register Mobile Ablutions and Eating areas
- Stacking & Storage inspection registers
- Housekeeping inspection registers

# FIRE

- Fire Extinguishing Equipment Register
- Register of Trained Employees in Fire Fighting
- Fire Awareness Attendance Training Register

#### EMERGENCY

- First Aid Box and Equipment Checklist
- Register of Trained Employees in Basic First Aid
- First Aid Awareness Attendance Training Register
- Incident Register (Injury/ occupational disease record book (Recording and investigation of incidents)
- Motor Vehicle Accident Register

#### TRAINING

- Induction Training Attendance Registers
- Toolbox talks Training Attendance Registers
- Community Training Attendance Registers

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- Fall protection plan training attendance register
- Risk assessment & Safe work procedure attendance register
- Emergency/evacuation Training attendance register

# PERMITS

- Blasting
- Bulk fuel storage
- Lock-out Permits (Water and Electricity)
- Radiation equipment (troxler)

#### INSPECTIONS

- Daily Excavations Inspection Register with specific reference to barricading
- Safety officer internal audit Monthly
- SHE Rep Inspection Register Monthly checklist and deviations
- Minutes of Safety Committee Monthly meetings

# CS1. 45 Safe Work Procedures Required in Health and Safety File

- Stacking of material
- Working with Portable electrical equipment
- Working with cement and concrete mixers
- Scaffolding activities
- Formwork activities
- Working at heights
- Working in inclement weather
- Excavating of trenches
- Steel fixing
- Use of Troxler
- Blasting
- Loading and transportation of material
- Transportation of workers
- Operation of construction vehicles
- Refuelling of Plant
- Use of hand tools
- Electrical installations
- Use of Ladders
- Public safety
- Ergonomics

# CS1. 46 Written Training Course Material to be filed in Health and Safety File and presented

- Induction Training (Workplace awareness)
- Training of operators on Construction Vehicles and Mobile Plant

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- First Aid Awareness
- Fire Fighting Awareness
- HIV/AIDS Training
- Toolbox talks on Hand Tools
- Toolbox talks on Stacking of material
- Toolbox talks on working at heights
- Toolbox talks on Maintaining Scaffolding
- Toolbox talks on Traffic management
- Toolbox talks on Driving company vehicles
- Toolbox talks on Working with cement and concrete mixers
- Toolbox talks on working with portable electrical equipment
- Toolbox talks on Excavating of trenches
- Toolbox talks on Machine Guarding
- Toolbox talks on Hand Tool Accidents
- Toolbox talks on Ten Commandments of Safety
- Toolbox talks on Fire prevention
- Toolbox talks on Ergonomics
- Toolbox talks on lifting materials by hand
- Toolbox talks on safe loading
- Toolbox talks on substance abuse
- Toolbox talks on public safety
- Toolbox talks on facilities and hygiene
- Toolbox talks on Environmental influences

# CS1. 47 Emergency Equipment to be kept on site but not limited to:

First Aid Kits with splinters and the minimum required contents

Stretcher

Fire Extinguishers

**Emergency Siren** 

**Emergency contact details** 

Cell phone with airtime of at least R20

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# CS1. 48 Personal Protective Clothing

The Contractor shall provide the necessary personal protective clothing free of charge for its employees in hazardous areas, appropriate to the nature of the hazard. PPE must be maintained and kept in a good condition.

Proposed Personal Protective Equipment & Clothing required on this project but not limited to:

	ТҮРЕ	WHEN TO WEAR
1.	Hard Hats	When there is work carried above 2m from ground level or in deep excavations
2.	PVC Gloves	Working with cement, steel
3.	Reflective clothing	Working adjacent to public roads or in close proximity to construction vehicles
4.	Safety Goggles	Grinding, Cutting Cement, mixing cement
5.	Gumboots	Working in water, concrete casting
6.	Safety shoes	Offloading, working with heavy loads, positioning of materials etc.
7.	Dust Masks	Working with HCS, windy conditions, cement
8.	Ear protection	Grinding, compaction etc.
9.	Safety harness	Working at heights
10.	Life-line	Working at heights
11.	Kidney belts	Plant operators

# CS1. 49 Sub-Contractor Management

# Contractor control

PRINCIPAL CONTRACTOR shall enter into a Contractors Agreement in terms of Section 37(2) of the Occupational Health and Safety Act, 85 of 1993, with all appointed contractors.

