



Postal Address: 29 Jesmond Grove, Unit 3,
Musgrave, Durban
Cell No: 083 786 0511 / 082 385 8036

12 Fredman drive
Sala House 1 st floor
Sandton 2196
011 082 9814

Telephone: 031 207 2051
e-mail: adampeters@sobuyagroup.co.za
e-mail: suhanapeters@sobuyagroup.co.za

OCCUPATIONAL HEALTH AND SAFETY SITE SPECIFIC SAFETY SPECIFICATION FOR

RENOVATIONS AND ADDITIONS OF AN EXISTING BUILDING FOR OFFICE BUILDING, 41 GENERAL VAN RYNEVELD STREET



CLIENT



(PRINCIPAL AGENT)

	COMPILED BY	APPROVED BY	RECEIVED BY
NAME	ADAM PETERS		
SIGNATURE			
DESIGNATION	OHS AGENT	CLIENTS REPRESENTATIVE	PRINCIPAL BUILDING CONTRACTOR
ORGANISATIONS	SOBUYA SAFETY CONSULTANTS (PTY) LTD	UMALUSI	
DATE	28/06/2020		

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HEALTH AND SAFETY SPECIFICATION PROJECT: RENOVATIONS AND ADDITIONS OF AN EXISTING BUILDING FOR OFFICE BUILDING, 41 GENERAL VAN RYNEVELD STREET

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RENOVATIONS AND ADDITIONS OF AN EXISTING BUILDING FOR OFFICE BUILDING, 41 GENERAL VAN RYNEVELD STREET



1. INTRODUCTION

In terms of the Construction Regulation 5(1) (b) of the Occupational Health and Safety Act, No.85 of 1993 and construction regulation 2014 the Client, is required to compile a Health & Safety Specification for any intended project and provide such specification to any prospective contractor who, on appointment shall submit a Health and Safety Plan which shall address the requirements of this specification.

This objective of safety specification is to ensure that the Principal Building Contractor entering into a Contract with the Client achieves an acceptable level of OH&S performance. This document forms an integral part of the Contract and the Principal Building Contractor and Subcontractors should include it in part of any Contract that they may have with their Subcontractors and/or Suppliers.

Compliance with this document does not absolve the Client from complying with minimum legal requirements and the Client remains responsible for the health & safety of his employees and those of his Mandatories. The Client or his appointed Safety Agent - **Sobuya Safety Consultants (Pty)Ltd** reserves the right to audit, monitor and where necessary regulate the site work activities of any Principal Building Contractor or Principal appointed contractor as per Construction Regulation 7(1) a and 7(c) v.

1.1 Purpose of the Construction Health and Safety Specification

To assist in achieving compliance with the Occupational Health and Safety Act 85 / 1993 and the new promulgated Construction Regulation (2014) in order to reduce incidents and injuries. The Construction specifications shall act as basis for the drafting of the Construction Health and Safety Plan. These specifications in no way release contractors from compliance with the relevant legal compliance. The construction specification sets out the requirements to be followed by the Principal Building Contractor and Subcontractors so that the health and safety of all persons potentially at risk is reduced.

1.2 Implementation of the Construction Health and Safety Specification

This specification forms an integral part of the contract, and the Principal Building Contractor is required to use it at pre-tender phase when drawing up its project-specific construction phase health and safety plan. The Principal Building Contractor shall forward a copy of this specification to all Subcontractors at their bidding stage so that they can in turn prepare health and safety plans relating to their operations.

1.3 Abbreviations

OHS – Occupation Health and Safety

ACT – Occupational Health and Safety Act. Act 85of 1993



2. Scope of Work

Construction work will include:

- Site establishment
- addition of a new double storey ablution block
- Electrical
- Plumbing
- Formwork
- Access scaffold
- Concrete
- Brickwork
- Plastering
- Piling
- Pouring of columns, etc

2.1 Application

This specifications document is a legal compliance document drawn up in terms of the OHS Act and are therefore binding. All contractors entering into a Contract shall, as a minimum, comply with the;

- Occupational Health & Safety Act and Regulations (Act 85 of 1993). A current, up-to-date copy of the OHS Act and Construction Regulations must be available on site at all times
- Compensation for Occupational Injuries & Diseases Act (Act 130 of 1993). The Principal Building Contractor will be required to submit a letter of Registration and "good-standing" from the Compensation Insurer before being awarded the Contract.
- All contractors shall comply with the "Integration Labour Law Act" and regulations
- All relevant Municipal bylaws and National Building Regulations
- The Immigrations Act 2002 as amended and shall further ensure that no illegal immigrants are employed on the construction site.

2.2 Definitions

The definitions as listed in the OHS Act and Construction Regulations (07 February 2014) shall apply.

"**Agent**" means a competent person who acts as a representative for 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-

(a) 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

(b) 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.

2.2 Definitions (Continued)

"**Construction Work**" means any work in connection with -

- (a) the construction, erection, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure; or
- (b) 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, includes drawings, calculations, design details and specifications.

"**Designer**" means-

- (a) a competent person who-
 - (i) prepares a design;
 - (ii) checks and approves a design;
 - (iii) 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
 - (iv) designs temporary work, including its components;
- (b) an architect or engineer contributing to, or having overall responsibility for a design;
- (c) a building services engineer designing details for fixed plant;
- (d) a surveyor specifying articles or drawing up specifications;
- (e) a contractor carrying out design work as part of a design and building project; or an interior designer, shopfitter 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, including personal equipment, a body harness, lanyards, lifelines or physical equipment such as guardrails, screens, barricades, anchorages or similar equipment.

"**Fall Protection Plan**" means a documented plan, which includes and provides for-

- (a) all risks relating to working from a fall risk position, considering the nature of work undertaken;
- (b) the procedures and methods to be applied in order to eliminate the risk of falling; and
- (c) 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 containing the information in writing required by these Regulations.

2.2 Definitions (Continued)

"**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 Construction 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.

"**National Building Regulations**" means the National Building Regulations made under the National Building Regulations and Building Standards Act, 1977 (Act No. 103 of 1977), and promulgated by Government Notice No. R. 2378 of 30 July 1990, as amended by Government Notices No's R. 432 of 8 March 1991, R. 919 of 30 July 1999 and R. 547 of 30 May 2008.

"**Person Day**" means one normal working shift of carrying out construction work by a person on a construction site.

"**Principal Building 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 a 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-

(a) 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.

(b) any falsework, scaffold or other structure designed or used to provide support or means of access during construction work; or

2.2 **Definitions (Continued)**

(c) 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.

"**Suspended Platform**" means a working platform suspended from supports by means of one or more separate ropes from each support.

"**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.

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

"**Tunneling**" means the construction of any tunnel beneath the natural surface of the earth for a purpose other than the searching for or winning of a mineral.

3. **Duties of the Designer**

Designer must ensure that he complies with the requirements of the Construction Regulations 6(1) and 6(2). Designers have a duty to assist with health and safety during construction as well as post construction to ensure safe occupation of the structure. This will include informing the Client in writing of any known or anticipated dangers or hazards relating to the safe executing of the work upon being designed or when the design is subsequently altered.

Designers must ensure that the following information is included in a report and made available to the Client:

- A geo science technical report where appropriate
- The loading the structure is designed to withstand
- The methods and sequence of construction the construction process

Duties of designer as per Construction Regulation 6

6. (1) The designer of a structure must-

- (a) ensure that the applicable safety standards incorporated into these Regulations under section 44 of the Act are complied with in the design;
- (b) take into consideration the health and safety specification submitted by the Client;
- (c) before the contract is put out to tender, make available in a report to the Client-
 - (i) all relevant health and safety information about the design of the relevant structure that may affect the pricing of the construction work;
 - (ii) the geotechnical-science aspects, where appropriate; and
 - (iii) the loading that the structure is designed to withstand;
- (d) inform the Client in writing of any known or anticipated dangers or hazards relating to the construction work, and make available all relevant information required for the safe execution of the work upon being designed or when the design is subsequently altered;
- (e) refrain from including anything in the design of the structure necessitating the use of dangerous procedures or materials hazardous to the health and safety of persons, which can be avoided by modifying the design or by substituting materials;
- (f) take into account the hazards relating to any subsequent maintenance of the relevant structure and must make provision in the design for that work to be performed to minimize the risk;
- (g) when mandated by the Client to do so, carry out the necessary inspections at appropriate stages to verify that the construction of the relevant structure is carried out in accordance with his design: Provided that if the designer is not so mandated, the Client's appointed agent in this regard is responsible to carry out such inspections;

3. Duties of the Designer (Continued)

- (h) when mandated as contemplated in paragraph (g), stop any Subcontractor from executing any construction work which is not in accordance with the relevant design's health and safety aspects: Provided that if the designer is not so mandated, the Client's appointed agent in that regard must stop that Subcontractor from executing that construction work;
- (i) when mandated as contemplated in paragraph (g), in his or her final inspection of the completed structure in accordance with the National Building Regulations, include the health and safety aspects of the structure as far as reasonably practicable, declare the structure safe for use, and issue a completion certificate to the Client and a copy thereof to the Principal Building Contractor; and
- (j) during the design stage, take cognisance of ergonomic design Principals in order to minimize ergonomic related hazards in all phases of the life cycle of a structure.

(2) The designer of temporary works must ensure that-

- (a) all temporary works are adequately designed so that it will be capable of supporting all anticipated vertical and lateral loads that may be applied;
- (b) the designs of temporary works are done with close reference to the structural design drawings issued by the Principal Building Contractor, and in the event of any uncertainty consult the Principal Building Contractor;
- (c) all drawings and calculations pertaining to the design of temporary works are kept at the office of the temporary works designer and are made available on request by an inspector; and
- (d) the loads caused by the temporary works and any imposed loads are clearly indicated in the design.

4. Minimum Administrative Requirements

4.1 Notification to Commence Construction Work

Principal Building Contractor must notify the Provincial Director of the Department of Labour in writing before construction work commences. A copy of this notification must be held in the Principal Building Contractors health & safety file on site.



4.2 Assignment of Project Managers / Contractors' Responsible Persons to Supervise Health and Safety on Site

Principal Building Contractor and all Subcontractors must make supervisory appointments as well as other relevant appointments in writing (as stipulated by the OHS Act and Construction Regulations 2014). See attached Annexure 'B' for more detail and relevant appointments.

4.3 Site Establishment

Site Establishment including:

- a) Office/s
- b) Secure/Safe Storage and storage areas for materials, plant & equipment
- c) Ablution facilities for male and female
- d) Shower facilities with hot and cold water
- e) Sheltered dining area with seating
- f) Vehicle access to the site
- g) Hazardous chemical stores
- h) storage / lay down area
- i) Changing facilities

4.4 Competence of the Contractors' Appointed Competent Persons

Principal Building Contractor and all Subcontractors' competent persons for the various risk management portfolios must fulfill the criteria as stipulated under the definition of 'Competent' in accordance with the Construction Regulations (July 2014).

4.5 Compensation for Occupational Injuries and Diseases Act 130 of 1993 (COIDA)

Principal Building Contractor and Subcontractors must also hold proof of workman's compensation insurance registration in the form of a letter of good standing and forward a copy to the Client before they begin work on site. A copy should also be available on site.

4.6 Health and Safety Organogram

Principal Building Contractor and all Subcontractors must prepare an organogram, outlining the site health & safety management structure and appointed competent persons. In cases where appointments have not been made, the organogram shall reflect the intended positions. The organogram must be updated when there are changes in the Site Management Structure and dated accordingly.

4.7 Preliminary Hazard Identification and Risk Assessments

Principal Building Contractor and Subcontractors performing Construction work shall, before the commencement of any Construction work or work associated with the aforesaid Construction work and during such work, cause a Risk Assessment to be performed by a competent person, appointed in writing, and the Risk Assessment shall form part of the OH&S Plan and be implemented and maintained as contemplated in the Construction regulations 9 (1).

The Risk Assessment shall include, at least:

- The identification of the risks and hazards to which persons may be exposed to
- The analysis and evaluation of the risks and hazards identified



- A documented plan of safe work procedures to mitigate, reduce or control the risks and hazards that have been identified
- A monitoring plan and
- A documented review plan

Based on the Risk Assessments, Principal Building Contractor must develop a set of site-specific OHS rules that will be applied to regulate the OH&S aspects of the construction.

4.8 General Record Keeping

Principal Building Contractor and all Subcontractors must keep and maintain Health and Safety records to demonstrate compliance with these Specifications, with the OHS Act 85/1993, and with the Construction Regulations (February 2014). The Client must also ensure that all records of incidents/injuries, emergency procedures, training, planned maintenance inspections, monthly Subcontractor audits, etc. are kept in the health & safety file(s) held in the site office. The Principal Building Contractor must ensure that every Subcontractor keeps its own health & safety file, maintains the file and makes it available on request (the file must include The Principal Building contractor's health & safety plan). Principal Building Contractor safety files will be audited by Sobuya Safety Consultants (appointed agent for the Client)

4.8.1 Inspection Registers

The following items of equipment must be regularly inspected, maintained and appropriate records kept. Items that are listed below may change depending on the equipment being used on site:

- First Aid dressing registers
- Fire equipment
- Lifting equipment
- Lifting gear
- Portable Electrical equipment
- Stacking and Storage inspections
- Explosive Power tools
- Pressure Vessels
- Ladders
- Excavations
- Safety Harnesses
- Scaffolding – static and mobile
- Pneumatic Tools
- Construction Vehicles and Mobile Plant
- Health and Safety Representative Checklists, etc

4.9 Injury / Incident Reporting and Investigation

Injuries are to be categorized into first aid; medical; disabling (lost day); and fatal. When reporting injuries to the Client, these categories shall be used.

All Contractors must investigate all injuries, with an annexure 1 report being completed and filed. All contractors must report on the 4 categories of injuries to the Client at least monthly. contractors must investigate injuries

and incidents involving their employees and forward a copy of the annexure 1 investigation report to the Client forthwith. All incidents reportable in terms of the provisions of Section 24 of the OHS Act, 1993 must be reported to the local Dept. of Labour in the prescribed manner.

(Department of Labour Durban contact number: 031 336 1500). All contractors must report all incidents where an employee is injured on duty to the extent that he/she



- Dies
- Becomes unconscious
- Loses a limb or part of a limb
- Is injured or becomes ill to such a degree that he/she is likely either to die or to suffer a permanent physical defect or likely to be unable for a period of at least 14 days either to work or continue with the activity for which he/she was usually employed

Or where:

- A major incident occurred
- The health or safety of any person was endangered
- Where a dangerous substance was spilled
- The uncontrolled release of any substance under pressure took place
- Machinery or any part of machinery fractured or failed resulting in flying, falling or uncontrolled moving objects
- Machinery ran out of control

Principal Building Contractor is required to provide the Client with copies of all internal and external accident/incident investigation reports including the reports contemplated above within 7 days of the incident occurring.

Annexure 1 forms must also be completed.

Reports are to be sent to Sobuya Safety Consultants (Pty) Ltd

Tel: (031) 207 2051

Email: adampeters@sobuyagroup.co.za & suhanapeters@sobuyagroup.co.za

4.10 Permits

Permits may include but is not limited to the following:

- Closing of public roadways, Parking and walkways Road works permit
- Demolition
- Hot work
- Specialized lifting
- Construction work permit

Principal Building Contractor must manage and co-ordinate these permit procedures.

4.11 Preparation of Health & Safety Documentation

It is the duty of Principal Building Contractor to ensure that all documentation that is required are kept or generated during the construction process and must be consolidated into one set of documents that must be handed over to the Client upon completion of the construction work. This should include instructions from the design team that will be required for the continued safe operation and maintenance of this new structure(s).

4.12 Offences and Penalties

Penalties may be imposed for ongoing non-compliance with the provisions of the Client's health & safety specifications.



Non-compliances noted during safety agent audits and visits will be categorized into three levels based on severity. These will be as follows:

- Life threatening situations –a prohibition notice will be issued. This activity must be seized immediately, and corrective measures taken. R 10 000 penalty per non-compliance item per day that the non-compliance persists
- Serious injury possible – a contravention notice will be issued with a time frame for compliance stipulated. Failure to comply within the time frame may result in up to a R2500 penalty per non-compliance item per day that the non-compliance persists.
- Minor or no injury may result – an improvement notice will be issued. The corrective measures stipulated in the report / notice must be taken. R 1000 penalty per non-compliance item per day that the non-compliance persists

The methodology used to decide the above levels will be directly linked to the risk assessments of Principal Building Contractor and Subcontractors (i.e. high, medium and low). In the absence of a risk assessment the decision of the safety Agent will be final.

Any contractor employee who is found not adhering to the Sobuya Safety Consultants OHS Specification, Site Ground Rules, plan or any other statutory requirement, or who is observed committing unsafe acts or contributing to unsafe conditions will be issued with a Non-Conformance Report and the relevant contractor will be issued a fine according to the scale of fines nominated below.

Contractor employees will also be reprimanded as per the relevant company HR procedures:

- First transgression constitutes a verbal warning.
- Second transgression constitutes a written warning.
- Third transgression constitutes a full disciplinary hearing according to the company's HR procedures.
- Any life-threatening unsafe act or unsafe condition must be treated as a Gross Neglect of Company Environmental, Safety and Health Rules and Procedures and a disciplinary hearing shall be conducted to determine the root cause of the incident and the appropriate action which must be taken to prevent the a similar unsafe situation from occurring in the future.

Copies of Non-Conformance Reports (NCR) and disciplinary hearings must be kept on record on the OHS File.
Minor Transgression

Not wearing PPE; e.g. safety helmet, eye protection, high visibility vests or foot protection. Fine: R1000-00 will be issued to Principal Building Contractor by Sobuya Safety Consultants.

Serious Transgression

Not contributing to good housekeeping practices, improper stacking and storage, lack of supervision on site, failure to carry out risk assessments for tasks or activities, failure to carry out toolbox talks, failure to train employees in risk assessments and/or safe work procedures, failure to issue PPE to employees. Fine: R5000-00 will be issued to Principal Building Contractor by Sobuya Safety Consultants.

Major Transgression

A life-threatening activity, condition, act or contribution by an employee in creating an unsafe working environment for himself or herself or other persons, failure to wear critical PPE (safety harness, eye protection, respiratory equipment, or as stipulated in the risk assessment).

Fine: Up to R10 000.00 will be issued to Principal Building Contractor by Sobuya Safety Consultants.



Repeat Offences

A Contractor that receives more than three (3) major transgressions for the same offence and may, at the discretion of the project manager, be required to leave site.