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PRINCIPAL CONTRACTOR shall take reasonable steps as are necessary to ensure cooperation between all contractors to enable each of those contractors to comply with the provisions of these regulations.

This would include the following:

- to appoint each contractor contemplated in writing for the part of the project on a construction site;
- ensure that contractors comply to the directives of the PRINCIPAL CONTRACTOR health and safety plan;
- to stop any contractor from executing construction work, which is not in accordance with the health and safety plan, and or the clients health and safety specification;
- to ensure that where changes are brought about to the design and construction, sufficient health and safety information and appropriate resources are made available to the contractor to execute the work safely;
- to ensure that every contractor is registered and in good standing with the compensation fund or with a licensed compensation insurer prior to work commencing on site;
- to ensure that potential sub-contractors have made provision for the cost of health and safety measures during the construction process;
- ensure that a comprehensive and updated list of all the contractors accountable to PRINCIPAL CONTRACTOR is maintained and that the section 37.2 agreements between the parties and the type of work being done are included and available;
- Ensure that the contractors to be used have the necessary competencies and resources to perform the construction work safely;
- Ensure that all other contractors are warned of hazardous or potentially hazardous situations, which may prevent them from effectively performing their duties, which includes the placement of adequate warning signs.
- As far as reasonably practicable, PRINCIPAL CONTRACTOR is to audit contractors at least once for the duration that the contractors are on site. Should the contractor be on site for longer than a month, then the audit must be conducted at least once every month.

# CS1. 50 Medical surveillance procedures

All employees:

- Working at heights,
- Operators of plant/machinery,
- Exposed to noise,
- Exposed to cement and dust,
- General labour,

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#### - Handling Hazardous Chemicals

Are to undergo pre-employment and exit medical assessments performed by a registered occupational medical practitioner.

#### CS1. 51 Incident reporting

#### Reporting of accidents and incidents - OHSACT, Sec. 24 & GAR 8

The Principal Contractor shall report all reportable incidents to the Dept. of Labour (in terms of the Act and Regulations) and shall provide the Client with copies of all statutory reports required in terms of the Act within 7 days of the incident occurring.

The Principal Contractor shall provide the Client with copies of all internal and external accident / incident investigation reports including the reports contemplated above and below within 7 days of the incident occurring.

#### **CS1. 52 ACCIDENT AND INCIDENT INVESTIGATION - GAR 9**

The Principal Contractor / Contractor shall investigate all accidents / incidents where employees and non-employees were injured to the extent that he / she / they had to be referred for medical treatment by a doctor, hospital or clinic and results recorded on file.

The Principal Contractor / Contractor shall investigate all minor and non-injury incidents as described in Section 24 (1) (b) & (c) of the Act and keep a record of the results of such investigations including the steps taken to prevent similar incidents in future.

The Principal Contractor / Contractor shall investigate all road traffic accidents and keep a record of the results of such investigations including the steps taken to prevent similar accidents in future.

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

#### CS1. 53 Emergency preparedness, Contingency planning & response

The Principal Contractor / Contractor shall appoint a competent person to act as Emergency Controller/Coordinator.

The Principal Contractor / Contractor shall conduct an emergency identification exercise and establish what emergencies could possibly develop. He/she shall then develop detailed contingency plans and emergency procedures, taking into account any emergency plan that the Client may have in place.

The Principal Contractor / Contractor shall hold regular practice drills of contingency plans and emergency procedures to test them and familiarize employees with them (every 3 months).

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#### CS1. 54 Security and access control

The Principal Contractor / Contractor shall establish site access rules, implement and maintain these throughout the construction period. Access control procedure shall ensure that non-employees do not proceed on to work areas unaccompanied by a senior site responsible person or other.

Construction site shall be adequately hoarded (fenced) with temporary gate manned to prevent unauthorised access. Warning signage shall be displayed on all four sides of the construction site

#### CS1. 55 Public Safety

The Principal Contractor / Contractor shall be 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 minimize these dangers. This includes:

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

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

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

# All unattended excavations are to be backfilled, if not possible, they are to be adequately barricaded with PVC orange net of at least 1.2m high (NO DANGER TAPE)

# CS1. 56 Audit, Reporting & Corrective actions

# Monthly audit by the Client SHE agent

Occupational Health and Safety Audits will be conducted monthly to comply with Construction Regulation 4(1) (*d*) to ensure that the Principal Contractor / Contractor has implemented and is maintaining the agreed and approved OH&S Plan.

# Contractor's audits and inspections

The Principal Contractor / Contractor shall conduct monthly internal audits to verify compliance with his own occupational health and safety management systems and procedures.

# CS1. 57 Consultations, Communication and Liaison

All occupational health and safety liaison between the Client, the Principal Contractor, other Contractors, the Designer and other concerned parties shall be through the OH&S committee.

In addition to the above, communication may be directly to the Client or his appointed Agent, in writing, as and when the need arises.

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Consultation with the workforce on OH&S matters shall be through their Supervisors, OH&S Representatives, the OH&S committee and their elected Trade Union Representatives, if any.

The Principal Contractor / Contractor shall be responsible for the dissemination of all relevant OH&S information to other Contractors e.g. design changes agreed with the Client and the Designer, instructions by the Client and/or his/her Agent, exchange of information between Contractors, the reporting of hazardous/dangerous conditions/situations etc.

# CS1. 58 Record keeping

The Contractor shall keep and maintain Health and Safety records to demonstrate compliance with the Health and Safety Specification and the Occupational Health and Safety Act. The contractor shall ensure that all records of incidents, spot fines, training etc. are kept on site. All documents shall be available for inspection by the Client, or the Department of Labour's Inspectors.

# CS1.59 COVID-19

# CS1.59.1 Introduction:

Construction sites operating during the Coronavirus (COVID-19) pandemic need to ensure they are protecting their workforce and minimising the risk of spread of infection. This includes an establishment if all employees are fit for works with no COVID-19 symptoms, considering how personnel travel to and from site and a range of other applicable matters to manage the spread of the virus on site on a daily basis.

These COVID-19 responds requirements form part of the project specific construction health and safety specification to introduce control measures on the construction site that is in line with the Government's recommendations on social distancing and ensure employers and employees make every effort to comply by adhering to the implementation good hygiene practises and constantly monitoring and reviewing the required control measure for the project. These requirements are applicable for all employers and employees working on site including the client, Consulting Engineers and all contractors.

The principal contractor should ensure the requirements are implemented, a COVID-19 site management plan must be developed by the principal contractor taking into consideration the requirements stipulated in this document under item 12 and the requirements stipulated under Disaster Management Act (57/2002): COVID-19 Occupational Health and Safety Measures in Workplaces COVID-19 (C19 OHS), 2020. The COVID-19 site management plan should specify amongst other how the principal contractor intend to return to work consideration at this stage Government specified only one third of the workforce are allowed.

These COVID-19 site management plan are to be approved by the Consulting Engineers and the OR TAMBO DISTRICT MUNICIPALITY prior to work commencing on site. Principal Contractor will also be required to submit risk assessment together with a written policy concerning the protection of the health and safety of its employees from COVID-19 as contemplated in section 7(1) of OHSA. This police must notify Principal Contractor employees that if they are sick or have symptoms associated with the

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COVID-19 that they must not come to work and to be on self-isolation in terms of section 7 of Regulations issued in Terms of Section 27(2) of Disaster Management Act, 2002.

It must be noted matters relating to COVID-19 may change as and when Government introduce further requirement and adherence to all government requirements and Regulations during the times of this pandemic is crucially important.