4.13 Health and Safety Audits, Monitoring and Reporting

Sobuya Safety Consultants (Pty) Ltd shall conduct fortnightly health and safety audits of the work operations including a full audit of physical site activities as well as an audit of the administration of health and safety. The Principal Building Contractor is obligated to conduct similar audits on all Subcontractors appointed by them. Detailed reports of the audit findings and results shall be reported on at all levels of project management meetings / forums. Copies of the Client audit reports shall be kept in the Project Health and Safety File while the Principal Building Contractor's audit reports shall be kept in their file and a copy forwarded to the Client. Subcontractors have to audit their Subcontractors and keep records of these audits in their health and safety files and it must be available on request

4.14 Emergency Procedures

The Principal Building Contractor shall submit a detailed Emergency Procedure for approval by the Client prior to commencement on site. The procedure shall detail the response plan including the following key elements:

- List of key competent personnel
- Details of emergency services
- Actions or steps to be taken in the event of the specific type of emergencies
- Information on hazardous materials / situations

Emergency procedure(s) shall include, but shall not be limited to fire, spills, accidents to employees, use of hazardous substances, bomb threats, major accidents / incidents etc. The Principal Building Contractor shall advise the Client in writing forthwith of any emergencies, together with a record of actions taken. A contact list of all service providers (Fire department, Ambulance, Police, Medical and Hospital etc.) must be maintained and available to site personnel. The Principal Building Contractor must develop a **Site Emergency Evacuation Plan** detailing specifications for the appropriate appointments for the firefighting team, bulk first aid and the emergency coordinating team. In addition to which, mustering points must be identified and depicted by the use of the appropriate symbolic signage (SANS Approved). The Emergency Evacuation Plan must be approved by in consultation with the Client, or Client's Agents. Should the early warning fire alarm system not be integrated, each zone / area must, by definition be accommodated in the site Evacuation Plan (ref. Section 9 – Environmental Regulations of the OHS Act 85 / 1993) The Site Manager must conduct an emergency identification exercise and establish what emergencies could possibly develop. He / she must then develop a detailed contingency plan and emergency procedure, taking into account any emergency plans that may already be in place. The Subcontractors must hold regular practice drills of the contingency plans and emergency procedures to test them and to familiarize employees with them. The Principal Building Contractor must appoint a competent person to act as Emergency Controller / Coordinator A contact list of all emergency providers (Fire Department, Ambulance, Police Medical and Hospital) must be maintained and available to all site personnel. An emergency situation, which is likely to require outside emergency assistance, may attract mass circulation written media or electronic media attention and be harmful to the Client's reputation. No person may comment on the incident on site without prior approval of the Client.

4.16 Personal Protective Equipment (PPE) and Clothing

The Principal Building Contractor and subcontractors shall ensure that all workers are issued with and not limited to the following:

- Hard hats



- Reflective vests
- Steel toe safety footwear
- Two-piece overalls
- Pig skin or similar gloves for labour intensive work
- PVC gloves to be used for any wet work or concrete work
- Ear plugs for machinery that produces under 85 Db's
- Earmuffs for operations that produce more than 85 Db's
- Eye protection in the form of safety glasses for any operations that produce dust or debris that can enter a person's eye
- Face shield to be used for any grinding operations
- Double lanyard safety harness for all work at height above 2 meters
- Leather apron for grinder operations
- or any other Personal Protective Equipment that may be required due to the nature of the work.

The above procedure applies to Subcontractors and their Subcontractors, as they are all Employers in their own right. The Principal Building Contractor and Subcontractors are to train all employees on how to use PPE on site. Records of these issue registers should be kept on file. Employees must sign for all PPE issued to them

4.17 Occupational Health and Safety Signs

The Principal Building Contractor shall provide adequate on-site OHS signage, including but not limited to: *No unauthorized entry, report to site office, beware of overhead work, hard hat area* etc. Signage shall be posted up at all entrances to site as well as on site in strategic locations e.g. access routes, entrances to structures and buildings, scaffolding, and other potential risk areas / operations. pedestrian access ways, roadways, construction work zones, as well as specific operations such as excavations and electrical installations.

4.18 Safety and Security

The Principal Building Contractor shall ensure that all persons under their control or the Principal Building Contractor himself shall comply with the security operations, security requirements, including stop and search procedures if required.

Special permission may need to be obtained for after hours and / or weekend / public holiday access.

The Subcontractor and his employees shall enter and leave the premises only through the main gate(s) and / or checkpoint(s) designated by the Principal Building Contractor.

The Principal Building Contractor shall ensure that employees and Subcontractors observe that security rules at all times and shall not permit any person who is not directly associated with the work from entering the premises.

Each of the contractor's employees will be issued with a company identification card which must be displayed on his / her person at all times whilst on duty or on the premises.

Should any of the employees of the contractor:

- Tamper or otherwise interfere with the Principal's equipment, plant or other assets
 - Steal, or otherwise engage in acts of dishonesty
 - Appears to be under the influence of alcohol and drugs
 - Ignore any security, safety or occupational health rule, or engage in unsafe conduct;
- Then the contractor / employer or employer's representative shall have the right to immediately remove such a person or have him withdrawn from the premises, and if appropriate, charge at law such relevant offence(s).



The Principal Building Contractor and Subcontractor and their employees shall not enter any area of the premises that is not directly associated with the work. The Principal Building Contractor and Subcontractors shall ensure that all materials, machinery plant and equipment brought by him onto the premises are recorded at the main gate(s) and / or checkpoint(s). A failure to do this may result in a refusal by the Principal Building Contractor to allow the materials, machinery or equipment to be removed from the premises. The Subcontractor acknowledges that its employees and vehicles may be subject to search at any time and that the Subcontractor shall ensure that its employees co-operate fully with such arrangements. The Principal Building Contractor shall ensure a written acknowledgment from each agent, Subcontractor and service provider that its employees and vehicles will be subject to search at any time and the Principal Building Contractor shall ensure that its agent, Subcontractor and service providers co-operate fully with the arrangements.

4.19 Medicals

All employees that will work on the project must be declared fit to do the work. The medical certificate as prescribed in the New Construction Regulations (2014) must be done through an Occupational Health Practitioner. Proof of the Medical surveillance certificates must be available in the Health and Safety File. Failing to submit the medical information on the prescribed form will result in work not being able to commence / or be temporarily suspended.

4.20 Scaffolding and Working at Heights

Working at heights includes any work that takes place in an elevated position. The Principal Building Contractor must submit a risk specific fall prevention plan in accordance with the new Construction Regulations (2014) before the work / activity is undertaken. The Client must approve the Fall Prevention plan before the work may commence. All employees working at heights must have a valid Medical Fitness certificate. All scaffolding structures on site must comply with SANS 10085. All scaffold erectors and scaffold inspectors must have proof of their Competency Certificates with all their appointment letters.

4.21 Fall Protection

A pre-emptive Risk Assessment will be required for any work to be carried out for above two (2) metres from the ground or any floor level and it will be classified as "Working in elevated positions" As far as practicable, any person working in an elevated position will work from a platform, ladder or other device that is at least safe as if he / she are working at ground level. Whilst working in this position the person will be wearing a full body harness to prevent the person from falling from the platform, ladder or other device utilized. This safety harness will be, as far as possible, be secured to a point away from the edge over which the person might fall. The double lanyard must be of such length that that the person will not be able to fall over the edge. In addition, any platform, slab, deck or surface forming an edge over which a person may fall, must be fitted with guard rails at two (2) different heights as prescribed in SANS10085 – 1: Code of Practice for the design, erection, use and inspection of Access Scaffolding. Employees working in elevated positions must be medically fit and trained to do this type of work safely. Proof of the Medical Fitness Certificates must be maintained on the contractors' Health and Safety File. Where roof is being performed on a construction site the contractor must ensure that in addition to the requirements set out (2) and (4) is indicated in the fall protection plan –

- a) The roof work has been properly planned
- b) The roof erectors are competent to carry out the work
- c) No employees are permitted to work on roofs during inclement weather conditions
- d) All covers to openings and fragile material are sufficient strength to withstand any imposed loads



- e) Suitable and sufficient platforms, coverings or other similar means of support have been provided to be used in such a way that the weight of any person passing across or working on or from fragile material is supported
- f) Suitable and sufficient guard-rails, barriers and toe – boards or other similar means of protection prevent, as far as is reasonably practicable, the fall of any person, material or equipment Fall Protection work must comply with the requirement as set out in the Construction Regulations (2014) – Section 10. **No work may take place if all documentation is not in place.**

4.22 Traffic Accommodation

The Construction of the New 100 Bed Student Residence at The Mangosuthu University of Technology will inevitably result in a temporary increase in traffic flow, as personnel, materials and equipment have to be transported to various points along the main road as well as internal roads within the University. Careful planning of the routes, the location of the construction areas and storage, laydown areas together with the timing of the transportation are considered to be the key to the minimization to traffic disturbance, the impact on the students and for the efficient delivery of materials and equipment. Authority and responsibility will be delegated to the **Traffic Safety Officer, the Site Safety Officer and the Construction Manager** for:

Determining the Traffic Control at the work zones and ensuring that the following items are taken in consideration:

- a) Implementation of statutory safety regulations on site,
- b) Verifying that all traffic arrangements are safely implemented,
- c) Carrying out of regular inspections,
- d) Diversions, side-tracks and detours as required,
- e) That temporary warning signs and devices are available,
- f) Adequate delineation for night and wet conditions,
- g) Special lighting when required,
- h) Access ways to be kept clear for emergency vehicles,
- i) Setting up of diversions when required in Consulting with the local Authorities when necessary,
- j) The traffic impact for work near traffic intersections and schools,
- k) Temporary delineation, barriers and traffic signs until permanent measures are completed. All temporary measures must be maintained in an effective condition while in use and will be removed when permanent devices are completed,
- l) Implementation and Maintaining of the Traffic Management Plan,
- m) Assessing and monitoring the contractor's capability and performance in respect of the site activities.

5. Principal Building Contractor and Subcontractors

5.1 Principal Building Contractor and Subcontractors' Requirements

Principal Building Contractor must ensure that all Subcontractors appointed by them comply with these Specifications as well as the OHS Act, Construction Regulations (July 2014), and other relevant legislation that

may relate to the activities directly or indirectly. The Principal Building Contractor, when appointing other Subcontractors, shall ensure compliance as if it was The Principal Building Contractor.

Principal Building Contractor may only allow a Subcontractor to begin work on site after approving The Subcontractor's health & safety plan in writing. Principal Building Contractor must audit each of its Subcontractors on a monthly basis, with audit reports filed in the health & safety file on site. The audit must include an administrative assessment as well as a physical inspection of The Subcontractor's site activities.



Should any Subcontractor be unable to complete all the necessary documentation, an independent Safety Consultant will be appointed by the Client to assist at the contractor's own cost.

Principal Building Contractor must stop any Subcontractor from carrying out construction work that is not in accordance with the Client and/or Subcontractor's health & safety plan or if there is an immediate threat to the health and safety of persons.

- Principal Building Contractor shall take all reasonable steps necessary to ensure co-operation between all Subcontractors to enable each of those Subcontractors to comply with the provisions of these regulations;
- Principal Building Contractor shall take all reasonable steps to ensure that each Subcontractor's health and safety plan is implemented and maintained on the construction site: Provided that the steps taken shall include periodic audits at intervals mutually agreed upon between the Client and Subcontractors, but at least once every month;
- Principal Building Contractor must ensure that where changes are brought about to the design and construction, that sufficient health and safety information and appropriate resources are made available to Subcontractors so as to allow them to execute the work safely;
- Principal Building Contractor must ensure that every Subcontractor is registered and in good standing with a recognized compensation fund or with a licensed compensation insurer prior to work commencing on site;
- Principal Building Contractor must ensure that potential Subcontractors submitting tenders have made provision for the cost of health and safety measures during the construction process;
- Principal Building Contractor shall discuss and negotiate with the Subcontractor the contents of the health and safety plan and shall finally approve that plan for implementation;
- The Principal Building Contractors shall hand over a consolidated health and safety file to the Client upon completion of the construction work and shall include a record of all drawings, designs, materials used and other similar information concerning the completed structure;
- Principal Building Contractor may only appoint a Subcontractor to perform construction work unless the Client is reasonably satisfied that Principal Building Contractor he or she intends to appoint, has the necessary competencies and resources to perform the construction work safely.

5.2 Principal Building Contractor / Subcontractor – Competency Assessment

The Client must be reasonably satisfied that contractor it intends to appoint has the necessary competency and resources to safely conduct the work they will be appointed for.

Principal Building Contractor must be reasonably satisfied that the Subcontractors he intends to appoint also have the necessary competencies and resources to safely conduct the work they will be appointed for. This must be established at tender stage and before appointments are made.

In order to ensure this, Principal Building Contractor must demonstrate to the Client that it has a suitable and sufficiently documented OHS Plan and that its Subcontractors have the necessary competencies and resources to perform the construction work safely.

Principal Building Contractor must therefore submit the following documentation for perusal and verification by the Client.

- Management Structure as envisaged at tender (organogram);
- Registration certificate with the Compensation Commissioner or FEM;
- Proof of management training on the Occupational Health & Safety Act and other related training;
- Any previous convictions under the OHS-Act;
- Your Company's previous two years injury claims as reported to your workman's compensation insurer;



- Your company's approach to co-ordination of health & safety – do you employ safety officers, etc.? If not, what alternative arrangements are used?

5.3 Costs for OHS –Compliance

All parties bidding to work on this construction project must ensure that they have made provision for the cost of complying with these specifications as well as with the OHS-Act 1993 and incorporated Regulations as a minimum requirement in their tender documentation. It must also be taken into consideration that time is money. That implies that sufficient time must be allowed for the implementation of the minimum OHS standards. No additional claims will be entertained at a later stage if a compliance requirement was prescribed in the OHS-Act, 1993 and incorporated regulations or this specifications document.

5.4 Contractors' Health & Safety Plans [Construction Regulations 7(1)(a)]

Under the Construction Regulations [7(1)(a)], Principal Building Contractor is required to develop the Health and Safety Plan before work commences on site and to keep it up to date throughout the Construction Phase.

The degree of detail required in the Health and Safety Plan for the Construction Phase and the time and effort in preparing it should be in proportion to the nature, size and level of Health and Safety risks involved in the project. Projects involving minimal risks will call for simple, straightforward plans. Large projects or those involving significant risks will need more detail.

What should the construction health & safety plan cover?

The Construction Health and Safety Plan should include details of the following:

- The Project description and any information that may affect the work.
- The positioning of the site access and egress points to ensure that any nuisance or risk to the adjacent properties is minimized and controlled. This should be away from the adjacent occupied and sensitive premises.
- The location of temporary internal site accommodation to ensure that sensitive properties are not subjected to any nuisance arising from the use of the facilities.
- The location of unloading, layout and storage areas to reduce and minimize excessive manual handling of construction materials, damage to adjacent property and the security of the plant, equipment and materials and the use of elevators out of normal office hours.
- The planning of traffic and pedestrian routes, outside the site, to ensure adequate protection for employees, public footpath and road users. The use of suitable barriers, signs and the appointment of a signaller should be adopted to provide the required level of protection. The site must be enclosed by a ring fence/barrier system.
- The arrangements for the reception of prospective visitors. All registers and Agreements with Mandatory documents must be signed before commencement on site.

5.5 Communication and Management of the work

Site Safety committee meetings will be held in accordance with the Act (3 monthly) or as determined by the associated risks on site. Due to the confinements of this project, safety committee meetings will be required to take place once a month. This does not preclude the requirement that each Subcontractor will implement and maintain their own safety meetings where applicable.

- In addition to the above, communication may be directly to the Client or Sobuya Safety Consultants (Pty)Ltd, verbally or in writing, as and when the need arises.

- Consultation with the workforce on OH&S matters will be through their Supervisors, OH&S Representatives, the OH&S committee and their elected Trade Union Representatives, if any.
- The Site manager or his Site Safety Officer will be responsible for the dissemination of all relevant OH&S information to the other Subcontractors e.g. design changes agreed with the Client and the Designer, instructions by the Client and/or his/her agent, exchange of information between Subcontractors, the reporting of hazardous/dangerous conditions/situations etc.
- A due diligence, one-page report must be completed (and retained on file) by Principal Building Contractor every week after he has performed a site inspection. This document will be referenced at each formal site safety meeting.
- The Principal Building Contractors will be required to conduct Toolbox Talks with their employees on a weekly basis and records of these must be kept on the OH&S File. Employees must acknowledge the receipt of Toolbox Talks which record must, likewise, be kept on the OH&S File.
- The Contract Manager or suitable designate of each appointed Subcontractor will be required to attend all Site OH&S meetings.

6. Client Identified Hazards and Potentially Hazardous Situations

6.1 Client identified Hazards

The following items have been identified by the Client as potential hazards for this construction work and must be incorporated in The Principal Building Contractor's risk assessments.

- Formwork for concrete columns, floors, stair wells, bases, ring beams and other
- Working with, around and above other Subcontractors
- Working on and from scaffolding and ladders
- Roof work – structural and roof covering. Placement of roof tiles.
- Working work at heights
- Lifting operations including mobile plant use, lifting tackle and other fixtures
- Electrical installation (temporary and permanent)
- Interface with the public – roads and pavements
- Portable electrical tools and extension leads
- Explosive powered tools
- Power tools (including rock drills, jackhammers, core drilling, high pressure air and water jets, etc.)
- Construction vehicle and Mobile Plant
- Working in confined spaces
- Ancillary works

See attached Annexure 'D' for more details surrounding hazards already envisaged by the Client and it should be used as a starting point for Principal Building Contractor and Subcontractors so as to elaborate on their own risk assessments in terms of Section 8 of the OHS Act and General Safety Regulations 2(1).

6.2 Unforeseeable Hazards

Principal Building Contractor must immediately notify other Subcontractors as well as the Client, in writing, of any hazardous or potentially hazardous situations that may arise during the performance of construction activities so that the necessary precautions may be taken.



7. Site Operational Requirements

7.1 Construction Health & Safety Officer

A Full-time construction health & safety officer (in terms of Construction Regulation 8.5, safety officer is to be registered with SACPCMP, no person that is not registered may hold the position as safety officer without registration) will be required on the project. The safety officer will be required to conduct at least the following duties:

- Health & safety audits and inspections including administrative and physical audits of all Subcontractors' health & safety plans, files and activities, and record findings
- Maintain the health & safety plan and file;
- Co-ordinate the function of reviewing the hazard identifications and risk assessments;
- Assisting with Method Statements and checking whether the responsible persons follow safe work procedures.

7.2 Health and Safety Representative(s)

Principal Building Contractor and all Subcontractors must ensure that Health and Safety Representative(s) are appointed under consultation with the employees and trained/informed to carry out their functions. The appointments must be in writing. The Health and Safety Representatives could carry out monthly inspections, keep records and report all findings to the Responsible Person or safety officer forthwith and at monthly health & safety meetings.

At least one Health & safety representative is required by all Employers. (Appoint one for the first 20 employees and an additional one for each group of up to 50 employees on site).

7.3 Health and Safety Committees

The principal must ensure that project health and safety committee meetings are held monthly with minutes kept. Meetings must be chaired by The Principal Building Contractor's Responsible Person [CR 8(1) person]. All Subcontractors' Responsible Persons and Health & Safety Representatives must attend the Principal Building Contractors monthly health & safety meetings. All Subcontractors appointed supervisors must attend health & safety meetings.

The following topics must be tabled at meetings: management appointments; Subcontractor legal issues; injuries and incidents; hazards and risk assessments (present and foreseen); method statements; planned inspections and registers/record keeping, etc. The committee chairperson must sign off minutes.

7.4 Health and Safety Training

7.4.1 Induction

The Principal must ensure that all site personnel undergo a site-specific health & safety induction training session before any worker starts work. The induction must include the General duties of the employer and the employees. A record of attendance shall be kept in the health & safety file, as well as a copy of the contents of the said induction. Principal Building Contractor will be required to induct all Subcontractors' employees. Workers must carry some sort of proof of inductions on their person.



7.4.2 Awareness

Principal Building Contractor must ensure that, on site, periodic toolbox health & safety talks take place at least once every two weeks. These talks should deal with risks relevant to the construction work at hand. Records of attendance must be kept in the health & safety file.

7.4.3 Competence

All competent persons must have the knowledge, experience, training, and qualifications specific to the work they have been appointed to supervise, control, and carry out. This must be assessed on a regular basis e.g. training, evaluation, and periodic audits by the Client, progress meetings, etc. Principal Building Contractor is responsible to ensure that Competent Subcontractors are appointed to carry out construction work.