# CS1.59.2 Definitions

"COVID-19" means Coronavirus Disease 2019

"Self-isolation" means anyone who either has a high temperature or a new persistent cough or is within 14 days of the day when the first member of their household showed symptoms of Coronavirus (COVID-19) should not come to site but must follow the guidance on self-isolation. "Social distancing" means Workers in the construction industry should follow the guidance on staying at home and away from others (social distancing). Where they cannot work from home, they must follow the same principles of social distancing while travelling to and from work and while at work.

"Person at increased risk" means anyone who is at increased risk of severe illness from Coronavirus (COVID-19) is strongly advised to work at home and should be particularly stringent about following social distancing measures.

"Living with a person in one of the above groups" means Anyone living with a person who is at increased risk of severe illness, or an extremely vulnerable person who is shielding from Coronavirus (COVID-19), should stringently follow the guidance on social distancing and minimise contact outside the home.

"If someone falls ill" means If a worker develops a high temperature or a persistent cough while at work, they should:

- Ensure their manager or supervisor is informed. Employer is responsible to take the employee to the Doctor.
- Employer to investigate possible other contacts, implement isolation measure and ensure those employees are taken for medical examination.
- Avoid touching anything
- Cough or sneeze into a tissue and put it in a bin, or if they do not have tissues, cough and sneeze into the crook of their elbow.

They must then follow the guidance on self-isolation and not return to work until their period of self-isolation has been completed and declared clear to work my medical professional.

# CS1.59.3 Travel to work:

Principal Contractor is required to provide a safe transportation of its employees to and from the work place. Strict instructions to be given to the responsible driver not to give rides to any other person than the principal contractor Employees

All employees must wear appropriate face Cloth mask

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- Hands to be sanitized before entering the transport and when journey ends.
- Employer must ensure that records of all his employees travelling with the transport are kept and no changing in travelling team for traceability should any of them test positive.
- Journeys should be shared with the same individuals and with the minimum number of people at any one time as prescribed by the Regulations.
- Good ventilation (i.e. keeping the windows open) and facing away from each other may help to reduce the risk of transmission
- The vehicle should be cleaned regularly using gloves and standard cleaning products, with particular emphasis on handles and other areas where passengers may touch surfaces
- Social distancing should be practice all time during transportation.

# CS1.59.4 Appropriate Personal Protective Equipment:

The principal contractor must ensure that:

- All his employees are provided with a correct PPE that meet all the requirements prescribed by minister of Health, this include but Face Cloth Masks, surgical Gloves, Facial shields/ Safety Glasses.
- Provide each employee with hand sanitizers, soap and clean water to wash their hands and disinfectants to sanitize their workstations.
- All employees will be required to sanitize or wash hand at the entry and exit point of the site.
- Employer is responsible to issue the appropriate PPE as per the job description to each employee.
- No employees are allowed to share any of their PPE.
- Employers should consider locations of works to be performed strategically and arrange for specific work intervals.
- PPE must be worn at all times on site.
- PPE such as face masks is required by all employees or member entering the site, the said masks are to be worn on site.
  - Masks should fit properly, completely covering the face from bridge of nose to chin.
  - Always clean hands before putting on of removing face masks.
  - Only touch the cord or elastic at the back when removing the masks.

# CS1.59.5 Site access and exit points:

- Access to site must be managed at all times.
- Site access and exit points should enable social distancing and screening of all workers must be done daily before entering and when leaving site. Please refer to questionnaire included in this plan.
- Screening Methods

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- Visual assessment-Prior to entering the site gate, employers should conduct a visual assessment verifying and checking symptoms of the virus. If symptoms are evident go ahead to conduct infrared temperature testing
- The average normal body temperature is generally accepted as (37°C).
- The infrared beam sensor is placed approximately 0 5 cm's from the persons forehead, the thermometer will beep twice if within range. The thermometer will record the temperature and light green, displaying the temperature of the person.
- At no stage must the infrared beam be directed to the eyes of the employees, as there is a risk of injury and damage to the eyes.
- Any person displaying a temperature between 37.1°C and 37.9°C will be isolated and place either next to the Security Guardhouse or in his/her vehicle until second temperature testing is done.
- The person's temperature will be taken again after 15 min. If the temperature has increased the person will be required to leave, access to site will be denied.
- If the person's temperature has decreased to an acceptable/normal level, access will be granted.
- Any person with a temperature of 37.5°C or above will be denied access and will be required to leave immediately and be advised to visit a Doctor;
- All cases where persons were denied access a detailed register kept on site of the date, name of contractor, name of employee, contact number.
- The screening table must be made of a washable surface that can easily be disinfected- no linen is to be used to cover the table.
- Face Shields and masks will be made available to screening personnel.
- All required items to operate safely must be available at the screening desk, these includes, hand sanitizers, pens for filling in registers and a bucket filled with 1000 ppm hypochlorite solution to soak pencils, employee/visitor's questionnaire for screening and determination of symptoms, Perspex sheet separating screening. Should employees or visitors fail the questionnaire to be completed they should not be allowed to enter site.
- A site access control attendance register must be complete, it is recommended that lists of various company employees be kept at security to tick off the attendance as and when entering site.
- Allow plenty of space between people waiting to enter site.

Use signage:

- Such as floor markings, to ensure 2 metre distance is maintained between people when queuing
- Reminding workers not to attend if they have symptoms of Coronavirus (COVID-19) and to follow guidelines
- Require all workers to wash their hands for 20- 40 seconds using soap and water when entering and leaving the site

- Regularly clean common contact surfaces in reception, office, access control and delivery areas e.g. scanners,
- Telephone handsets and desks, particularly during peak flow times
- Reduce the number of people in attendance at site inductions and consider holding them outdoors
- Where loading and offloading arrangements on site will allow it, drivers should remain in their vehicles. Where drivers are required to exit their vehicle, they should wash or sanitise their hands before handling any materials
- Consider arrangements for monitoring compliance on site by principal contractor.

# CS1.59.6 Washing hands

The principal contractor must:

- Allow regular breaks to wash hands. Breaks should be divided between employee groups.
- Provide additional hand washing facilities (e.g. pop ups) to the usual welfare facilities.
- Ensure adequate supplies of soap and fresh water are readily available and kept topped up at all times.
- Provide hand sanitizer (minimum 70% alcohol based) where hand washing facilities are unavailable.
- Regularly clean the hand washing facilities on site.
- Provide suitable and sufficient bins with to dispose hand paper towels.

# CS1.59.7 Toilet facilities

- Restrict the number of people using toilet facilities at any one time.
- Use signage, such as floor markings, to ensure 2 metre distance is maintained between people when queuing
- Wash or sanitise hands before and after using the facilities
- Enhance the cleaning regimes for toilet facilities, particularly door handles, locks and the toilet flush
- Portable toilets should be avoided wherever possible, but where in use these should be cleaned and emptied more frequently
- Provide suitable and sufficient rubbish bins with lids for hand paper towels with regular removal and disposal.

# CS1.59.8 Eating areas:

- Where possible, workers should be encouraged to bring their own food. They should also be required to stay on site once they have entered it and avoid using local shops.
- Consider increasing the number or size of facilities available on site if possible.

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- The capacity of each eating area should be clearly identified at the entry to each facility, and where necessary attendants provided to supervise compliance with social distancing measures.
- Break times should be staggered to reduce congestion and contact at all times.
   Employees should not all be taking at the same time. The principal contractor should specify different intervals for breaks and ensure limited number of employees is specified as well.
- Drinking water should be provided with enhanced cleaning measures of the tap mechanism introduced
- Frequently clean surfaces that are touched regularly, using standard cleaning products e.g. kettles, refrigerators, microwaves
- Hand cleaning facilities or hand sanitizer should be available at the entrance to any room where people eat.
- A distance of 2 metres should be maintained between users, wherever possible
- All rubbish should be put straight in the bin and not left for someone else to clear up.
- Tables should be cleaned between each use

# **CS1.59.9 Changing Facilities:**

- Consider increasing the number or size of facilities available on site if possible.
- Based on the size of each facility, determine how many people can use it at any one time to maintain a distance.
- Restrict the number of people using these facilities at any one time.
- Introduce staggered start and finish times to reduce congestion and contact at all times.
- Introduce enhanced cleaning of all facilities throughout the day and at the end of each day.
- Provide suitable and sufficient rubbish bins in these areas with regular removal and disposal.