7.5 Health & Safety Audits, Monitoring and Reporting

Monthly Audit by Client (Construction Regulation 5(1) (o))

Sobuya Safety Consultants (Pty) Ltd will be conducting a Monthly Audit to comply with Construction Regulation 5(1) (o) to ensure that Principal Building Contractor has implemented and is maintaining the agreed and approved OH&S Plan. Principal Building Contractor is obligated to conduct monthly audits on all Subcontractors appointed by him and keep audit reports in its health & safety file. Subcontractors have to audit their Subcontractors and keep records of these audits in *their* health & safety files, made available on request. Principal Building Contractor scoring less than 90% will have to stop work until the file is updated. Sobuya Safety Consultants (Pty) Ltd will advise the client to withhold payment if the minimum safety standard is not maintained.

7.6 Emergency Preparedness

Principal Building Contractor must develop a site Evacuation Plan detailing specification for the appropriate appointments for the firefighting team, bulk first aid and the emergency coordinating team. In addition to which, mustering points must be identified and depicted by the use of appropriate symbolic signage (SANS approved). The Emergency Evacuation Plan must be approved by the CL or in consultation with the Clients Agents. Should the early warning fire alarm system not be integrated each zone/area must, by definition be accommodated in the site Evacuation Plan. (Ref Environmental Regulations Section 9)

The Site Manager must conduct an emergency identification exercise and establish what emergencies could possibly develop. He/she must then develop a detailed contingency plan and emergency procedure, taking into account any emergency plans that may already be in place. The Principal Building Contractors must hold regular practice drills of the contingency plans and emergency procedures to test them and to familiarize employees with them.

The Principal Building Contractor / Subcontractor must appoint a competent person to act as Emergency Controller/Coordinator.

A contact list of all emergency service providers (Fire Department, Ambulance, Police, Medical and Hospital, etc.) must be maintained and available for site personnel. An emergency situation, which is likely to require outside emergency assistance, may attract mass circulation, written media or electronic media attention and be harmful to the Client's reputation. No person may comment on the incident on site without prior approval from the Client.



7.7 First Aid Boxes and First Aid Equipment

Principal Building Contractor and all Subcontractors shall appoint First Aider(s) in writing. Principal Building Contractor must appoint at least one First Aider who must be certificated. Copies of valid certificates are to be kept on site. Principal Building Contractor must provide at least 1 (one) first aid box, adequately stocked at all times. All Subcontractors with more than 5 employees shall supply their own first aid box. Subcontractors with more than 10 employees must have their own trained, certified first aider on site at all times.

The Contingency Plan of Principal Building Contractor must include the arrangements for speedily and promptly transporting injured persons to a medical facility or securing emergency medical help to persons that may require it.

7.8 Public and Site Visitor Health & Safety

Public walkways and roadways must be kept clean and free of excessive construction materials so as to prevent a negative impact on the public.

Roadways and walkways will have to be cleaned on a regular basis – daily inspections to be conducted by the Principal Building Contractor with action to be taken without delay.

Site visitors must be briefed on the hazards they may be exposed to as well as what measures are in place or should be taken to control these hazards. As per the Construction Regulations, a record of these 'inductions' must be kept on site. It is advised that a visitor book with site rules leaflet be kept at the gate or at reception/site office and all visitors to be directed to such point where they must read through the site safety information and sign the visitor book.

7.9 Access to Site

Where any permits are necessary from the local authorities, this will be the responsibility of the Principal Building Contractor. Any road signage must be inspected by a designated person on a daily basis and the required cleaning and maintenance of signs will be the responsibility of this designated person. The road surface of all public and private roadways and pavements/pedestrian walkways must remain in a reasonably clean state, free of excessive sand, stone, water or other construction related materials.

7.10 Security on Site

The Principal Building Contractor Site Manager will establish site access rules and implement and maintain these throughout the construction period. Permission must be obtained from the local Metropolitan Council's Traffic Department to use the site entrance for heavy vehicles on site. Access control must include the rule that non-employees will not be allowed on site unaccompanied. Both the Client and Principal Building Contractor have a duty in terms of the OHS Act 85/1993 to do all that is reasonably practicable to prevent

members of the public and site visitors from being affected by the construction activities. The site must be suitably hoarded at all times with a limited number of access points which must be controlled to ensure safe access and egress. The access points must be kept closed and must have the adequate notices displayed. Hoarding must be at least 1.8m high and constructed of 'ready fence' panels (Or Similar) with adequate supports to withstand strong wind conditions. Hoarding should be inspected on a daily basis and must be secured (closed and locked) at the end of every work shift.



7.11 Lighting

Principal Building Contractor is to ensure that wherever work is performed where the lighting conditions are less than the minimum requirement as defined in ER Regulation 3 and relative schedules, that this is supplemented with additional lighting capacity to ensure that all works contemplated can be conducted safely.

7.11.1 Portable Lights

Must be fitted with a robust non-hygroscopic non-conducting handle. The lamp must be protected by a robust and weatherproof guard. The cable lead-in must withstand rough handling Registers must be maintained for each piece of equipment and findings of regular inspections must be entered in the portable electrical equipment register Inspections must concentrate on plug, cord, switch and any obvious faults. When used in wet/damp conditions, it must be protected as for portable electrical tools, above

8. PHYSICAL REQUIREMENTS

8.1 Traffic Diversions Road Works

Provision by means of a method statement must be made for any traffic diversions to conduct your construction activities as well as any loading and off- loading of materials and waste. The method statement must include a drawing indicating traffic signage and the like. Please refer to Section 4.11 – Permits, of this specification.

8.2 Edge Protection and Penetrations

Principal Building Contractor must ensure that all exposed edges and openings are guarded and demarcated at all times until permanent protection has been erected. Principal Building Contractor has the following options when contemplating the protection of openings, slabs and edges:

- A physical barrier at the edge of the opening/slab, which must be strong enough to carry the weight of a person in the process of falling (wire will not be deemed sufficient).
- External façade scaffold complete with a fully boarded platform at the same level as the slab with a handrail, could serve as a fall protection measure.
- A visual barrier in the form of orange webbing, at a distance of at least one meter from the actual edge of such slab, opening.

Should none of the above be achieved, as a last resort, Principal Building Contractor must endeavor to gain exemption from Construction Regulation 10(4)(a) obtainable in writing from the Department of Labour.

The Principal Building Contractor's fall protection plan must detail the following safety measures: Protection of decking edges; finished floor slab edges; stairways; floor penetrations; lift shafts; and all other openings and areas from where a person may fall.

The placement of edge protection at deck edges must be coordinated so as to minimize the time that such edge protection is not in place (programming issue between Principal Building Contractor and Formwork/support work contractor).

The removal of edge protection from formwork decks and the subsequent replacement thereof at the finished floor edge must be systematically coordinated by the Principal Building Contractor.



During the erection of formwork and support work, edge protection may be waived in lieu of fall arrest equipment. The Principal Building Contractor's and Subcontractors' fall protection plans must include the strategies for management of edge protection and penetrations.

8.3 Housekeeping

Principal Building Contractor's is to ensure that:

- Housekeeping is continuously implemented
- Scrap, waste & debris are removed regularly
- Materials placed for use are placed safely and not allowed to accumulate or cause obstruction to free movement of pedestrian and vehicle traffic
- Waste & debris not to be removed by disposing from heights, but by chute or crane
- Where practicable, Construction sites are fenced off to prevent access of unauthorized persons
- An unimpeded workspace is maintained for every employee
- Every workplace is kept clean, orderly and free of tools etc. that are not required for the work being done.
- As far as is practicable, every floor, walkway, stair, passage and gangway are kept in good state of repair, slip and trip, skid-free and free of obstruction, waste and materials
- The walls and roof of every indoor workplace is sound and leak-free
- Openings in floors, hatchways, stairways and open sides of floors or buildings are barricaded, fences, boarded over or provided with protection to prevent persons from falling.

8.4 Stacking & Storage

- The Principal Building Contractor/Employer must ensure that a competent person is appointed in writing to supervise all stacking and storage on a construction site as per Construction Regulation 28.
- Adequate storage areas are provided and demarcated
- The base of any stack is level and capable of sustaining the weight exerted on it by the stack
- The items in the lower layers can support the weight exerted by the top layers.
- Cartons and other containers that may become unstable due to wet conditions are kept dry
- Pallets and containers are in good condition and no material is allowed to spill out.
- The height of any stack does not exceed 3X the base unless stepped back at least half the depth of a single container at least every fifth tier or the approval of an inspector has been obtained to build the stacks higher with the aid of an appropriate machine.
- The articles that make up a single tier are consistently of the same size, shape and mass
- Structures for supporting stacks are structurally sound and able to support the mass of the stack
- No articles are removed from the bottom of the stack, but from the top tier first
- Anybody climbing onto a stack can and does so safely and that the stack is sufficiently stable to support him/her
- Stacks that are in danger of collapsing are broken down and restacked
- Stability of stacks are not threatened by vehicles or other moving plant and machinery
- Stacks are built in a header and stretcher fashion and that corners are securely bonded
- Persons climbing onto stacks do not approach unguarded moving machinery or electrical installations

8.5 Fire Extinguishers and Fire Fighting Equipment

Principal Building Contractor and relevant Subcontractors shall provide adequate, regularly serviced firefighting equipment located at strategic points on site, specific to the classes of fire likely to occur. The



appropriate notices and signs must be posted up as required. A minimum of four (4No) 9kg dry chemical powder fire extinguishers must be available in and around the site office establishment and stores. Wherever 'hot work' is taking place, additional fire extinguishers must be on hand. The Principal Building Contractor is responsible for ensuring compliance with hot work procedures and must be in possession of method statements

Detailing the safe working procedures. 'Hot work' includes all work that generates a spark or flame and may therefore result in a fire.

8.6 Fall Protection Working in Elevated Positions

A pre-emptive Risk Assessment will be required for any work to be carried out above two meters from the ground or any floor level and will be classified as "Work in Elevated Positions".

As far as is practicable, any person working in an elevated position will work from a platform, ladder or other device that is at least as safe as if he/she is working at ground level and whilst working in this position be wearing and using a full body harness that will be worn to prevent the person falling from the platform, ladder or other device utilized. This safety harness will be, as far as is possible, secured to a point away from the edge over which the person might fall and the double lanyard must be of such a length that the person will not be able to move over the edge.

In addition, any platform, slab, deck or surface forming an edge over which a person may fall must be fitted with guard rails at two different heights as prescribed in SABS 10085-1 Code of Practice for the Design, Erection, Use and Inspection of Access Scaffolding

Workers working in elevated positions must be medically fit and trained to do this safely. Proof of medical fitness and training must be maintained on The Principal Building Contractors site safety file.

The Risk Assessments shall place specific emphasis on the placing and handling of roofing materials such as IBR sheeting or similar materials, (including contingency safety measures), which when exposed to windy conditions represents a serious safety hazard. Fall protection plan is to conform with Construction Regulation 10.

8.7 Roof work

All roof work must be conducted in accordance with construction regulation 10. A roof work risk assessment must be compiled by the roof work contractors (roof structure contractor and roof covering contractor) prior to such work being undertaken. The Risk Assessment must take into account the possibility of persons falling through fragile material, skylights, soffits and openings in the roof, steel support work trusses and purlins so designed as to support the roof structure. This consolidated roof safety plan must be forwarded to the

Principal Building Contractor. before the roof work is programmed to begin. The plan must include the following:

- How the roof work is planned to be erected;
- What hazards (tasks and tools) are associated with the work;
- That the roof workers are competent (trained, experienced, knowledgeable);
- That no work is carried during inclement weather (Strong wind and rain)
- That fragile material/areas are demarcated, and sign posted;
- That suitable platforms are provided where fragile materials exist;



- What safety measures will be implemented to ensure the safety of roof workers as well as persons working below the roof work (due to placement of roof tiles)?

8.8 Severe Weather Plan

- When high wind creates a hazard to craftsmen or work being performed, i.e., instability in elevated areas, limited visibility due to dust or particles in the air, unmanageable materials, etc., supervision will stop work activities, re-assign work and area, properly store and secure material which might blow away, injure or damage, lower/tie down crane booms and obtain further instruction from Site Management.
- When rain creates a hazard to craftsmen on work being performed, i.e., un-stable footing conditions due to slippery structural steel, muddy and flooded work environments, unstable trenches or excavations, poor visibility due to rain or eye protection, supervision will stop specific work due to hazard, re-assign work duties and/or areas, and obtain further instructions from Project Management. All scaffolding equipment and lifting equipment to be inspected and proclaimed safe to use or rectified as to be safe to use after any inclement weather. Signage must be posted to indicate the status of the scaffolding.

8.9 Structures

Principal Building Contractor will ensure that in terms of the Construction Regulations 11.

- That the structure on/in, which works, is to be performed has been inspected by a certified structural engineer declaring the structure to be safe for construction/demolition/renovations work processes.
- Steps are taken to ensure that no structure becomes unstable or poses a threat of collapse due to demolition and construction work being performed on it, or in the vicinity of it
- No structure is overloaded to the extent where it becomes unsafe
- He/she has received from the designer the following information:
- Information on known or anticipated hazards relating to the construction/demolition work and the relevant information required for the safe execution of the construction/demolition work
- A geo-scientific report (where applicable)
- The loading the structure is designed to bear
- The methods and sequence of the construction/demolition process
- All drawings pertaining to the design are on site and available for inspection
- The structural engineer shall carry out inspections at appropriate and sufficient intervals of the construction work involving the design of the relevant structure to ensure compliance with the design and record the results of these inspections in writing. These records shall be maintained on the relevant site safety files as per Construction regulation 9(2) f.

8.10 Excavations, Shoring, Dewatering or Drainage

The Principal Building Contractor needs to conform with Construction Regulation 13;

13. (1) A contractor must-

13(1)(a) ensure that all excavation work is carried out under the supervision of a competent person who has been appointed in writing for that purpose; and

13(1)(b) evaluate, as far as is reasonably practicable, the stability of the ground before excavation work begins.

13(2) A contractor who performs excavation work-

13(2)(a) must take reasonable and sufficient steps in order to prevent, as far as is reasonably practicable, any person from being buried or trapped by a fall or dislodgement of material in an excavation;



13(2)(b) may not require or permit any person to work in an excavation which has not been adequately shored or braced: Provided that shoring and bracing may not be necessary where-

13(2)(b)(i) the sides of the excavation are sloped to at least the maximum angle of repose measured relative to the horizontal plane; or

13(2)(b)(ii) such an excavation is in stable material: Provided that-

13(2)(b)(ii)(aa) permission has been given in writing by the appointed competent person contemplated in sub regulation (1) upon evaluation by him or her of the site conditions; and

13(2)(b)(ii)(bb) where any uncertainty pertaining to the stability of the soil still exists, the decision from a professional engineer or a professional technologist competent in excavations is decisive and such a decision must be noted in writing and signed by both the competent person contemplated in sub regulation (1) and the professional engineer or technologist, as the case may be;

13(2)(c) must take steps to ensure that the shoring or bracing contemplated in paragraph (b) is designed and constructed in a manner that renders it strong enough to support the sides of the excavation in question;

13(2)(d) must ensure that no load, material, plant or equipment is placed or moved near the edge of any excavation where it may cause its collapse and consequently endangers the safety of any person, unless precautions such as the provision of sufficient and suitable shoring or bracing are taken to prevent the sides from collapsing;

13(2)(e) must ensure that where the stability of an adjoining building, structure or road is likely to be affected by the making of an excavation, steps are taken to ensure the stability of such building, structure or road and the safety of persons;

13(2)(f) must cause convenient and safe means of access to be provided to every excavation in which persons are required to work, and such access may not be further than six meters from the point where any worker within the excavation is working;

13(2)(g) must ascertain, as far as is reasonably practicable, the location and nature of electricity, water, gas or other similar services which may in any way be affected by the work to be performed, and must before the commencement of excavation work that may affect any such service, take the steps that are necessary to render the circumstances safe for all persons involved;

13(2)(h) must ensure that every excavation, including all bracing and shoring, is inspected-

13(2)(h)(i) daily, prior to the commencement of each shift;

13(2)(h)(ii) after every blasting operation;

13(2)(h)(iii) after an unexpected fall of ground;

13(2)(h)(iv) after damage to supports; and

13(2)(h)(v) after rain,

by the competent person contemplated in sub regulation (1), in order to ensure the safety of the excavation and of persons, and those results must be recorded in a register kept on site and made available on request to an inspector, the client, the client's agent, any other contractor or any employee;

13(2)(i) must cause every excavation which is accessible to the public or which is adjacent to public roads or thoroughfares, or whereby the safety of persons may be endangered, to be-

13(2)(i)(i) adequately protected by a barrier or fence of at least one metre in height and as close to the excavation as is practicable; and

13(2)(i)(ii) provided with warning alluminants or any other clearly visible boundary indicators at night or when visibility is poor, or have resort to any other suitable and sufficient precautionary measure where subparagraphs (i) and (ii) are not practicable;

13(2)(j) must ensure that all precautionary measures stipulated for confined spaces as determined in the General Safety Regulations, 2003, are complied with by any person entering any excavation;

13(2)(k) must, where the excavation work involves the use of explosives, appoint a competent person in the use of explosives for excavation, and must ensure that a method statement is developed by that person in accordance with the applicable explosives legislation; and

13(2)(l) must cause warning signs to be positioned next to an excavation within which or where persons are working or carrying out inspections or tests.



8.11 Speed Restrictions and Protection

The Principal Building Contractor shall ensure that all persons in its employment, all Subcontractors, and all those that are visiting the site are aware and comply with the site speed restriction(s). Separate vehicle and pedestrian access routes shall be provided, maintained, controlled and enforced.

8.12 Hazardous Chemical Substances (HCS)

The Principal Building Contractor and other relevant Subcontractors shall provide the necessary training and information regarding the use, transport, and storage of Hazardous Chemical Substances. The Principal Building Contractor shall ensure that the use, transport, and storage of Hazardous Chemical Substances are carried out as prescribed by the Hazardous Chemical Substances Regulations. The Subcontractor shall ensure that all hazardous chemicals on site have a Material Safety Data Sheet (MSDS) on site and the users are made aware of the hazards and precautions that need to be taken when using the chemicals. The First Aiders must be made aware of the MSDS and how to treat Hazardous Chemical Substances incidents appropriately. Flammable substances must be stored separately away from other materials, and in a well – ventilated area (appropriate cross ventilation). A competent person should be appointed to be in control of this portfolio. The necessary safety signage should be positioned near and around the cornered off areas. Fire extinguishers should also be placed, no closer than five (5) meters of the area.

All containers must be clearly labelled. substances must be stored separately, away from other materials, and in a well-ventilated area (appropriate cross ventilation). A competent person should be appointed to be in control of this portfolio. Fuel storage tanks must conform to the general environmental legislation and Environmental Management Plan. The necessary safety signage must be posted up on the tanks – ‘no naked flames’, ‘no smoking’. Two 9kg DCP fire extinguishers must be placed near to fuel tanks, but not within 5m of the tanks. These extinguishers are over and above the minimum four required for the offices and stores.

8.13 Transport of Workers

The Principal Building Contractor and other Subcontractors shall not:

1. Transport persons together with goods or tools unless there is an appropriate area or section to store them
2. Transport persons in a non-enclosed vehicle e.g. truck, there must be a proper canopy (properly covering in the back and top) with suitable sitting area. Workers shall not be permitted to stand or sit at the edge of the transporting vehicle.