#### CS1.59.10 Cleaning:

- Enhanced cleaning procedures should be in place across the site, particularly in communal areas and the contractors should ensure a dedicated employee is assigned to perform the activity on site and be issued with the correct PPE.
  - Taps and washing facilities
  - Toilet flush and seats
  - Door handles and push plates
  - Hand rails on staircases and corridors
  - Lift and hoist controls
  - Machinery and equipment controls

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- All areas used for eating must be thoroughly cleaned at the end of each break and shift, including chairs, door handles, vending machines and payment devices.
- Telephone equipment
- Key boards, photocopiers and other office equipment
- Rubbish collection and storage points should be increased and emptied regularly throughout and at the end.

#### CS1.59.11 Emergency responds:

The primary responsibility is to preserve life and first aid should be administered if required and until the emergency services attend.

- When planning site activities, the provision of adequate first aid resources must be agreed.
- Provision for fast track emergency service providers must be agreed.
- Emergency plans including contact details should be kept up to date.
- Consideration must also be given to potential delays in emergency services response, due to the current pressure on resources.
- Consider preventing or rescheduling high-risk work or providing additional competent first aid or trauma resources.

#### CS1.59.12 COVID-19 Waste Management

- All waste generated in respect to COVID-19, shall be managed as isolation health care risk waste.
- It is preferable to use box sets/waste bin for all COVID-19 response waste generated.
- When the box set is ¾ full it should be closed with a bio hazardous waste tape and placed in designated storage area.
  - The waste handler is required to be dressed in proper PPE before moving waste to the storage area.
  - The Waste handler must ensure that the person designated to oversee waste collection informs the service provider of the COVID- 19 waste that should be removed from the facility.
  - The designated person must ensure that a separate collection of COVID-19 waste is done by the service provider, the designated vehicle complies with waste legislations and proper PPE is worn by the service provider.
  - The designated person must ensure that all waste containers containing COVID-19 waste are properly sealed and no spillages occur during external removal.

# CS1.59.13 Addressing stress, Psychological Risk, Violence and Harassment

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The Principal Contractor is encouraged to consider other COVID-19 risk factors: Remember, employees are your company's assets.

During this pandemic your employees could be subjected to increased stress levels with serious effects of mental health (mandatory isolation at home is imposed).

Further to this, employees can be affected by the psychosocial hazard arising from present and future uncertainty of the work situation or from changes in work processes and arrangements.

There are a number of risk factors endured by many workers that can induce stress, these include:

- fear for one's own well-being or that of family member / co-workers who might contract the disease
- lack of safety equipment for personal protection;
- lack of social support or social networks;
- tension between established safety protocols
- difficult I maintaining self-care activities such as exercises, good eating habits and getting enough rests
- Employees may be labelled, stereotyped, discriminated against (social stigma) and/or experience loos of status perceived link with a disease.
- Occupational health and safety measures must be implemented to prevent and reduce psychosocial risks, including violence and harassment, and promote mental health and wellbeing (in addition to preventing the risk of long-term repercussions on workers wellbeing)
- A plan in the addressing the aforesaid must be developed and implemented to prevent work-related stress amongst workers: The plan must be constant updated with reliable information: It is not limited to the below:
- Good communication and up to date information
- Avenue for workers to express concerns and ask questions about health risks to themselves and colleagues
- Multidisciplinary sessions to identify concerns, wellbeing of staff and to work together on strategies to resolve
- problems
- Regular rest periods during work day)
- Opportunities to promote physical health (exercises, maintain healthy eating habits)
- Psychological support for workers share fears and worries confidentially
- Role modelling where managers are role models for staff
- Campaigns to reduce stigma