8.14 Temporary Works (Formwork and Support work)

A contractor must appoint a temporary works designer in writing to design, inspect and approve the erected temporary works on site before use. The designer of temporary works must ensure that –

- a) All temporary works are adequately designed so that it will be capable of supporting all anticipated vertical and lateral loads that may be applied;
- b) The design of temporary works are done with close reference to the structural design drawing issued by the contractor, and in the event of any uncertainty consult the contractor;
- c) The loads caused by the temporary works and any imposed loads are clearly indicated in the design
- d) The temporary works drawing are approved by the temporary works designer before the erection of any temporary works;

All temporary works operations are carried out under the supervision of a competent person who has been appointed in writing for that purpose. All temporary works structures are inspected by a competent person immediately before, during and after the placement of concrete, after inclement weather or any other

imposed load and at least on a daily basis until the temporary works structure has been removed and the results have been recorded in a register and made available on site.

The contractor must ensure that –

- a) All temporary works structures are adequately erected, supported, braced and maintained by a competent person so that they are capable of supporting all anticipated vertical and lateral loads that may be applied to them, and that no loads are imposed onto the structure that the structure is not designed to withstand;
 - b) All temporary works structures are done with close reference to the structural design drawings, and where any uncertainty exist the structure designer should be consulted;
 - c) Detailed activity specific drawings pertaining to the design of temporary works structures are kept on the site and are available on request to an inspector, Subcontractors, Client the Client agent or any employee;
 - d) All persons required to erect, move or dismantle temporary works structures are provided with adequate training and instruction to perform those operations safely;
 - e) All equipment used in temporary works structure are carefully examined and checked for suitability by a competent person before being used;
 - f) No person may cast concrete, until authorization in writing has been given by the competent person;
 - g) Adequate precautionary measures are taken in order to –
 - i. Secure any deck panels against displacement; and
 - ii. Prevent any person from slipping on temporary works due to the application of release agents
 - h) Upon casting concrete, the temporary works structure is left in place until the concrete has acquired sufficient strength to safely support its own weight and any imposed load, and is not removed until removed until authorization in writing has been given by the competent person;
 - i) The foundation conditions are suitable to withstand the loads caused by then temporary works structure and any imposed load accordance with temporary works design;
- See Construction Regulation 12 for details.

8.15 Environmental management

8.15.1 Dumping

1. Receipts for hazardous waste disposal shall be copied to the Environmental Manager.
2. Any proposal to dispose of vegetation cuttings, tree trunks or building waste products such as rubble or asphalt or similar such products as part of backfill or landscape shaping shall require a Method Statement.

8.15.2 Litter and refuse

1. Waste and litter shall be disposed of into scavenger- and weatherproof bins. Principal Building Contractor shall then remove the refuse collected from the working areas, from site at least once a week.
2. Refuse must be disposed at a site approved by the Environmental Manager.
3. Principal Building Contractor shall make provision for workers to clean up Principal Building Contractor's camp and working areas at least once a week.

8.15.3 Recycling

1. Wherever possible, materials used or generated by construction shall be recycled.
2. Containers for glass, paper, metals and plastics shall be provided. Office and camp areas are particularly suited to this form of recycling process.
3. Where possible and practical, such as at stores and offices, waste shall be sorted for recycling purposes. Recycling protocols shall sort materials into the following categories:
 - a. Paper / cardboard



- b. Aluminium
- c. Metals (other than aluminium)
- d. Organic waste
- e. Glass

8.15.4 Litter and oil traps

1. Refuse screens and oil traps shall be installed at runoff concentration points from large parking facilities, wash bays, storm water outlets, inlets to detention ponds, workshop drainage points, ablution and eating areas. These facilities shall be serviced and monitored at the discretion of the Environmental Manager.

8.15.5 Wastewater management

1. A surface water management plan has been prepared and approved before construction commences. It has considered the following:
 - Appropriate cut-off drains to separate potentially contaminated flows from the open drainage system.
 - Containment of polluted flows.
 - Settling ponds/sludge dams/evaporation ponds for water with high suspended solids (e.g. batching, crusher, and sand washing areas).
2. Principal Building Contractor should take precautions to minimise water pollution as shall be required.
3. All wastewater should comply with pre-determined standards as set out in the National Water Act, Act 36 of 1998, Government Notice No 398 and No 399 DWAF General Authorisations in terms of Section 39 of the National Water Act, Act 36 of 1998 and the South African Water Quality Guidelines for Fresh Water Second Edition, 1996, before it can be released into the environment.
4. Water quality monitoring shall be undertaken as described in the relevant section of this CEMP.
5. Principal Building Contractor shall notify the Environmental Manager immediately of any pollution incidents on site.

8.15.6 Washing areas

1. Wash areas shall be placed and constructed in such a manner so as to ensure that the surrounding areas, which include groundwater, are not polluted.
2. A Method Statement shall be required for all wash areas where hydrocarbon and hazardous materials, and pollutants are expected to be used. This includes, but is not limited to, vehicle washing, workshop wash bays, paint wash and cleaning.
3. Wash areas for domestic use shall ensure that the disposal of contaminated "grey" water is sanctioned by the Environmental Manager

8.15.7 Spillages

1. Streams, rivers and dams and underground water will be protected from direct or indirect spillage of pollutants such as refuse, garbage, cement, concrete, sewage, chemicals, fuels, oils, aggregate, tailings, wash water, organic materials and bituminous products.
2. In the event of a spillage during the construction phase, the responsibility for spill treatment will lie with Principal Building Contractor will be liable to arrange for competent assistance to clear the affected area.
3. Principal Building Contractor will compile and maintain environmental emergency procedures, to ensure that there will be an appropriate rapid response to unexpected or accidental environment-related incidents throughout the life cycle of the project.



4. The individual responsible for, or who discovers a hazardous waste spill must report the incident to the Environmental Manager.
5. The Environmental Manager will assess the situation in consultation with Principal Building Contractor and act as required. In all cases, the immediate response will be to contain the spill. The exact treatment of polluted soil/water will be determined By Principal Building Contractor in consultation with the Environmental Manager. Areas cleared of hazardous waste will be re-vegetated according to the Environmental Manager's instructions.
6. Should water downstream of the spill be polluted, and fauna and flora show signs of deterioration or death, specialist hydrological or ecological advice must be sought for appropriate treatment and remedial procedures to be followed. The requirement for such input will be agreed with the Environmental Manager. The costs of containment and rehabilitation will be for Principal Building Contractor's account, including the costs of specialist input.
7. No person shall be allowed to approach a spill unless he/she is equipped with the personal protective clothing.
8. The risk involved shall be assessed before anyone approaches the scene of the incident with the emergency response plan.
9. The Environmental Manager shall establish, at the earliest opportunity, a temporary isolation zone to clear the area of onlookers.
10. A written report shall be completed and signed by the Environmental Manager and forwarded to the relevant environmental authority within 24 hours of the incident.
11. Any known or discovered spillage of toxic substances into a stream or river should be followed by immediate monitoring of the receiving streams and rivers.

8.15.8 Cement /concrete batching

1. Location, layout and preparation of cement/ concrete batching facilities including the methods employed for the mixing of concrete including the management of runoff water from such areas.

8.15.9 Pumping and Sumping

1. All pumps shall be placed over drip trays in order to prevent fuel spills and leaks from contaminating the water in the pumped area.
2. Contaminated water may not be discharged into existing watercourses or streams and a method statement for discharge of this contaminated water shall be required.
3. Small volumes of silt-laden water may be cleaned by using a perforated 200l drum containing sand and stone separated by geotextile fabric with a central delivery water pipe
4. Silt-laden water shall be cleaned by ensuring that the overland flow of water disperses widely through vegetation.
5. Silt-laden water shall be cleaned by tying a geotextile sock on the delivery pipe of the pump. Other filtration methods, such as hay bales and flocculation, may be used and shall be approved by the Environmental Manager.

8.15.10 Fuels/flammables stores

1. Fuel stores are kept as low in volume as practicable.
 - There are no leaks.
 - The outlet is secure and locked.
 - The bund is empty.
 - Fire extinguishers are serviced and accessible.
 - The area is secure from accidental damage through vehicle collision & the like.



- Emergency and contact numbers are available and displayed.
- There is adequate ventilation in enclosed spaces.
- There are no stores or containers within the 1:50 year flood line.

8.15.11 Cleaning of Roads

The Principal Building Contractor and earth work Subcontractor will be responsible for cleaning off access roads at all times while work is taking place on site.

9. Plant, Machinery and Equipment

9.1 Vessels under Pressure and Gas Bottles

Principal Building Contractor and all relevant Subcontractors shall comply with the Vessels under Pressure Regulations, including:

- Providing competency and awareness training to the operators/users;
- Providing the relevant PPE and clothing;
- Inspect equipment regularly (every month) and keep records of inspections;
- Providing appropriate firefighting equipment (Fire Extinguishers) on hand;
- Oxygen and acetylene bottles must be secured in an upright position, must not show signs of corrosion or damage and must have flash back arrestors fitted.

9.2 Hired Plant and Machinery

The Principal Building Contractor shall ensure that any hired plant and machinery used on site is safe for use and complies with the minimum legislated requirements. The necessary requirements as stipulated by the OHS Act and Construction Regulations (July 2014) shall apply.

The Principal Building Contractor shall ensure that operators hired with machinery are competent and that certificates are kept on site in the health & safety file.

Any load test requirements and inspections in terms of legislation must be complied with and copies of load test certificates and inspections must be kept in the health & safety file. All relevant Subcontractors must ensure the same.

9.3 Lifting Machines, Tackle and Lifting Operations

Principal Building Contractor and all Subcontractors shall ensure that lifting machinery and tackle are inspected before use and thereafter in accordance with the Driven Machinery Regulations and the Construction Regulations (regulation 22).

There must be a competent lifting machines inspector (registered with the Department of Labour, Gazette number 27305) and a competent lifting tackle inspector who must inspect the equipment, taking into account that:

- All lifting machinery and tackle have a safe working load clearly indicated;
- Regular inspection and servicing are carried out (3-monthly inspections and records for tackle and 6-monthly inspections and records for lifting machines);
- Records are kept of inspections and of service certificates;
- There is proper supervision in terms of guiding the loads that includes a trained banks man to direct lifting operations and check lifting tackle and attachments daily;



- Rigging of loads to be done in accordance with acceptable safe work practices;
- Tower crane bases have been designed and finally approved by an engineer before loading such base;
- Annual load test certificates for lifting machines are in place;
- Tower cranes are fitted with wind speed meters and audible alarm/warning lights, crane hooters, and that the crane's load chart is posted up in the crane cab;
- The operators are certified to operate the specific machine (valid certificate to be on site);
- The operators are physically and psychologically fit to work and in possession of a medical certificate of fitness to be available on site.

The Principal Building Contractor must ensure that safe lifting operations are adhered to. This must include the following:

- Pallets of bricks being lifted by a tower crane or mobile crane may only be lifted when secured in a brick cage or brick net, securing the entire load of bricks to the crane hook;
- Mortar bins, waste bins and any other receptacle must be deemed to be a lifting attachment and must be designed to carry the required load. Such attachments must be on register and inspected every 3 months by the competent lifting tackle inspector;
- Formwork may only be lifted by using purpose designed and manufactured lifting tackle – eight-gauge wire and the like is prohibited;
- A competent banks man must be in control of all rigging, slinging and lifting operations and must wear a high visibility vest, be in possession of a two-way radio and make use of a whistle warning persons of overhead loads. The crane operator may only take commands and signals from the designated bank men;
- Guide ropes (tag lines) must be used when lifting large shutters, long bundles of re-bar and other similar loads. This must be detailed in the Clients and contractors' fall prevention plans.
- Lifting operations must be re-evaluated once wind speeds reach 40 km/h unless otherwise specified by the lifting machine manufacturer.
- and tested and such registered person shall date and sign such report and submit said report within 30 days to the user who shall keep the report in a safe place in the machine-room or machine compartment.

9.4 Ladders

The Principal Building Contractor must ensure that all ladders are inspected daily with monthly records kept; in good safe working order; the correct height for the task; extend at least 1m above the landing; fastened and secured; and at a safe angle. Stepladders must be safe for use, must be the correct height for the task and the top two rungs may not be used. Records of inspections must be kept in a register on site. Subcontractors using their own ladders must ensure the same.

9.5 General Machinery

The Principal Building Contractor and relevant Subcontractors must ensure compliance with the Driven Machinery Regulations, which includes carrying out risk assessments on the machines, inspecting machinery regularly, appointing a competent person to inspect and ensure maintenance, issuing PPE and relevant clothing, and training those who use machinery.

9.6 Electrical Installations, Portable Electrical Tools and Explosive power tools

The Client will ensure as far as possible that the Principal Building Contractor is made aware of the positions of all electrical power lines. The Principal Building Contractor must notify the Client should it not be sure of the



location of any electrical power lines. The Principal Building Contractor must comply with the Electrical Installation Regulations, the Electrical Machinery Regulations and the Construction Regulations (CR 24).

The Principal Building Contractor must keep a copy of the Certificate of Compliance (CoC) for its electrical power supply. A revised CoC is required whenever the installation is altered or changed in any way. All temporary electrical installations must be inspected at least weekly by a competent person appointed in writing.

The Principal Building Contractor shall ensure that use and storage of all explosive powered tools and portable electrical tools are in compliance with relevant legislation. The Principal Building Contractor shall ensure that all electrical, tools, electrical distribution boards, extension leads and plugs are kept in safe working order.

Regular inspections and toolbox talks must be conducted to make workers aware of the dangers and control measures to be implemented e.g. personal protection equipment, guards etc.

The Principal Building Contractor shall consider the following:

1. A competent person undertakes routine inspections and records are kept
2. Only authorized trained persons use the tools
3. The Safe Working Procedures apply
4. Awareness training is carried out and compliance is enforced at all times, and
5. PPE and clothing are provided and maintained
6. A register indicating the issue and return of all explosive rounds
7. Ensure that the cartridges and explosive tools is locked up separately
8. Signs to be posted up in the areas where explosive powered tools are being used. **(Warning: Explosive Powered Tools in use – Keep Clear)**
9. Each item of power tool must be clearly marked so as to identify and tests /examinations must be recorded in the register.
10. Portable Power tool inspector must be appointed in writing.

9.7 Electrical & Mechanical Lockout

A system of control shall be established in order that no unauthorized person can energize a circuit, open a valve, or activate a machine on which people are working or doing maintenance, even if equipment, plant or machinery is out of commission for any period, thus eliminating injuries and damage to people and equipment as far as is reasonably practicable.

9.7 Electrical & Mechanical Lockout (Continued)

Physical/mechanical lock-out systems shall be part of the safety system and included in training. Lockouts shall be tagged, and the system tested before commencing with any work or repairs.

9.8 Waste Chutes

The disposal of rubble and other waste from elevated positions may only be conducted under controlled conditions. Waste chutes must be secured to a scaffold structure, which must in turn be secured to the main building. A person must be designated to take control of waste chute operations, which must include the inspection of the chute on a daily basis. Waste must discharge into an enclosed area (ready fence panels to be used), eliminating the risk of persons being struck by waste material.

9.9 Explosive Powered Tools

- 21, (1) No contractor may use or permit any person to use an explosive actuated fastening device, unless-
- (a) the user is provided with and uses suitable protective equipment;

- (b) the user is trained in the operation, maintenance and use of such a device;
 - (c) the explosive actuated fastening device is provided with a protective guard around the muzzle end, which effectively confines any flying fragments or particles; and
 - (d) the firing mechanism is so designed that the explosive actuated fastening device, will not function unless it is held against the surface with a force of at least twice its weight; and the angle of inclination of the barrel to the work surface is not more than 15degrees from a right angle.
- (2) A contractor must ensure that-
- (a) only cartridges suited for the relevant explosive actuated fastening device, and the work to be performed, are used;
 - (b) an explosive actuated fastening device is cleaned and examined daily before use and as often as may be necessary for its safe operation by a competent person who has been appointed for that purpose;
 - (c) the safety devices of an explosive actuated fastening device are in good working order prior to use;
 - (d) when not in use, an explosive actuated fastening device and its cartridges are locked up in a safe place, which is inaccessible to unauthorized persons;
 - (e) an explosive actuated fastening device is not stored in a loaded condition;
 - (f) a warning notice is displayed in a conspicuous manner in the immediate vicinity wherever an explosive actuated fastening device is used; and
 - (g) the issuing and collection of cartridges and nails or studs of an explosive actuated fastening device are-
 - (i) controlled and done in writing by a person having been appointed in writing for that purpose; and
 - (ii) recorded in a register by a competent person and that the recipient has accordingly signed for the receipt thereof as well as the returning of any spent and unspent cartridges.

9.10 Tower Cranes

As per construction Regulation 22:

A contractor must, in addition to compliance with the Driven Machinery Regulations, 1988 ensure that Where tower cranes are used-

- (a) they are designed and erected under the supervision of a competent person;
- (b) a relevant risk assessment and method statement are developed and applied;
- (c) the effects of wind forces on the crane are taken into consideration and that a wind speed device is fitted that provides the operator with an audible warning when the wind speed exceeds the design engineer's specification;
- (d) the bases for the tower cranes and tracks for rail-mounted tower cranes are firm, level and secured;
- (e) the tower crane operators are competent to carry out the work safely; and the tower crane operators have a medical certificate of fitness to work in such an environment, issued by an occupational health practitioner in the form of Annexure 3. No loads may be lifted over the external blocks.

10 Occupational Health

10.1 Industrial Hygiene (exposure to physical and chemical stress factors)

Exposure of workers to occupational health hazards and risks is very common in any work environment, especially in construction. Occupational exposure is a major problem and all contractors must ensure that proper health and hygiene measures are put in place to prevent exposure to these hazards. Prevent inhalation, ingestion, and adsorption through the skin of hazardous chemical substances.

10.2 Noise Induced Hearing Loss

Noise induced hearing loss is a highly underrated occupational condition.



Occupational noise emitted by construction machinery and power tools must be controlled as far as possible by implementing engineering solutions such as noise dampening, regular maintenance, servicing and inspection, screening off the noise, and reducing the number of persons exposed.

It is generally accepted that all employees on a construction site will be exposed to varying degrees of noise. In view of this, Principal Building Contractor shall ensure full compliance with the above-mentioned regulation; furthermore, provide proof of the relative management process. Principal Building Contractor is advised to pay particular attention to section 12 of the “Noise-Induced Hearing Loss Regulation”

10.3 Ergonomics

Ergonomics is the study of how workers relate to their workstations. We advise Principal Building Contractor and Subcontractors to take this into consideration when conducting risk assessments, thereby improving the worker-task relationship, which will in turn improve productivity and reduce chronic conditions such as back strains, joint problems and mental fatigue, amongst others.

10.4 Welfare Facilities

Principal Building Contractor must supply sufficient toilets (1 toilet per 30 workers), clean, lockable changing facilities, hand washing facilities, soap, toilet paper, and hand drying material. Waste bins must be strategically placed around site and emptied regularly. Workers must not be exposed to hazardous materials/substances while eating and must be provided with adequate, sheltered eating areas complete with benches and tables. Stores may not double up a change rooms or mess areas.

10.5 Alcohol and other Drugs

No alcohol and drugs will be allowed on site. No person may be under the influence of alcohol or any drug while on the construction site. Any person on prescription medication must inform his/her superior, who shall in turn report this to the Client's Agent forthwith. Any person suffering from any illness/condition that may have a negative effect on his/her /anyone else's health or safety performance must report this to his/her superior. Any person suspected of being under the influence of alcohol or other drugs must be sent home immediately.

10.6 Dust Control

1. Principal Building Contractor shall be solely responsible for the control of dust arising from Principal Building Contractor operations. Principal Building Contractor should prepare and submit a Dust Control Method Statement. As a minimum, the statement should address the following:

- Schedule of spraying water on construction areas/components like the batching area, unpaved roads paying due attention to control of runoff.
- Speed limits for vehicles on unpaved roads and minimisation of haul distances.
- Measure to ensure that material loads are properly covered during transportation.
- Minimisation of the area disturbed at any one time and protection of exposed soil against wind erosion.
- Location of material stockpiles taking into consideration prevailing wind directions and location of sensitive receptors.
- Adherence to the dust loads and protective gear stipulated in the Occupational Health and Safety Act.
- Reporting mechanism and action plan in case of excessive wind and dust conditions.
- The quantity of water used to control dust must be monitored and documented.



2. Principal Building Contractor shall take all reasonable measures to minimise the generation of dust as a result of construction activities to the satisfaction of the Environmental Manager.
3. Removal of vegetation shall be avoided where possible and similarly exposed surfaces shall be re-vegetated or stabilised as soon as is practically possible.
4. Excavation, handling and transport of erodible materials shall be avoided under high wind conditions or when a visible dust plume is present.
5. During high wind conditions, the Environmental Manager will evaluate the situation and make recommendations as to whether dust-damping measures are adequate, or whether working will cease altogether until the wind speed drops to an acceptable level.
6. Where possible, soil stockpiles shall be located in sheltered areas where they are not exposed to the erosive effects of the wind. Where erosion of stockpiles becomes a problem, erosion control measures shall be implemented at the discretion of the Environmental Manager.
7. Vehicle speeds shall not exceed 40km/h along dirt roads or 20km/h when traversing unconsolidated and non-vegetated areas.
8. Appropriate dust suppression measures shall be used when dust generation is unavoidable, e.g. dampening with water, particularly during prolonged periods of dry weather in winter. Such measures may also include the use of temporary stabilising measures (e.g. chemical soil binders, straw, brush packs, chipping etc.).

11 ANNEXURE - A

PRIMARY HEALTH AND SAFETY COMPLIANCE

Principal Building Contractor and Subcontractors must submit compliance with Annexure 'A' within **two weeks (10 working days)** of receiving these Health & Safety Specifications. **Compliance with Annexure 'A' must be maintained and proven to the Safety Agent at audits.**

HSS Item No.	Requirement	Legal Reference	Compliance required by:
A1	Health & Safety Plan (H&S plan)	Constructions Regs.	Prior to work commencing
A2	Notification of Intention to Commence Construction / Building Work	Complete Schedule 1 (Construction Regs)	Before commencement on site
A3	Assignment of Responsible Persons to Supervise Construction Work	OHS Act Section 8.(1) appointee. Construction Work Supervisor CR 8. (7)	Before commencement on site
A4	Competence of Responsible Persons in the form of CV's, related work history of CR 8 (7) and CR 8 (8) appointees	OHS Act Construction Work Supervisor-CR 8. (7) Sub-ordinate supervisors CR 8.(8)	Together with H&S plan
A5	Compensation for Occupational Injuries and Diseases – proof of registration	COIDA	Together with H&S plan
A6	Health and Safety Organogram showing all safety management portfolios and positions	Client Requirement	Together with H&S plan
A7	Initial Hazard Identification and Risk Assessment document	Construction Regs.	Together with H&S plan
A8	Fall protection plan (first draft) as defined in the Construction regulations Also, see CR 10.(1)(a)	Construction Regs.	Together with H&S plan



- HSS = health & safety specifications
- OHS Act = occupational health & safety Act
- CR = construction regulations
- COIDA = compensation for occupational injuries and diseases Act

RENOVATIONS AND ADDITIONS OF AN EXISTING BUILDING FOR OFFICE BUILDING, 41 GENERAL VAN RYNEVELD STREET

12 ANNEXURE - B

Assignment of duties by Principal Building Contractor and Subcontractors' responsible persons

The Principal Building Contractor must make all the management appointments as set out below. (Further appointments could become necessary as the project progresses).

No	OHS Act Ref.	Appointment	Name of Appointee
1	Section 8.(1)	Overall Authority and Accountability	
2	Section 16.(2)	Assignment of Duties	
3	CR 8.(7)	Construction Supervisor	
4	CR 8.(8)	Subordinate Construction Supervisor	
5	GMR 2(1)	Supervision of Machinery (not for construction sites)	
6	Section 17	Health and Safety Representative	
7	CR 16.(1))	Scaffold Erector, Inspector (separate appointments)	
8	CR 13(1)	Excavation Inspector	
9	GSR 3(4)	First Aiders	
10	CR 29(h)	Fire Equipment Inspector	
11	EMR 9	Portable Electrical Tool Inspector	
12	CR 17(8)(a)	Materials Hoist Inspector	
13	DMR 18(5)	Lifting Machinery and Equipment Inspector	
14	DMR 18(6)	Lifting Tackle Inspector	
15	GSR 13(a)	Ladder Inspector	
16	HSC Regs	Hazardous Chemical Substances Inspector	
17	CR 21(2)(b)	Explosive Powered Tools Inspector	
18	GSR 3	Emergency Procedure Coordinator	

19	CR 12(a)	Formwork and Support Work Inspector	
20	CR 14.(1)	Demolition Work Supervisor	
21	CR 17(1)	Suspended Platforms Supervisor	
22	CR 20(1)	Batch Plant Supervisor	
23	CR 23(j)	Construction Vehicle and Mobile Plant Inspector	
24	CR24(e)	Electrical Installation and Machinery Responsible Person	
25	CR 28(a)	Stacking and Storage Supervisor	
26		COVID 19 Manager	
26		COVID 19 Officer	

CR	=	Construction Regulations
EMR	=	Electrical Machinery Regulations
DMR	=	Driven Machinery Regulations
GMR	=	General Machinery Regulations
ER	=	Environmental Regulations
GSR	=	General Safety Regulations
HSC	=	Hazardous Chemical Substances Regulations

13 ANNEXURE - C

GENERAL COMPLIANCE REQUIREMENTS

Principal Building Contractor and Subcontractors must comply with but not be limited to the requirements tabled below: Prove compliance with annexure 'C' at audits conducted by the safety agent.

OHS Act Section/Regulation	Subject	Requirements
Construction. Regulation 4(1)	Notice of carrying out Construction work	Department of Labour notified Copy of Notice available on Site
General Admin. Regulation 4	Copy of OH&S Act (Act 85 of 1993)	Updated copy of Act & Regulations on site. Readily available for perusal by employees.
COID Act Section 80	Registration with Compensation Insurer	Written proof of registration/Letter of good standing available on Site
Construction. Regulation 5 (B)	H&S Specification & Programme	H&S Spec received from Client and/or its Agent on its behalf OH&S programme developed & Updated regularly
Section 16.(1)	Overall Authority and Accountability	Overall Responsibility
Section 16.(2)	Assignment of Duties	Responsible for Contract management of the project CV on file Legal Liability and HIRA training on file
Construction Regulation 8(1)	Construction Manager	Responsibility of complying with the OH&S Act assigned to other person/s by S 16.2. CV on file Legal Liability and HIRA training on file
Construction Regulation 8(2)	Assist Construction Manager	To assist the construction manager on site CV on file Legal Liability and HIRA training on file
Construction.	Designation of Person	Competent person appointed in writing as

Regulation 8 (7)	Responsible on Site	Construction Supervisor with job description CV on file Legal Liability and HIRA training on file
Construction. Regulation 8(8)	Assistant	Competent person appointed in writing as Assistant Construction Supervisor with job description CV on file Legal Liability and HIRA training on file
Construction Regulation 8(5)	Safety Officer	Competent person appointed in writing as Registered with SACPCMP CV on file
Section 17 & 18 General Administrative Regulations 6 & 7	Designation of Health & Safety Representatives	More than 20 employees - one H&S Representative, one additional H&S Rep. for each 50 employees or part thereof. Designation in writing, period and area of responsibility specified in terms of GAR 6 & 7 Safety Representatives name to be displayed on site notice board Meaningful H&S Rep. reports. Reports actioned by Management.
Section 19 & 20 General Administrative Regulations 5	Health & Safety Committee/s	H&S Committee/s established. All H&S Reps shall be members of H&S Committees Additional members are appointed in writing. Meetings held monthly; Minutes kept. All safety meeting schedules are to be displayed on site notice board Actioned by Management.
Section 37(1) & (2)	Agreement with Mandatories/ Contractors	Written agreement with Contractors List of Contractors displayed. Proof of Registration with Compensation Insurer/Letter of Good

		<p>Standing</p> <p>Construction Supervisor designated</p> <p>H&S Reps & H&S Committee</p> <p>Written arrangements re. First Aid</p>
<p>Section 8(2)(d)</p> <p>Construction.</p> <p>Regulation 9(1)</p>	<p>Hazard Identification & Risk Assessment</p>	<p>Hazard Identification carried out/Recorded</p> <p>Risk Assessment and – Plan drawn up/Updated</p> <p>RA Plan available on Site</p> <p>Risk assessments to be signed off by risk assessor and Contract manger</p> <p>Method statement to be done for each activity which is taking place on site.</p> <p>All risk assessments to be done as per method statements</p> <p>Employees/contractors informed/trained</p>
	<p>Reporting of Incidents</p> <p>(Dept. of Labour)</p>	<p>Incident Reporting Procedure and man-hours to be displayed on site notice board.</p> <p>All incidents in terms of Sect. 24 reported to the Provincial Director, Department of Labour, within 3 days. (Annexure 1) (WCL 1 or 2) and to the Client and/or its Agent on its behalf</p> <p>Copies of Reports available on Site</p> <p>Record of First Aid injuries kept</p>
<p>General Admin.</p> <p>Regulation 9</p>	<p>Investigation and Recording of Incidents</p>	<p>All injuries which resulted in the person receiving medical treatment other than first aid, recorded and investigated by investigator designated in writing.</p> <p>Copies of Reports (Annexure 1) available on Site</p> <p>Tabled at H&S Committee meeting</p>
<p>Construction.</p> <p>Regulation 10.(1)(A)</p>	<p>Fall Prevention & Protection</p>	<p>Competent person appointed to draw up and supervise the Fall Protection Plan</p> <p>Proof of appointees' competence available on Site</p> <p>Risk Assessment carried out for work at heights</p>

		Fall Protection Plan drawn up/updated and workers trained Available on Site
Construction. Regulation 10(5)(B)	Roof work	Competent person appointed to plan & supervise Roof work. Proof of appointees' competence available on Site Risk Assessment carried out and workers trained Roof work Plan drawn up/updated Roof work inspect before each shift. Inspection register kept Employees medically examined for physical & psychological fitness. Written proof on site
Construction. Regulation 11	Structures	Information re. the structure being erected received from the Designer including: - geo-science technical report where relevant - the design loading of the structure - the methods & sequence of construction - anticipated dangers/hazards/special measures to construct safely Risk Assessment carried out Method statement drawn up All above available on Site

Construction. Regulation 16.(1)	Scaffolding	Competent persons appointed in writing to: - erect scaffolding (Scaffold Erector/s) - inspect Scaffolding weekly and after inclement weather (Scaffold Inspector/s) Mobile scaffold to be inspected if any changes are made to the platform or structure Names and contact numbers of Scaffold erectors and inspectors to
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		<p>be displayed</p> <p>Written Proof of Competence of above appointees available on Site</p> <p>Risk Assessment carried out</p> <p>Inspected weekly/after bad weather. Inspection register/s kept</p>
Construction. Regulation 14.(1)	Demolition Work	<p>Competent person/s appointed in writing to supervise and control Demolition work</p> <p>Written Proof of Competence of above appointee/s available on Site</p> <p>Risk Assessment carried out</p> <p>Engineering survey and Method Statement available on Site</p> <p>Inspections to prevent premature collapse carried out by competent person before each shift. Inspection register kept</p>
Construction. Regulation 19	Materials Hoist	<p>Competent person appointed in writing to inspect the Material Hoist</p> <p>Written Proof of Competence of above appointee available on Site.</p> <p>Materials Hoist to be inspected weekly by a competent person. Inspections register kept.</p>
Construction. Regulation 21	Explosive Powered Tools	<p>Competent person appointed to control the issue of the Explosive Powered Tools & cartridges and the service, maintenance and cleaning. Register kept of above</p> <p>Empty cartridge cases/nails/fixing bolts returns recorded</p> <p>Cleaned daily after use Work areas are demarcated!</p>
Construction. Regulation 20	Batch Plants	<p>Competent person appointed to control the operation of the Batch Plant and the service, maintenance and cleaning. Register kept of above</p> <p>Risk Assessment carried out</p> <p>Batch Plant to be inspected weekly by a competent person. Inspections register kept</p>
Construction.	Cranes & Lifting Machines Equipment	<p>Competent person appointed in writing to inspect Cranes, Lifting</p>

<p>Regulation 22</p> <p>Construction Vehicles and Mobile Plant C.R 23</p>		<p>Machines & Equipment</p> <p>Written Proof of Competence of above appointee available on Site.</p> <p>Cranes & Lifting tackle identified/numbered</p> <p>Register kept for Lifting Tackle</p> <p>Logbook kept for each individual Crane</p> <p>Inspection: - All cranes - daily by operator</p> <ul style="list-style-type: none"> - Tower Crane/s - after erection/6monthly - Other cranes - annually by comp. person - Lifting tackle (slings/ropes/chain slings etc.) - daily or before every new application
<p>Construction. Regulation 24/Electrical Machinery Regulations 9 & 10/ Electrical Installation Regulations</p>	<p>Inspection & Maintenance of Electrical Installation & Equipment (including portable electrical tools)</p>	<p>Competent person appointed in writing to inspect/test the installation and equipment.</p> <p>Written Proof of Competence of above appointee available on Site.</p> <p>Inspections:</p> <ul style="list-style-type: none"> - Electrical Installation & equipment inspected after installation, after alterations and quarterly. Inspection Registers kept <p>Portable electric tools, electric lights and extension leads must be uniquely identified and numbered.</p> <p>Weekly visual inspection by User/Issuer/Storeman. Register kept.</p>
<p>Construction. Regulation 28</p> <p>General Safety Regulation 8(1)(a)</p>	<p>Stacking & Storage Supervisor.</p>	<p>Competent Person/s with specific knowledge and experience designated to supervise all Stacking & Storage</p> <p>Written Proof of Competence of above appointee available on Site</p>
<p>Construction. Regulation 29</p> <p>Environmental Regulation 9</p>	<p>Designation of a Person to Co-ordinate Emergency Planning And Fire Protection</p>	<p>Person/s with specific knowledge and experience designated to co-ordinate emergency contingency planning and execution and fire prevention measures</p> <p>Emergency Evacuation Plan developed:</p> <ul style="list-style-type: none"> - Drilled/Practiced - Plan & Records of Drills/Practices available on Site <p>Fire Risk Assessment carried out</p>

		<p>All Fire Extinguishing Equipment identified and on register.</p> <p>Inspected weekly. Inspection Register kept</p> <p>Serviced annually</p>
General Safety Regulation 3	First Aid	<p>Every workplace provided with sufficient number of First Aid boxes. (Required where 5 persons or more are employed)</p> <p>First Aid freely available</p> <p>Equipment as per the list in the OH&S Act.</p> <p>One qualified First Aider appointed for every 50 employees. (Required where more than 10 persons are employed)</p> <p>List of First Aid Officials and Certificates</p> <p>Name of person/s in charge of First Aid box/es displayed.</p> <p>Location of First Aid box/es clearly indicated.</p> <p>Signs instructing employees to report all Injuries/illness including first aid injuries</p>
General Safety Regulation 2	Personal Safety Equipment (PSE)	<p>Items of PSE prescribed/use enforced</p> <p>Records of Issue kept</p> <p>PPE matrix to be displayed</p> <p>Undertaking by Employee to use/wear PSE</p> <p>PSE remain property of Employer, not to be removed from premises GSR 2(4)</p>
General Safety Regulation 9	Inspection & Use of Welding/Flame Cutting Equipment	<p>Competent Person/s with specific knowledge and experience designated to Inspect Electric Arc, Gas Welding and Flame Cutting Equipment</p> <p>Written Proof of Competence of above appointee available on Site</p> <p>All new vessels checked for leaks; leaking vessels NOT taken into stock but returned to supplier immediately</p> <p>Equipment identified/numbered and entered into a register</p> <p>Equipment inspected weekly. Inspection Register kept</p>

<p>Hazardous Chemical Substances (Hazardous Chemical Substances)</p> <p>Regulations</p> <p>Construction Regulation 25</p>	<p>Control of Storage & Usage of Hazardous Chemical Substances and Flammables</p>	<p>Competent Person/s with specific knowledge and experience designated to Control the Storage & Usage of Hazardous Chemical Substances (including Flammables)</p> <p>Hazardous chemical survey to be conducted</p> <p>Risk Assessment carried out</p> <p>Register of Hazardous Chemical Substances kept/used on Site</p>
<p>Vessels under Pressure Regulations</p>	<p>Vessels under Pressure</p>	<p>Competent Person/s with specific knowledge and experience designated to supervise the use, storage, maintenance, statutory inspections & testing of VUP's</p> <p>Written Proof of Competence of above appointee available on Site</p> <p>Risk Assessment carried out</p> <p>Register of VUP's on Site</p>
<p>Construction. Regulation 23</p>	<p>Construction Vehicles & Earth Moving Equipment</p>	<p>Operators/Drivers appointed to:</p> <ul style="list-style-type: none"> - Carry out a daily inspection prior to use - Drive the vehicle/plant that he/she is competent to operate/drive - All plant to be fitted with revolving lights - Plant to be fitted with Fire extinguishers <p>Written Proof of Competence of above appointee available on Site.</p> <p>Medical Report available for each operator available on site</p> <p>Record of Daily inspections kept</p>
<p>General Safety Regulation 13A</p>	<p>Inspection of Ladders</p>	<p>Competent person appointed in writing to inspect Ladders</p> <p>Ladders inspected at arrival on site and weekly thereafter.</p> <p>Inspections register kept</p>

14 ANNEXURE - D

HAZARD IDENTIFICATION

Task Orientated Risks

Task / situation	Personal protective equipment	Risk to safety	Risk to health	Risk to Environment
Formwork	Overalls, hard hats, safety shoes, aprons	Cuts, splinters		
Stripping of Formwork	Overalls, hard hats, safety shoes	Foot injuries, hand injuries eye injuries.		Spillage of oils and degreasers onto ground water, etc.
Brick work (General)	Overalls, hard hats, safety shoes, gloves	Twisting and straining of back muscles while lifting bricks, Hand injuries		
Brick work (Gables / Parapets) – working off of platforms or trestles	Overalls, hard hats, safety shoes, gloves, harnesses	Gables collapsing on windy days Fractures, death, falls from height		
Plastering	Overalls, hard hats, safety shoes, gloves		Chemical reaction in wet cement causes Dermatitis, Back strains while manually shoveling cement.	
Cement and Concrete Mixing	Overalls, dust masks, hard hats, safety shoes, gloves, earmuffs		Ingestion, inhalation of cement Dermatitis	
Roof work Includes Truss work and roof sheeting, cladding and painting. Where trusses are to be mechanically lifted	Overalls hard hats, safe shoes, gloves, harnesses and lifelines	Falls from roof height Materials falling from heights	Death, Neck and Head injuries, sprains and breaks	

into position, an assessment of the process must be undertaken.				
Scaffolding Erection and Dismantling	Overalls hard hats, safety shoes, gloves, harnesses and lifelines	Falls – death, fractures Falling objects Collapsing of scaffold		
Work in Elevated Positions (Scaffolds)	Overalls hard hats, safety shoes, gloves, harnesses and lifelines	Falls from heights Falling objects		
Ladder Usage	Hard hats, safety shoes	Falls		
Electrical Installations (Temporary)	Overalls, hard hats, safety shoes, gloves, etc.	Exposed switches and wires Cables lying in pools of water Un-insulated cables and wires	Execution, Burns	
Load & Unload by Hand	Gloves	Back and hand injuries		

EQUIPMENT RISKS

Activity / Situation	Personal Protective Equipment	Risk to Safety	Risk to Health	Risk to Environment
Construction Vehicles and Plant	High visibility bibs, hearing protection, safety shoes	Accidents	Noise, dust	
Electric Drill	Overalls, hard hats, safety shoes	Eye injuries, general injuries, electrical shocks		
Angle Grinder	Overalls, hard hats, safety shoes, goggles, hearing protection, respiratory protection.	Electrical shocks, severe injuries, noise induces hearing loss, respiratory problems	Permanent damage to ears. Silicosis in lungs	Noise & Dust pollution
Jack Hammer	Gloves, Safety Shoes, Eye protection, Hearing Protection, kidney belt for prolonged use.	Noise induced hearing loss, eye injuries, vibration related loss of sensitivity, kidney problems, bruises, hand injury	Certain conditions have been noted related to extended use of such equipment such as noise induced hearing loss and loss of sensitivity in hands and limbs as a result of continual vibration	Noise pollution
Skill Saw	Overalls, hard hats, safety shoes, goggles, hearing protection	Electrical shocks, severe injuries, guard malfunction		
Extension Leads	Hard hats, safe shoes, goggles	Electrical shocks, trips and falls		
Hand Tools	Overalls, hard hats, safety shoes, goggles, aprons	Cuts, bruises		
Compressed Air Tools	Overalls, hard hats, safety shoes, goggles	Injuries, ruptured eardrums, eye injuries		

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PHYSICAL RISKS

Situation	Personal Protective Equipment	Risk to Safety	Risk to Health	Risk to Environment
Tripping Hazards	Footwear, ramps and walkways with rails.	ankle & knee injuries and foot injuries etc.		
Noise (General Machinery)	Ear plugs, earmuffs		Noise induced hearing loss	Noise pollution
Vibration (General Machinery)	Ear plugs, earmuffs, gloves		May result in kidney complications	
Bad Lighting		Injuries, falls, death		
Fire Prevention	Overalls, hard hats, safety shoes, aprons	Combustible refuse: paper & plastics Flammable liquids: petrol, diesel, etc. Electrical equipment		

ERGONOMIC RISKS

Situation	Personal Protective Equipment	Risk to Safety	Risk to Health	Risk to Environment
Visual Workplace		Falls from heights Materials falling from heights Tripping over materials		
Awkward		Back injuries, etc.	Health complication	

Postures			from unnatural postures	
Heavy Manual Lifting		Back injuries, etc.		