# CS1.59.14 Screening Questionnaire

- The principal contractor should ensure a suitable screening questionnaire be developed for used on site.
- Screening should be conducted prior to entering site and well as when leaving site.
- The checklist should include the following but is not limited to:
  - Name of employee
  - Contact number of employees

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- Names of employers
- Date of screening
- Body temperature recorded
- Respiratory symptoms (Yes or No)
- Pre-entry screening
- Access granted (yes or No)
- Exit site screening
- Have you traveling/ have you recently travelled to a restricted country / Have you recently travelled outside the province/ have you travelled to areas regarded as COVID-19 Epicentre?
- Have you attended a funeral or any mass gathering?
- Have you come into close contact or confirmed covid19 cases?
- Person screening
- Do you have Flu Symptoms?
- Screening records of all employees must be kept on site.
- Should the site experience any positive cases, the principal contractor should inform the Consulting Engineers and the OR TAMBO DISTRICT MUNICIPALITY within 24hrs via email.

# CS1.59.15 Medical Surveillances

Principal contractor to ensure that all medical surveillance renewal, new entry medicals, exit medical should include COVID-19 Symptoms Screening by OHS Doctor / OHS Nurse Practitioner, employee suspected to have symptoms or at the risk of COVID-19 shall be sent for COVID-19 testing and be asked to self-Isolate at home until his/her test are confirmed. Should an employee test positive for COVID-19, and if there is evidence that the worker contracted COVID-19 as a result of occupational exposure, lodge a claim for compensation in terms of the Compensation for Occupational Injuries and Diseases Act, 1993 (Act No. 130 of 1993) in accordance with Notice 193 published on 3 March 2020

#### CS1.59.16 Social distancing measures

- Every employer must arrange the workplace to ensure minimal contact between workers and as far as practicable ensure that there is a minimum of one and a half meters
- Metres between workers while they are working. Reducing the number of workers present in the workplace at any time
- Appointed Site Manager & the CHS Officer must ensure that Construction Activities are arranged at least one and a half metres apart.
- All shared construction Site offices must be arranged; physical barriers can be placed between work stations or Maintain 1 m distance.

# CS1.59.17 Reporting of COVID-19 Cases

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- Appointed Principal Contractor is required to immediately inform OR TAMBO DISTRICT MUNICIPALITY should one of its employee experience any of the COVID-19 symptoms while at work.
- Principal Contractor is also required to immediately contact the COVID-19 hotline: 0800 02 9999 for instruction and direct the employee to act in accordance with those instructions.
- If a worker has been diagnosed with COVID-19 and isolated in accordance with the Department of Health Guidelines, an employer may only allow a worker to return to work if the worker has undergone a medical evaluation confirming that the worker has been tested negative for COVID-19.

# CS1.59.18 COVID-19 Requirements to be meet by OR TAMBO DISTRICT MUNICIPALITY Service Providers

Before commencement of any work under Level 1 lock down all OR TAMBO DISTRICT MUNICIPALITY service provider will be required to;

- Principal Contractor will be required to appoint a designate a COVID -19 compliance officer who will be responsible to oversee the implementation of COVID-19 rules at the work place.
- All OR TAMBO DISTRICT MUNICIPALITY appointed service provider this include professional team should adherence to the standards of hygiene and health protocols relating to COVID-19 at all OR TAMBO DISTRICT MUNICIPALITY Project.
- All OR TAMBO DISTRICT MUNICIPALITY appointed Contractors develop a plan for the phased in return of their employees to the workplace, prior to reopening the workplace for business, which plan must correspond with Annexure E of Amended Disaster Management Act and be submitted to OR TAMBO DISTRICT MUNICIPALITY for approval, be retained for inspection and contain the following information:
- which employees are permitted to work;
- (ii) what the plans for the phased-in return of their employees to the workplace are;
- (iii) what health protocols are in place to protect employees from COVID-19; and
- (iv) the details of the COVID-19 compliance officer:
- Contractors with large numbers of employees to ensure phase in the return of their employees to work
- OR TAMBO DISTRICT MUNICIPALITY Contractors are required to develop measures to ensure that the workplace meets the standards of health protocols,
- Contractors in all the projects that are accessed by the public, should ensure adequate space for employees and social distancing measures for the public and service providers, as required.