15 ANNEXURE – E

SAFE -WORK PROCEDURES / METHOD STATEMENTS REQUIRED

The hazardous operations listed below have been identified by the Client and must be managed by Principal Building Contractor in the form of preparation of method statements / SWP's before such work begins. The onus remains on Principal Building Contractor to conduct risk assessments and compile method statements for hazardous tasks (Construction Regulations). Subcontractors appointed by the Principal Building Contractor will be required to conduct the necessary risk assessments and method statements and forward these to the Principal Building Contractor before such work begins.

Due to the fact that various structures will be constructed with varying engineering designs, structure specific method statements will be required.

No.	METHOD STATEMENT / SWP	DATE APPROVED	DATE LAST REVIEWED
1	Scaffolding Erection, alteration, dismantling Work thereon Inspections – when and who		
2	Lifting machines and related equip. Erection of equipment Operational procedures (slinging, control of various lifting operations)		
3	Roof work Installation of roof tiles, including worker safety methods and procedures while conducting this work		
4	Temporary barricading of exposed edges and elevated walkways (concrete floors, stairways and other)		
5	Movement of construction vehicles and mobile plant across/on public roadways and walkways (including cleaning procedures and road signage)		
6	Formwork and support work Erection and dismantling Inspections – when and who Edge protection strategy		
7	Fall protection plan Site specific		
8	Emergency procedures & evacuation plan Evacuation Fire Injuries/incidents		



16 ANNEXURE – F

HEALTH AND SAFETY COST GUIDELINES

ITEMS COSTED		ESTIMATED COST
1	PERSONAL PROTECTIVE EQUIPMENT	
	Overalls	R
	Hard hats and safety glasses	R
	Safety boots / shoes	R
	Visors / gloves	R
	Other	R
TOTAL		

ITEMS COSTED		ESTIMATED COST
2	FIRE FIGHTING EQUIPMENT	
	Fire extinguishers	R
	Training	R
	Survey	R
	Other	R
TOTAL		

ITEMS COSTED		ESTIMATED COST
3.	HEALTH AND SAFETY PERSONNEL	
	Safety Manager	R
	Full time safety officer	R
	Full time safety representatives	R
	First aiders	R
	External auditors' cost	R
TOTAL		

Name	
Designation	
Date	

ITEMS COSTED		ESTIMATED COST
4.	FACILITIES	
	Provision of ablution facilities	R
	Service and maintenance of ablution facilities	R
	Provision of eating area	R
	Cleaning of lay down and other storage areas	R
TOTAL		

ITEMS COSTED		ESTIMATED COST
5.	FALL PREVENTION AND PROTECTION	
	Safety harness with double lanyards	R
	Lanyard extenders	R
	Scaffold hooks	R
	Lifelines and vertical fall arrest systems	R
	Scaffolding – material, erection and inspection (estimate for project)	
TOTAL		

ITEMS COSTED		ESTIMATED COST
6.	LIFTING MACHINERY AND EQUIPMENT	
	Annual inspections and load testing as per legal requirement	R
	Certification of all lifting gear during the course of the project	R
	Third party inspection	R
TOTAL		

Name	
Designation	
Date	

	ITEMS COSTED	ESTIMATED COST
7.	INSURANCES	
	COID cover for the project	R
	Liability insurance	R
TOTAL		

	ITEMS COSTED	ESTIMATED COST
8.	TRAINING	
	Health and safety representatives	R
	H & S Supervisory training	R
	First aid training	R
	Fire fighting	R
	Legal liability training	R
	Risk assessment training	R
TOTAL		

	ITEMS COSTED	ESTIMATED COST
9.	SIGNAGE	
	All signage as required by law: regulatory, warning and information	R
	Posters for awareness	R
TOTAL		

Name	
Designation	
Date	

ITEMS COSTED		ESTIMATED COST
10.	ELECTRICAL	
	Locks required for lockouts	R
	Tags	R
	Permit books	R
	Callipers	R
	Keys safes	R
TOTAL		

ITEMS COSTED		ESTIMATED COST
11.	COVID 19 REQUIREMENTS	
	N 95 / FFP 2 Dust Masks	R
	Hand sanitizers (70% Ethanol based sanitizer)	R
	Posters	R
	Training of staff	R
	Hazardous disposal boxes	R
	Cloth masks (3 per employee)	R
	Face shields	R
	Wash areas	R
	Soap	R
	Ventilation by natural or mechanical means	R
	Tissue	R
	Sanitizing Offices, equipment, construction vehicles and mobile plant , eating areas	R
	Infrared Thermometer	R
	disposable paper cloth	R
	Safety glasses	R
	Lined Bins to dispose of PPE / Biological waste bins	R
TOTAL		

Name	
Designation	
Date	

This list is not exhaustive, and the Principal Building Contractor may expand all levels to include all relevancy H & S expenditure



18. Annexure G

PREVENTION AND MANAGEMENT PLAN DEALING WITH CORONAVIRUS COVID-19

1. Scope
2. Legislation
3. Period of application
4. What is Coronavirus COVID-19?
5. Life Span Details
6. Administrative measures
7. Social distancing measures
8. Symptom screening
9. Prevention
10. Construction Site Specific Plan of Action
11. Additional Information
12. Sanitizers, disinfectants and other measures
13. Cloth masks
14. Measures in respect of workplaces to which public have access
15. Ventilation
16. Risk Plan: COVID-19 Construction Sites
 - 16.1 Procedure if Someone Falls ill
 - 16.2 Site Access Points
 - 16.3 Hand Washing
 - 16.4 Toilet Facilities
 - 16.5 Eating Arrangements
 - 16.6 Changing Facilities
 - 16.7 General Principles
 - 16.8 Cleaning
 - 16.9 Security
 - 16.10 Suppliers
 - 16.11 Communication
 - 16.12 Travel to / from Work
 - 16.13 Personal Protective Equipment (PPE)
 - 16.13.1 Masks
 - 16.13.2 Face Shields
 - 16.13.3 Overalls
 - 16.13.4 Gloves
 - 16.13.5 Safety glasses
 - 16.13.6 Disposal of PPE
 - 16.13.7 Storage of PPE
 - 16.14 Alcohol and Drug Testing
 - 16.15 Screening questionnaire



1. Scope

This guideline may provide guidance in order to prevent workplace exposures to acute respiratory COVID-19. The plan also provides planning considerations if there are more widespread, community outbreaks of COVID-19.

2. Legislation:

Disaster Management Act (57/2002):

Covid-19 Occupational Health and Safety Measures in Workplaces Covid-19 Hazardous Biological Agents Regulations governing

National disaster published in Government Gazette 43096 on 15 March 2020

Basic Conditions of Employment Act, 1997 (Act No. 75 of 1997);

3. Period of application:

This Directive remains in force for as long as the declaration of a national disaster published in Government Gazette 43096 on 15 March 2020 remains in force.

4. What is Coronavirus COVID-19?

Coronavirus are a family of viruses that originated in animals, which can cross over to humans. The recent outbreak has been officially called COVID-19. COVID-19 is an infectious disease caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). So as like HIV and AIDS, SARS-CoV-2 is the virus and COVID-19 is the disease. However, COVID-19 has a 4.08% CFR (Case Fatality Rate), as of 15 April 2020 www.who.int

5. Life Span Details

Preliminary information indicates that it may "persist on surfaces for a few hours or up to several days.

Steel: 2-3 Days.

Other Metals; Plastic: Ceramics: 5 Days.

Wood and Glass: 4 Days.

Cardboard: 24 Hours.

Smooth, nonporous surfaces like doorknobs and tabletops are better at carrying viruses in general. Porous surfaces, like money, hair, and fabric, don't allow viruses to survive as long because the small spaces or holes in them can trap the microbe and prevent its transfer.

6. Administrative measures:

Principal building contractor must undertake a risk assessment to give effect to the minimum measures required by this Directive taking into account the specific circumstances of the workplace.

- All employees must be trained on this Covid 19 management plan
- Principal building contractor must notify its employees that if they are sick or have symptoms associated with the COVID-19 that they must not come to work and to take paid sick leave in terms of section 22 of the Basic Conditions of Employment Act, 1997 (Act No. 75 of 1997)
- Principal building contractor must, as far as practicable, minimize the number of workers on at the workplace at any given time through rotation, staggered working hours, shift systems, remote working arrangements or similar measures in order to achieve social distancing,



- Principal building contractor must take measures to minimize contact between workers as well as between workers and members of the public.
- Information that raises awareness in any form or manner, including where reasonably practicable leaflets and notices placed in conspicuous places in the construction site and site establishment areas informing workers of the dangers of the virus, the manner of its transmission, the measures to prevent transmission such as personal hygiene, social distancing, use of masks, cough etiquette and where to go for screening or testing if presenting with the symptoms.
- If a worker has been diagnosed with COVID-19, the employer must inform the Department of Health and the Department of Employment and Labour. Investigate the cause including any control failure and review its risk assessment to ensure that the necessary controls and PPE requirements are in place. It must give administrative support to any contact-tracing measures implemented by the Department of Health.

7. Social distancing measures

Principal building contractor 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 metres between workers while they are working, for example, at their work areas / locations. Reducing the number of workers present in the workplace at any time it will assist in achieving the required social distancing. Principal building contractor must ensure that social distancing measures are implemented through supervision both in the workplace and in the common areas outside the immediate workplace. These measures may include dividing the workforce into groups or staggering break-times to avoid the concentration of workers in common areas.

8. Symptom screening

The most common symptoms of COVID-19 are fever, dry cough, and tiredness. Some patients may have aches and pains, nasal congestion, sore throat or diarrhoea. These symptoms are usually mild and begin gradually. Some people become infected but only have very mild symptoms. Most people (about 80%) recover from the disease without needing hospital treatment. Older people, and those with underlying medical problems like high blood pressure, heart and lung problems, diabetes, or cancer, are at higher risk of developing serious illness. However, anyone can catch COVID-19 and become seriously ill. Even people with very mild symptoms of COVID-19 can transmit the virus. People of all ages who experience fever, cough and difficulty breathing should seek medical attention. Symptoms are thought to appear between 2 and 10 days after contracting the virus, but it may be up to 24 days.

Should any employee have any of the symptoms of Covid 19 Principal building contractor must not permit the worker to enter the workplace or report for work. If the worker is already at work immediately isolate the worker, provide the worker with a FFP1 surgical mask and arrange for the worker to be transported in a manner that does not place other workers or members of the public at risk either to be self-isolated or for a medical examination or testing and assess the risk of transmission, disinfect the area, refer those workers who may be at risk for screening and take any other appropriate measure to prevent possible transmission. Ensure that the worker is tested or referred to an identified testing site. Place its employee on paid sick leave in terms of section 22 of the Basic Conditions of Employment Act or if the employee's sick leave entitlement under the section is exhausted, make application for an illness benefit in terms of clause 4 of the Directive issued on 25 March 2020 on the COVID-19 Temporary Employer Relief Scheme under regulation 10(8) of the Regulations promulgated in terms of section 27(2) of the Disaster Management Act. Ensure that the employee is not discriminated against on grounds of having tested positive for COVID-19 in terms of section 6 of the Employment Equity



Act, 1998 (Act No. 55 of 1998). 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.

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 on the following conditions:

- The worker has undergone a medical evaluation confirming that the worker has been tested negative for COVID-19
- The Principal building contractor ensures that personal hygiene, wearing of masks, social distancing, and cough etiquette is strictly adhered to by the worker
- The Principal building contractor closely monitors the worker for symptoms on return to work

9. Prevention

Hand hygiene is the first and most important line of defence. You can protect yourself by keeping your hands clean by washing them frequently with soap and water or a hand sanitising gel if water and soap is not available.

Other tips include:

- Face mask/dust mask to be used at all times.
- Carry a hand sanitiser with you to make frequent cleaning of your hands easy - 70% Ethanol based sanitizer is recommended.
- Always wash your hands before you eat or touch your face. Employees to wash hands for a minimum of 20 seconds.
- Be especially careful about touching things and then touching your face in busy airports and other public transport systems
- Carry disposable tissues with you, cover your nose and mouth when you cough or sneeze and dispose of the tissue carefully (catch it, bin it, kill it)
- Do not share snacks from packets or bowls that others are dipping their fingers into
- Avoid shaking hands or cheek kissing, only use elbow greeting method.
- Regularly clean not only your hands but also commonly used surfaces and devices you touch or handle.
- Always maintain a minimum 1.5m distance between you and any other person.

If anywhere on site a closer physical distance is maybe required/possible, then strict control measure to be in place like supervisor presents, barriers like gloves, face mask, etc. At present, there is no vaccine or certified cure for the virus. What to do if you feel you are exposed to the virus or think you may have the virus

If you think you have been exposed to COVID-19 and develop a fever and symptoms, such as cough or difficulty breathing, call your healthcare provider for medical advice. Coronavirus Disease Public Hotline: 0800 029 999 or WhatsApp: 0600 123 456.

If you develop emergency symptoms for COVID-19 get medical attention immediately. Emergency warning signs include:

- Difficulty breathing or shortness of breath
- Persistent pain or pressure in the chest
- Disorientation
- Bluish lips or face

This list is not all inclusive. Please consult your medical provider for any other symptoms that are severe or concerning. Coronavirus Disease Public Hotline: 0800 029 999 or WhatsApp: 0600 123 456.



10. Construction Site Specific Plan of Action

The following method of prevention and management will be implemented as per guidelines from the Department of Health.

- The Principal building contractor and sub-contractors to provide Government approved essential worker permits to all employees. This includes labour, skilled workers, site management/office.
- Educate employees on the South African Department of Health guidelines concerning COVID 19.
- Toolbox talks to be implemented on all sites with no more than 10 employees per group and/ or session and these employees must ensure a physical distance of one and a half metres apart.
- Enforce cleanliness.
- Provide the necessary handwash sanitizing agents; water, soap, handwash, hand sanitizer as required to all employees. Soap and water will be the primary cleansing agent.
- Equip all personnel with face masks and eye protection.
- Multiple sets of PPE to be issued to all employees.
- Site meetings to be discouraged and preferably by remote communication.
- Attendees should be 2m apart from each other.
- Rooms should be well ventilated/windows open to allow fresh air circulation.
- Consideration to be given to hold meetings in open areas where possible
- Office meetings will be kept to a limit of 4 people at a time
- Hand sanitisers must be available during the meeting
- Office tables and chairs will be disinfected after every meeting
- All tools must be sanitised and cleaned before being issued out and must be sanitized and cleaned once again after EACH use daily.
- Employees must always prevent touching surfaces with bare hand and always ensure that there is a barrier between their hand and the surface/tool.
- The Principal building contractor to encourage employees with flu symptoms to stay home and seek medical treatment and call Coronavirus Disease Public Hotline: 08002999 or WhatsApp: 0600123456.
- Separate sick employees - Employees who appear to have acute respiratory illness symptoms will be referred for screening and testing if necessary.
- To avoid further spread of flu symptoms, we recommend you phone your nearest medical practitioner than physically visiting the practitioner.
- Emphasize staying home when sick, respiratory etiquette and hand hygiene by all employees.

11. Additional Information

Employees who are well but who have a sick family member at home with COVID-19 should notify their supervisor/manager. A quarantine site is to be established to isolate potential infected persons from the rest of the staff.

12. Sanitizers, disinfectants and other measures

Hand sanitizer must be one that has at least 70% alcohol content and is in accordance with the recommendations of the Department of Health. Principal building contractor must ensure there are sufficient quantities of hand sanitizer based on the number of workers or other persons who access the workplace at the entrance of, and in, the workplace which the workers or other persons are required to use. If a worker interacts with the public, the Principal building contractor must provide the worker with sufficient supplies of hand-sanitizer at that worker's workstation for both the worker and the person with whom the worker is interacting. All work surfaces and equipment are disinfected before work begins, regularly during the working



period and after work ends. All areas such as toilets, common areas, door handles, shared electronic equipment are regularly cleaned and disinfected.

Principal building contractor must ensure:

- There are adequate facilities for the washing of hands with soap and clean water
- only paper towels are provided to dry hands after washing – the use of fabric towelling is prohibited
- The workers are required to wash their hands and sanitize their hands regularly while at work
- The workers interacting with the public are instructed to sanitize their hands between each interaction with public
- Surfaces that workers and members of the public come into contact with are routinely cleaned and disinfected

13. Cloth masks

The main benefit of everyone wearing a cloth mask is to reduce the amount of virus droplets being coughed up by those with the infection and transmitted to others and to surfaces that others may touch. Since some persons with the virus may not have symptoms or may not know they have it, the Department of Health requires that all persons wear cloth masks when in a public place.

Principal building contractor must provide each of its employees, free of charge, with a minimum of two cloth masks, which comply with the requirement set out in the Guidelines issued by the Department of Trade, Industry and Competition for the employee to wear while at work and while commuting to and from work. The number and replaceability of cloth masks that must be provided to an employee or required of other workers must be determined in accordance with any sectoral guideline and in the light of the employee or worker's conditions of work, in particular, where these may result in the mask becoming wet or soiled. Principal building contractor must ensure that workers are informed, instructed, trained and instructed as to the correct use of cloth masks. The general requirement for workers to wear masks does not derogate from the fact that, where a risk assessment indicates that PPE is required, those categories of workers must be provided with the accredited PPE in accordance with Department of Health guidelines.

14. Measures in respect of workplaces to which public have access

The principle purpose of the measures contained in the following clause is to protect workers from being exposed to the virus through their interaction with the public and to protect members of the public from being exposed to virus through their interaction with workers or other persons present in such a workplace.

- Arrange the workplace to ensure that there is a distance at least one and a half metres between workers and members of the public or between members of the public.
- Undertake symptom screening measures of persons other than the employees entering the workplace with due regard to available technology and any guidelines issued by the Department of Health.
- If appropriate, display notices advising persons other than employees entering the workplace of the precautions they are required to observe while in the workplace
- Require members of the public, including suppliers, to wear masks when inside their premises.

15. Ventilation

Principal building contractor must keep the workplace well ventilated by natural or mechanical means to reduce the SARS-CoV-2 viral load. Where reasonably practicable, have an effective local extraction ventilation system with high-efficiency particulate air HEPA filters, which is regularly cleaned and maintained, and its



vents do not feedback in through open windows. Ensure that filters are cleaned and replaced in accordance with the manufacturer's instructions by a competent person.

16. Risk Plan: COVID-19 Construction Sites

Construction sites operating during the Coronavirus COVID-19 pandemic need to ensure they are protecting their workforce and minimising the risk of spread of the infection.

This risk plan is intended to introduce consistent measures on sites of all sizes in line with the Government's recommendations on social distancing.

These are exceptional circumstances and the industry must always comply with the latest Government advice on Coronavirus. The health and safety requirements of any construction activity must also not be compromised at this time. If an activity cannot be undertaken safely due to a lack of suitably qualified personnel being available or social distancing being implemented, it should not take place. We are aware that emergency services are also under great pressure and may not be able to respond as quickly as usual. Sites should remind the workforce at every opportunity of the Site Operating Procedures which are aimed at protecting them, their colleagues, their families, and the SA population.

16.1 Procedure if Someone Falls ill

If a worker develops a high temperature or a persistent cough whilst at work, they should:

- Employee to be moved to quarantine site to isolate potential infected persons from other members of the workforce
- Employee to be issued with FFPT2/N95 face mask
- Report symptoms to management and safety officer on site immediately
- Employee to 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.
- Employee to be transported to the nearest Covid 19 testing facility

16.2 Site Access Points

- Stop all non-essential visitors,
- Monitor site access points to enable social distancing – you may need to change the number of access points, either increase to reduce congestion or decrease to enable monitoring.
- Remove or disable entry systems that require skin contact e.g. fingerprint scanners or install an elbow or foot activated sanitizer dispensers.
- Require all workers to wash or clean their hands before entering or leaving the site.
- Allow plenty of space (one and half metres) between people waiting to enter site.
- Regularly clean common contact surfaces in reception, office, access control and delivery areas e.g. scanners, turnstiles, screens, telephone handsets, desks, particularly during peak times.
- Reduce the number of people in attendance at site inductions and consider holding them outdoors wherever possible.
- Drivers should remain in their vehicles if the load will allow it and must wash or clean their hands before unloading goods and materials.

16.3 Hand Washing

- Additional handwashing facilities to be added where necessary.
- Ensure soap and fresh water is always readily available and kept topped up.

- Provide hand sanitiser where hand washing facilities are unavailable.
- Regularly clean the hand washing facilities and check soap and sanitiser levels.
- Site will need extra supplies of soap, hand sanitiser and these should be securely stored.

How to Handrub?

RUB HANDS FOR HAND HYGIENE! WASH HANDS WHEN VISIBLY SOILED

⌚ Duration of the entire procedure: 20-30 seconds



16.4 Toilet Facilities

- Restrict the number of people using toilet facilities at any one time.
- Wash 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.

16.5 Eating Arrangements

- The workforce should also be required to stay on site once they have entered.
- Break times should always be staggered to reduce congestion and contact.
- Hand cleaning facilities or hand sanitiser should be available at eating facilities.
- Workers should sit 1,5 metres apart from each other whilst eating and avoid all contact.
- Food and drinks should not be shared between individuals.
- All rubbish should be put straight in the bin and not left for someone else to clear up.
- All areas used for eating must be thoroughly cleaned at the end of each break and shift, including chairs, door handles.

16.6 Changing Facilities



- Only 10 or less people allowed in change room at any time at a rate of 1 person per square meter.
- Masks to be worn at all times
- Surface sanitiser spray between each group of employees that utilise the changeroom

16.7 General Principles

- Minimise close contact between workers.
- Re-usable PPE should be thoroughly cleaned after use and not shared between workers.
- Single use PPE should be disposed off so that it cannot be reused.
- Always lower their capacity to reduce congestion and contact.
- Regularly clean touchpoints, doors, buttons etc.

16.8 Cleaning

Enhanced cleaning procedures should be in place across the site, particularly in communal areas and at touch points including:

- Taps and washing facilities
- Toilet flush and seats
- Door handles and push plates
- Handrails on staircases and corridors
- Lift and hoist controls
- Machinery and equipment controls
- Food preparation and eating surfaces
- Telephone / cellphones equipment
- Keyboards, photocopiers and other office equipment
- Rubbish collection and storage points should be increased and emptied regularly throughout and at the end of each day.
- Gates
- Showers
- Tables
- Chairs

16.9 Security

The Security will record the reading of the temperatures taken for individuals. Persons performing these duties shall wear masks and face shield at all times whilst doing so. Security taking temperature readings will use a clipboard and disposable pens. Following to be managed on site:

- Before employees arrive for work, the operator of the thermometer will wash / sanitise their hands and clean the thermometer with a disposable paper cloth using a 70% Isopropyl solution.
- Dispose of the damped disposable paper cloth in a lined dust bin.
- Check their own temperature and if it is elevated leave the station and report to the supervisor overseeing the process.
- Don the issued eye protection and cloth mask.
- The temperature must be taken on the temporal, on the side just above the eye.
- The Infrared thermometer must never touch the person being scanned.

- The operator will sanitise his / her hands and the Infrared Thermometer every 15 minutes.
- If a person's temperature is above 37°, wait 5 minutes and retake temperature. If temperature is above 37.3° access will be prohibited, report to management for further action
- At the end of the shift the operator of the Infrared Thermometer will clean / sanitise his hands and clean the thermometer with a disposable paper cloth using a 70% Isopropyl solution.
- They will wash / sanitise their hands and take off their face shield. The face shield will then be cleaned with a disposable paper cloth using a 70% Isopropyl solution and the cloth disposed of in a lined dustbin.
- They will then wash / sanitise their hands and take off their mask.
- The Infrared Thermometer and face shield will be stored in a sealed box or bag in an established area until the next shift.
- Ensure queue control at access points – stand 1.5m apart from each other
- Management to conduct COVID-19 induction screening and awareness program, together with PPE training before allowing employees to proceed to their workstations
- Allocate hand sanitizer stations at access points – every person must sanitise their hands prior to entering the premises
- Each person entering the premises will be required to conduct a COVID-19 Screening Questionnaire



16.10 Suppliers

Suppliers must ensure that they provide and issue the required PPE to all personnel:

- Drivers and helpers must wear masks
- Drivers and helpers must wear protective gloves
- Drivers and helpers will be required to wash their hands thoroughly on entry to the premises

Drivers and helpers will be screened for body temperature on entry at the gate

16.11 Communication

Notices must be posted in prominent locations should any changes and recommendations be implemented coming out of any safety meetings. Signage must be posted in and around the work areas as well as in ablutions and change rooms as per the samples below:



16.12 Travel to / from Work

Where a worker exhibits any signs of COVID-19 or has been exposed to a confirmed case, they should not travel to work.

Wherever possible, workers should travel to site alone using their company vehicle or their own means of transport.

Where public transport is the only option for workers, then regular toolbox talks outlining how to reduce the possibility of infection should be considered.

Site management must consider the following:

- Parking arrangements for additional cars / vans and bicycles.
- Providing hand cleaning facilities at entrances and exits. This should be soap and water wherever possible or hand sanitizer if water is not available.
- How someone taken ill would get home

Social Distancing in Vehicles. Social distancing is advised when travelling in vehicles to/from work and when in site vehicles.

Suggested arrangements are as follows:

- Single occupancy of vehicles is preferable.
- Sit as far apart as the vehicle allows.

Other Control Measures for Vehicle Use. Workers should not enter a work vehicle with others if they have any symptoms or have had contact with a confirmed case of COVID-19

- Employers should consider requesting personnel to use personal transport to reduce numbers travelling in work vehicles.
- It is advisable to limit the “churn” of people travelling together (i.e. try to ensure the same crew members travel and work together day after day).
- When entering (and leaving) all vehicles the driver should clean all common areas that are liable to be touched including the external door handles, keys and other internal furnishings.
- Keep windows at least partially open.
- Keep personal items (PPE, clothes, lunch boxes etc.) separate.
- Wiping/cleaning down of contact points should be done using antibacterial wipes or a wet cloth with soap application, or equivalent.



- Dispose of used wipes/cleaning materials in a designated bin/sealed bag and wash hands for at least 20 seconds.
- If availing of public transport, sit down to minimise contact with frequently touched surfaces, handles, roof straps, isolation bars etc.
- Carry hand sanitizer (at least 70% alcohol) and use it regularly throughout your journey.

16.13 Personal Protective Equipment (PPE)

The hierarchy of control applies with the use of PPE. Specific regard for the type and usage. The following PPE is to be issued to the relevant personnel:

Security Guards / Safety Personnel involved with Fever Screening Process at entrances.

- 1no. Clear Face Shield – eye and face protection
- 3no. Cloth face masks

First Aiders and persons dealing with Covid-19 Symptoms (Fever)

- 1no. Glasses – eye protection
- 2no. FFP2/N95 masks
- Disposable Latex Gloves as and when required

Cleaning Staff

- 2 pairs of re-useable chemical gloves
- 1no. Glasses – eye protection
- 3no. Cloth face masks
- Overalls as per company PPE policy

All other employees / staff

- 1no. Glasses – eye protection
- 3no. Cloth face masks
- Hand protection and other PPE will be as per the task specific Risk Assessments

PPE which will be deemed re-useable is classified as follows:

- Re-usable cloth face masks
- Glasses.
- Clear face shields.
- Overalls (Normal issue).
- High visibility Vests (Normal issue and use by non-high visibility overall wearers).
- Safety Boots / Gum Boots (Normal issue).
- 100ml Hand sanitiser bottle to use and when empty can be refilled on the site.
- Gloves (normal issue).

PPE Replacement

- Face shields will be replaced when damaged, lost or stolen.



- Glasses will be replaced when damaged, lost, stolen.
- Face masks will be replaced when damaged, lost, stolen or every 100 days (50 daily washes per mask).
- All other PPE will be replaced when damaged, lost, stolen or as per Company PPE Policy.
- All PPE shall only be replaced when damaged PPE is returned and then disposed off.

When putting on the issued PPE

- Non-disposable PPE must be cleaned with warm water and soap or a 70% alcohol based Isopropyl solution.
- Check that the PPE are in good order, no defects or tears;
- Hold the PPE on the outside of the equipment or on the string's earpieces and not on the inside when putting the equipment on.
- Make sure the PPE fits snugly.
- Ensure the glove fits correctly and interlock fingers to ensure it is fitted correctly.
- Keep re-usable PPE clean and safe from outside contact when they are not wearing it.

Do not:

- Touch the PPE once it is secured on the face, it may have already filtered the virus, which will now be on the exterior of the mask or glasses / face shield.
- Remove the PPE at any stage during work activities.
- Share any PPE with any other person.

How to wear, remove, clean and where appropriate dispose of ppe properly.

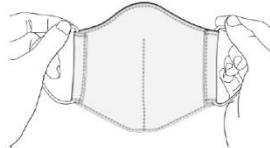
- Wash issued face masks, glasses, clear face shield, hardhat and overalls daily.
- Non-disposable PPE must be cleaned with warm water and soap or a 70% alcohol based Isopropyl solution.
- Do not touch your eyes, nose, and mouth when removing mask or glasses / face Shield when removing the PPE.
- Wash / sanitise your hands immediately after removing PPE.
- Wash PPE with hot soapy water and dry in the sun.
- Wash hands after washing PPE.
- **16.13.1 Masks**
- Masks are compulsory for all employees; personnel and professional team members, reducing the potential of inhaled COVID-19 droplets. For general administration purposes, for essential staff on site only, cloth masks may be worn. N95 masks are only to be worn by first aiders or high-risk workers, due to the national shortage thereof.



Putting on a mask



1. Ensure you are using a clean mask.
2. Wash hands with soap and water or alcohol-based hand sanitizer before touching mask.



3. Pick up mask by touching ear loops (or ties) only.
4. Avoid touching mask itself.



5. Hold both ear loops and place a loop around each ear.
6. Fit mask around mouth, nose, and chin.

All employees to have access to N95 or FFPT2 masks when required in instances of high risk of exposure. All N95 and FFPT2 masks to be disposed with or after 1 day's use. Induction is to include training on the correct use of face masks.

Cloth face masks to be used on entering and leaving the site. It is advised that each worker is supplied with at least 3 cloth face masks. This would assist in ensuring that the masks are hygienic (1 on the face; 1 in the wash and 1 as a backup). The Principal building contractor must ensure that sufficient stock is at all-times available on site.

All disposable masks are biological waste and must be properly disposed off. This must be disposed in container (locked) or in bags to be either removed as medical biological waste by registered service provider.

Clearly identifiable bins indicating biological waste to be provided



16.13.2 Face Shields

The Principal building contractor could also look at options such as full-face shields for preventing spread of virus through eyes. This would assist the employee who is doing hard physical work to breathe more easily but still protecting the mouth, eyes and nose. Face shields should be cleaned daily before the shift and at the end of the shift. Proper cleaning agents/disinfectant must be used. Face shields should be issued to employees and no sharing is allowed.



16.13.3 Overalls

All employees must be issued with 3 overalls (1 overall wearing; 1 overall in the wash and 1 as the backup). This will ensure that the employee will be able to wear clean hygienic overalls. This must form part of the COVID-19 training for all employees.

16.13.4 Gloves

It is preferable that surgical gloves are not worn unless indicated and workers trained in the proper use thereof. Gloves must only be used when the activity demand the wearing of specific type of hand gloves. This will be directed by the Principal building contractor risk assessment.

Site office personnel need to be made aware of the risks in the office environment, this includes handling of documents and plans. These employees could be issued with the appropriate hand gloves or sufficient hand wash / sanitising facilities must be available in the site office.



16.13.5 Safety glasses

All employees are to be issued with safety glasses.

16.13.6 Disposal of PPE

Lined Bins shall be used to dispose of any disposable and re-useable PPE.

- When used PPE is replaced, the old PPE shall be discarded in a lined bin and when the bin is full the bag shall be treated with a disinfectant mixed with the discarded PPE and the bag shall then be sealed.

These bags, ones treated shall be discarded as follows:

- Stored in a demarcated area
- Waste Companies to collect bags

Under no circumstances shall PPE be discarded in normal unlined waste bins.

16.13.6 Storage of PPE

Sealable bags provided to each person for keeping PPE requiring laundering, such as gloves and overalls. Storage of PPE is to be tightly controlled, with records of issue. Damaged PPE is to be managed in the usual way, but all to be disposed off as if contaminated.

16.14 Alcohol and Drug Testing



Alcohol testing may only be done using single use test units and must be disposed off in the appropriate contaminated waste. Drug testing will only be done by an occupational health facility either using urine or blood sampling. A protocol will be drawn up by the PC to manage this with the occupational health service being used.

16.15 COVID-19 Screening Questionnaire

Dear Employee/ professional team member / Visitor

You are important to us and we are committed in limiting the spread of the COVID-19 flu virus within all our construction sites. In order to limit the spread, we would appreciate it if you could disclose the following information. All information will be held in confidence.

Name & Surname	
Identity Number	
Designation	
Organization	
Contact Number	

I, _____ (Name & Surname) hereby declare the following:

Visitor Declaration Questions		Yes	No
1.	Have you travelled in the last 21 days?		
2.	If, yes where to? _____		
3.	Have you been exposed to someone who has the COVID-19 virus?		
4.	Have you experienced at least one of the following symptoms, cough, sore throat, shortness of breath or fever - $\geq 38^{\circ}\text{C}$ (measured) or history of fever (subjective) over the past 21 days?		
5.	Have you attended a health care facility where patients with COVID-19 infections are being treated?		
6.	Have you been hospitalized recently with severe pneumonia?		
7.	Do you currently have flu like symptoms?		

- To help limit the spread of infection should you have answered yes to any of the above questions



we advise that you refrain from coming onto site and make arrangements to get medical treatment

We have a "no handshaking policy" in place at this point in order to mitigate the spread and encourage you to make use of the hand sanitizers that we have made accessible

Signature: _____

Date: _____

RENOVATIONS AND ADDITIONS OF AN EXISTING BUILDING FOR OFFICE BUILDING, 41 GENERAL VAN RYNEVELD STREET



The Clients Principal Agent Approval:

Name: _____

Signature: _____

Date: _____

FOR PRINCIPAL BUILDING CONTRACTOR

Principal Building Contractor Representatives Acceptance: Name: _____

Signature: _____

Date: _____

RENOVATIONS AND ADDITIONS OF AN EXISTING BUILDING FOR OFFICE BUILDING, 41 GENERAL VAN RYNEVELD STREET

HAZARD IDENTIFICATION & RISK ASSESSMENT RECORD



Activity Description:	BASELINE RISK ASSESSMENT			HIRA No / Rev:	RENOVATIONS AND ADDITIONS OF AN EXISTING BUILDING FOR OFFICE BUILDING, 41 GENERAL VAN RYNEVELD STREET		
Assessment Team:	ADAM PETERS / FEZAL JUMOORTY		Assessment Date:	28/06/2020	Review Date:	ONCE OFF DOCUMENT	

Use the Standard Risk Matrix to determine the Raw and Residual Risk Ratings

Task #	Task Description	Hazards / Aspects / Failures	Potential Risks / Impacts	SHEQ Category	Likelihood	Consequence	Raw Risk Rating	Mitigation / Control Measures	Control Measure	Likelihood	Consequence	Residual Risk Rating	Resp Person
1	Induction and training	Injuries due to employees not aware of dangers in work area	Injury Disability Property damage	S+H+ENV.	2	4	14H	<ul style="list-style-type: none"> Inductions- Employees to be informed to all hazards in the work area as well as the recommended precautionary measures Site specific induction to be conducted to all employees, sub-contractors and visitor's Employees to be trained on all tools and equipment 	A	1	4	10M	SHEQ Officer
2	Site establishment	Exposure to hazardous materials Exposure to moving machinery and vehicles	Injury Property damage	S+H+ENV.	3	4	14H	<ul style="list-style-type: none"> Management to ensure site layout be approved by relevant engineer to consider site traffic, plant movement and other interfacing contractor site layouts 	E	2	3	9M	Site Supervisor
3	Environmental control	Environmental risks	Environmental	S+H+ENV	3	4	18H	<ul style="list-style-type: none"> Ensure all waste areas controlling hazardous waste is kept clear Ensure area housing hazardous waste is banded to prevent run-off and absorption into the ground water systems Ensure the area is well 	E	2	4	14H	ALL

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								<p>demarcated and screened off</p> <ul style="list-style-type: none"> • Ensure all spills are reported immediately • Ensure drip trays are used when the risk to spillage is high • Ensure the waste storage area has sufficient capacity • Ensure that all loose materials are covered and tied down to prevent wind picking the loose items out of the storage area or facility • Ensure storage areas and facilities are kept neat and tidy at all times • Ensure these areas are cleared regularly of waste material • Ensure all hazardous waste is removed to an approved dumping site/facility • Ensure correct colour coded waste bin for the discarding of waste 					
4	Access/egress to site & correct placing of units	Restricted/unsafe access & parking of vehicles and plant	Injury Property damage	S+H+AD	4	3	17H	<ul style="list-style-type: none"> • Management to ensure site layout approved by client to consider site traffic, plant movement and other interfacing contractor site layouts 	A & E	3	3	13H	All
5	Truck onto site and lay down area	Reckless driving Uncertified driver Substandard truck Conditions	Injury Fatality Property damage	S+H+AD	3	4	18H	<ul style="list-style-type: none"> • Ensure driver are qualified and approved. • Ensure drivers are informed of route and site traffic requirements • Vehicle to be approved and licensed to enter 	A	1	4	10M	Safety Officer / Supervisor

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								site					
6	Pedestrian access to site	Unsafe pedestrian access (Walkway)	Injury Property damage Production loss	S+H+R/S/C	2	4	14H	<ul style="list-style-type: none"> Safe demarcated walkway to be conducted Walkway to be barricaded with snow netting Pedestrian crossings to be conducted and utilised. 	I	1	4	10M	Safety Officer / Supervisor
7	Offloading and positioning of containers/offices (mobile crane)	Equipment failure	Injury Property damage Production loss	S+H+BI/AD	3	4	18H	<ul style="list-style-type: none"> Management (supervisor) to ensure that only certified and approved operator, crane and lifting tackle to be used. All lifting equipment to be inspected and registered Plant pre-inspection checklist to be completed Operator and rigger to attend tool box talk and risk assessment training before work commences 	E	2	4	14H	Supervisor
		Load falling	Injury Property damage Production loss	S+H+BI/AD/QA	3	3	13H	<ul style="list-style-type: none"> Supervisor and rigger to ensure correct lifting tackle and attaching method/procedures applied 	E	1	4	10M	Supervisor
		Rigger (falling)	Injury Fatality	S+H+BI	2	3	9M	<ul style="list-style-type: none"> Qualified and competent rigger allocated to specific crane (one on one communication) Rigger to wear safety harness and tie-off at all times. Step ladder must be used for access to top of container 	A	1	3	6M	Safety Officer / Supervisor

OCCUPATIONAL H & S MANAGEMENT SYSTEM

Baseline Risk Assessment – COVID 19

Record Keeping

Hazard, Risk, Environmental & Ergonomically Assessment

Contract Name

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Contractor

List Risk Assessment Team Names

Training Required

Risk Assessment No.