# CS1.59.19 Waste management for COVID-19 waste

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Contractor will be required to ensure that waste is managed and separated on site. Face Mask waste, Gloves and paper towel used to wipe hands and toilet paper used for sneezing or blowing nose to be disposed in a medical waste bin. Principal Contractor will be required to make arrangements for medical waste bins for its employees and all medical waste to be disposed accordingly. A detailed medical waste plan which includes (managing medical/COVIDID-19 related waste on site, removal and transportation of medical/COVIDID-19 related waste and disposal of medical/COVIDID-19 related waste with disposal proof or certificate from disposal medical waste site) is required.

#### CS1.59.20 Employees induction, training, communications

Employer will be required to give induction to his/her employees upon returning to site.
 Induction syllabus to included Employers plan on how are they going to manage COVID-19
on site. Employer should train employees on daily before

#### CS1. 60 Close-out

Upon completion of the Works (at zero man hours), the Contractor shall hand over a consolidated Health and Safety file (Hard & Soft copy) to the Client SHE agent.

#### Health and Safety close out SHE file requirements include:

- a) Client H&S Specification
- b) Principal Contractor's OHS Plan(s)
- c) Organograms
- d) Legal Appointments
- e) Notification to Department of Labour of commencement of work
- f) Letters of Good Standing for the Project
- g) Full files for all Contractors as well as their close out reports
- List of Contractors
- Letters of Approval of Contractors
- Mandatory Agreements
- Letters of Good Standing
- Appointments
- h) Incident Records

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i) Non- Conformance records

j) Agent's Audits

- k) Method Statements
- I) Risk assessments
- m) Safe work procedures

n) Medical surveillance certificates of fitness. Medical records are to be kept according to the OH&S Act as amended.

o) All drawings for temporary structures (suspended beams/scaffolds etc.)

p) Copies of test results, policies and procedures for environmental monitoring (silica, noise, dusts etc.)

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#### **CS1.61** Penalty Enforcement

#### Penalties may be imposed on Contractors who do not comply with this health and safety Specification.

The list of offences that attract penalties and how much it would cost per offence is listed on the below table and such fines will be deducted from the contractors payment certificate.

Note: In the event whereby the contractor has completed construction work and there are still outstanding critical non-conformances, the Employer reserves the right not to release an amount of not less than 5% of the final payment certificate or retention amount.

NON-CONFORMANCES	FIRST TRANSGRESSION	SECOND TRANSGRESSION
1. Expired Letter of goodstanding	Written warning	R 5000 or Site closure
2. Notification of Construction work	Written warning	R 500
3. Mandatory agreement	Written warning	R 500
4. Accident/incident management	Written warning	R 2000 – R 10000/Site closure
5. Pollution	Written warning	R 500 – R 5000
6. Inspections	Written warning	R 50 per item
7. Appointments & Competence	Written warning	R 50 per appointment
8. Risk assessment & safe work procedure	Written warning	R 200 per activity
9. Training (induction, toolbox talks etc.)	Written warning	R 50 per employee
10. PPE	Written warning	R 50 per employee
11. Unsafely working at heights	Written warning/Halt activity	R 500 – R 5000
12. Pre-employment Medicals	Written warning	R 100 per employee
13. Faulty/sub-standard tool	Written warning	R 50 per tool
14. Unsafe use & storage of Troxler	Site closure	Site closure + minimum of R10 000
15. Blasting (permits/notification)	Halt operation	Minimum of R5 000
16. Exit medicals	Written warning	R 250 per employee
16. File consolidation/ close out report	Written warning	5% of retention

#### LIST OF OFFENCES AND PENALTIES

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Client: OR Tambo District Municipality | Project name: Lusikisiki Sewer Reticulation | Contract number: MIS 232949

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