01

Adam Peters

Revision No.

02

Date of original issue

28/06/2020

Date revised

Project Manager Signature

Risk Assessor

Adam Peters

Risk Assessor Signature

Client Signature

Assessment Matrix

Probability of Occurrence (P)	INJURY SEVERITY POTENTIAL (IS)	DAMAGE / LOSS SEVERITY (DS)	DURATION OF EXPOSURE (ED)	ERGONOMICS / ENVIRONMENT (E)	HEALTH (H)	Probability of Occurrence (P)	INJURY SEVERITY POTENTIAL (IS)	DAMAGE / LOSS SEVERITY (DS)	DURATION OF EXPOSURE (ED)	ERGONOMICS / ENVIRONMENT (E)	HEALTH (H)	Consequence (C)
Common Occurrence	Multiple Fatalities OR PERMANENT DISABILITIES	More than R 1 500 000	1<10> Days	Major	Major	5	5	5	5	5	5	30
Has Happened before	Fatal / Permanent Disability	R 300 000 to R 1 500 000	6<10> Hours	Serious	Serious	4	4	4	4	4	4	24
Could Occur	Moderate / Serious Injury	R 150 000 to R 300 000	3<6> Hours	Medium	Medium	3	3	3	3	3	3	21
Not likely	Lost Time Injury	R 15 000 to R 150 000	1<3> Hour	Minor	Minor	2	2	2	2	2	2	12
Practically Impossible	Minor injury – No Lost Time	Less than R 15 000	< 1 Hour	None	None	1	1	1	1	1	1	6

										REMEDIAL	RESIDUAL							ACTION	
Task Steps	HAZARD IDENTIFIED	RISK ASSOCIATED WITH HAZARD	P	IS	D S	E D	E	H	C	HOW IS HAZARD TO BE DEALT WITH	P	IS	DS	D	E	H	C	BY WHOM	DATE
1. Development and Implementation of the COVID-19 Coronavirus/ Pandemic Management Plan	-Failure to have a site/ company specific COVID-19 Coronavirus Pandemic and Management Plan	Failure to have a site/ company specific COVID-19 Coronavirus and Management Plan may result in spreading of the virus	3	5	5	5	3	5	26	<p>-Mandatory approved face mask to be used at all time on site and at the offices. Avoid hand to face contact. Wash hands for 20 seconds with soap or sanitise hand with 70% or more alcohol base sanitizer. Social distancing to be adhered to. Maintain 1m spacing. All employees, suppliers, sub-contractors, security and visitors will be screened.</p> <p>-The Construction Manager and all site supervision must ensure that all workers, visitors, suppliers and Subcontractors are adequately and regularly trained to understand the impact and severity of the COVID-19 Coronavirus Pandemic</p>	2	4	4	4	2	4	20	The Construction Manager and all forms of supervision	
2. Training and Education	Employees not trained in the COVID-19 Pandemic Management Plan	Employees not trained in the COVID-19 Management Plan may result in their inability to effectively understand the pandemic and the associated	3	5	5	5	3	5	26	All employees, suppliers, sub-contractors, security and visitors to be inducted on the	2	4	4	4	2	4	20	The Construction Manager and all	

		dangers and/ or control measures								contractor COVID 19 plan. On-site training will be done. Education at toolbox talks will be administered.								forms of supervision	
3. PPE Supply	Insufficient/ inadequate or no PPE	Insufficient/ inadequate or no PPE on site may result in contamination and spread of the virus	2	3	3	5	3	3	19	<p>-Safety officer and SHE Rep to ensure that there is adequate supply of P.P.E. Stock to be checked and maintained.</p> <p>- The Construction Manager and all site supervision must ensure that a suitable and adequate amount of personal protective equipment as identified during a COVID-19 risk assessment process is always available on site.</p>	1	2	2	4	2	2	13	Safety officer, SHE Rep and site management	
4. PPE use and disposal	Incorrect use or disposal of PPE	Incorrect use or disposal of PPE may result in contamination or spreading of the virus	3	5	5	5	3	5	26	Safety Officer will conduct ongoing training on the correct use of P.P.E and disposing methods of P.P.E. with all employees and sub-contractors.	3	5	5	5	3	5	26	Safety officer and SHE Rep	

										transportation requirements. -Employees utilising public transport to ensure that the public service provider is adhering to Government COVID 19 transportation requirements. The employee using public transport to sanitise before and after entering public transport. It is a SA government requirement for South African to use a suitable face mask.									
7. Site Access and egress	Accessing site by employees, visitors, suppliers and sub-contractors.	Accessing site by employees and, visitors, suppliers and sub-contractors may result in COVID-19	3	2	2	2	2	2	13	-Security personal will not allow anyone without a face mask to enter. Thereafter personal will be required to sanitise and will be sent for screening. Temperature will be checked with an infrared thermometer. If temperature is above 37 degrees, personal will not be allowed to work and will be asked to visit their nearest medical facility. Once screening is approved, full induction will be communicated with personal which will include contractor COVID 19 plan, procedure and awareness training.	2	1	1	1	1	1	1	7	Security

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											bring home prepared meals.								
9. Ventilation	Inadequate Ventilation	Inadequate Ventilation may result in the spread on COVID-19 droplets and result in employee contamination	4	3	3	4	3	5	23	<p>-The Construction Manager and all supervision must ensure that adequate natural ventilation is utilized when working in enclosed spaces. Permit system will be adhered to when working in confined space.</p> <p>Working in confined space will be discouraged but if need be employees will be limited. Social distancing (2 metre spacing between individuals. Time frame of activity will be monitored. Job specific P.P.E will be used. Supervision will be present for this activity. DSTI to be conducted.</p>	3	2	2	3	2	4	16	Management	
10. Meetings	Regular Meeting Attendance	Attendance of regular meetings may result in COVID-19 contamination and infection	3	5	5	5	3	5	26	<p>-Reduce frequency of meetings. Remote meetings in progress. Only necessary meeting participants should attend. Attendees should be two metres apart from each other. Rooms should be well ventilated / windows opened to allow fresh air circulation or consider holding</p>	2	3	3	3	2	3	16	Management	

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										meetings in open areas where possible -Remote communication to be encouraged. Before any meeting commences surface areas to be sanitised. Those attending meeting to ensure that face masks are used, and screening and inductions to be conducted. Sanitise at entrance of room upon entry and exit. No physical contact by shaking hands.								
11. Employee Exposure & Tracing	Exposure to an infected person	Exposure to an infected person could result in the contracting and/ or spreading of the virus	3	5	5	5	3	5	26	-The security personnel and H&S Officer / SHE Rep will have a site register in order to contact trace employees or visitors that were exposed to the infected person. Work permits will be enforced. No employee will be allowed without a permit. -Mandatory for all individuals to sign in and sign out system. Work permits will be enforced. No employee will be allowed without a permit.	2	3	3	3	2	3	16	Security and safety officer
12. Site Works - exposure to the virus	Exposure to the COVID19	Contamination of employees and further spread of the virus	3	5	5	5	3	5	26	-Carry out an additional induction session with all site personnel and visitors with instructions about COVID-19.	2	4	4	4	2	4	20	Management

										<ul style="list-style-type: none">-Maintain social distancing where possible-Avoid touching eyes, nose and mouth Practice respiratory hygiene (cover mouth & nose when coughing / sneezing)-Avoid touching handrails when going and coming down stairwells.-Avoid shaking hands, use other greeting methods.-Hand sanitisers will be placed at strategic locations.-Implement a more frequent cleaning regime on site, focussing on frequently touched surfaces (door handles, lift buttons, handrails etc)-Employees to stay at home if they experience a fever, a new cough or difficulty breathing (seek medical care.-Report any site personnel that may be showing signs of illness to the Site Manager and the company.										
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UMALUSI - RENOVATIONS AND ADDITIONS OF AN EXISTING BUILDING

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								<ul style="list-style-type: none"> If working on top of load the rigger must then be hooked on the crane or on a life line 					
		<p>Load striking employees</p> <p>Load striking other containers</p> <p>Load swinging</p>	<p>Injury</p> <p>Property damage</p> <p>Production loss</p>	S+H+BI /AD/QA	4	3	17H	<ul style="list-style-type: none"> Area to be barricaded off during lifting activities to prevent unauthorised entry Two guide ropes to be used on load to ensure stable movement No lifting during high winds or inclement weather Heavy equipment must be identified and a rigging study to be in place Swing radius must be identified to ensure that the load can be of loaded in a safe manner Stay out of the swing radius of the crane Ensure there are barrier guards showing swing radius A boom angle indicator must be on the crane 	A	3	3	13H	Supervisor / Rigger / Banksman
8	Installation of safety signs and notice boards	Un-informed employees	<p>Injury</p> <p>Property damage</p>	S+H+R/S/C	3	2	8M	<ul style="list-style-type: none"> Legal required signage must be displayed to be clearly visible at all times. 	A	2	2	5L	Safety Officer / Contracts Manager / Supervisor
		Inadequate signage	<p>Injury</p> <p>Property damage</p>	S+H+BI+AD	3	2	8M	<ul style="list-style-type: none"> All required signage to be available <ul style="list-style-type: none"> Informative, prohibitive, mandatory and emergency signs 	A	2	2	5L	Safety Officer / Supervisor
		Incorrect signage	<p>Injury</p> <p>Property damage</p>	BI/AD	3	2	8M	<ul style="list-style-type: none"> Signage change and applicability should be maintained 	A	2	2	5L	Supervisor / Safety Officer
9	Emergency preparedness	Fire fighting equipment	<p>Injury</p> <p>Property</p>	S+H+L&R+B I	3	4	18H	<ul style="list-style-type: none"> Fire fighting equipment must be placed in 	E	1	4	10M	ALL

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		Insufficient no's	damage Production loss					<p>accordance to survey conducted during site establishment</p> <ul style="list-style-type: none"> • Identification and signage must be clear and visible • All relevant equipment to be inspected and on register 					
10	First aid	Inadequate medical assistance Untreated injuries		S+H+L&R+B I	3	2	8M	<ul style="list-style-type: none"> • First aid boxes to be available at each work area clearly identified, signage installed and qualified first aider identified • First aid boxes to comply with minimum requirements inspected and registered 	A	2	2	5L	Safety Officer
11	Facilities	Hygiene Insufficient no	Hygiene	S+H	3	2	8M	<ul style="list-style-type: none"> • Separate toilets for both genders must be available and clearly identified • Ration 1 to 20 and to be cleaned 3 times a week 	A	2	2	5L	Contracts Manager / Safety Officer
		Waste	Environmental	S+H+ENV	3	3	13H	<ul style="list-style-type: none"> • Separate waste bins for different waste categories to be available and identified • Waste disposal plan and schedule must be maintained • Skips must have lids 	A	2	2	5L	All
		Eating area	Poor hygiene Illnesses and ailments	S+H+ENV	3	3	13H	<ul style="list-style-type: none"> • Adequate, clean and shaded eating area to be ensured 	A	2	3	9M	Supervisor / Safety Officer
		Drinking water	Water contaminated	S+H+ENV	3	3	13H	<ul style="list-style-type: none"> • Facilities to be ensured from start of site establishment • Clean drinking water must be available • Signage to be installed to all drinking and non 	A & E	2	3	9M	Supervisor / Safety Officer / Contracts Manager

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								drinking water					
12	Power supply and electricity to office area	Generator	Injury	S+H+BI	3	3	13H	<ul style="list-style-type: none"> DB board must stand on firm level base and should be locked at all times DB board to be inspected and approved by qualified electrician 	E	2	3	9M	Supervisor / Contracts Manager
		Electrical cables	Injury Electrocution	S++BI	3	4	18H	<ul style="list-style-type: none"> All cables to be routed underground Only qualified electrician to do installation and termination 	E	1	4	10M	Supervisor
13	Lay down area Stacking and storage	Inadequate space	Injury	S+H+BI/AD	3	3	13H	<ul style="list-style-type: none"> Lay down area must be well planned to ensure adequate space 	A	2	3	9M	Supervisor / Contracts Manager
		Poor stack/storage practices	Property damage	BI/AD+S+H	2	3	9M	<ul style="list-style-type: none"> Safe stacking and storing practices/procedures must be maintained Access and off-loading space must be a priority Area to be barricaded 	A	1	3	6M	Supervisor
		Dunnage	Injury Property damage	S+H+BI/AD	2	3	9M	<ul style="list-style-type: none"> Timber poles (Dunnage) to be used for stacking material 	A	1	3	6M	Supervisor
14	Loading and off-loading of truck with mobile crane	Unfit personnell on site	Injury	S+H	2	3	9M	<ul style="list-style-type: none"> Insure all personnel are fit by means of medical clearance certificate All personnel shall undergo all relative inductions, site inductions and risk assessment training Daily DSTI plus toolbox talks to be conducted 	A	1	3	6M	Supervisor / Safety Officer
		Incorrect PPE	Injury	S+H	1	3	6M	<ul style="list-style-type: none"> Correct PPE to be worn for the right job or site requirements Safety harnesses to be worn when working at 	A	1	2	3L	Safety Officer / Supervisor

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								<p>heights and safety life lines to be erected when required</p> <ul style="list-style-type: none"> Safety harnesses will be issued per person and will be inspected and booked out accordingly 					
		Incompetent personnel	Injury Fatality	S+H	3	4	18H	<ul style="list-style-type: none"> Supervisor to ensure personnel is competent for the task at hand with competency/qualifications certificates All competency certificates to be kept in the safety officer office All appointments to be up to date Crane operator must be licenced by an authorised training institution Only competent rigger to do lifting operations 	A	1	4	10M	Supervisor / Safety Officer
		Under the influences of alcohol and substances	Injury Fatality	S+H	3	4	18H	<ul style="list-style-type: none"> No employee to work when under the influence of drugs or alcohol Random alcohol test will be conducted 	A	1	4	10M	Safety Officer / Supervisor
15	Truck arrived at site	Un informed operator Restricted access to loading area	Injury Property damage	S+H+BI/AD	3	3	13H	<ul style="list-style-type: none"> Supervisor to inspect driver's public licence and condition of truck by means of a checklist. Truck maintenance/service record to be with driver of truck Driver to be send back if condition are not complied with Supervisor to escort trucks to lie-down area 	E	1	2	3L	Supervisor

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								<ul style="list-style-type: none"> • Communication with truck and crane operator • Area to be identified and barricaded • If delivery truck from a supplier come to site they need to complete the proforma checklist at the warehouse and manager to sign off. 					
		Truck operator under influence of alcohol and substances	Injury Property damage	S+H+BI/AD	3	4	18H	<ul style="list-style-type: none"> • Randomly drug and alcohol test to be conducted • All truck drivers compulsory to do alcohol test prior of enter site area 	E	1	4	10M	Supervisor
		Load not secure	Property damage	S+H+BI/AD	3	3	13H	<ul style="list-style-type: none"> • Suppliers must be notified before hand that supplier is not allowed on site. • If delivery truck from an supplier come to site and complete proforma checklist at warehouse and their manager must sign • Signed form accompany with truck to site • Delivery truck to be inspected for secure load before entry on site. 	A&E	1	2	3L	Banksman/ Supervisor
		Not in position of stop blocks and PPE	Injury	S+H+BI/AD	3	3	13H	<ul style="list-style-type: none"> • Spare stop blocks to be provided or operator remain in truck. • Engine to be stopped engage park brakes and stay seated to take action if track comes in motion • Operator not allowed exiting truck without 	A	1	2	3L	Banksman / Supervisor

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								correct PPE					
		Incorrect parking on site	Injury Property damage	AD+S+H	3	1	4L	<ul style="list-style-type: none"> Supervisor to plan off load area before trucks arrived Supervisor to eliminate that roads been close for other users Barricade area off 	A	2	1	2L	Supervisor
16	Climbing on to truck to connect lifting equipment	Falling from truck	Injury	S+H	3	3	13H	<ul style="list-style-type: none"> Personnel must take tripping hazard in consideration and not walk on the edge of truck load bed Ensure 3 point contact when climbing on and off the truck Ladder to be used when ascending or descending truck Workers to wear safety harness attached to life line if working height exceeds 18m; lineyard on harness not exceeds 1 meter 	A	1	2	3L	Supervisor
17	Setting out points	Incorrect setting out points (Demarcation)	Production loss	BI/AD	3	4	18H	<ul style="list-style-type: none"> Management, surveyor and supervisor must ensure that SOP's are in accordance with approved and accepted drawings and survey results 	A	1	4	10M	Supervisor
18	Barricading of work area	Uncontrolled movement	Injury Disability Fatality Property damage Production loss	S+H+ENV+BI/AD	3	4	18H	<ul style="list-style-type: none"> All excavation areas will be barricaded with solid barricading from before excavations start until after backfilling is completed Excavation to be numbered and put on register Daily pre-work check list to be completed and permit obtained by 	I	1	4	10M	Supervisor

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								<ul style="list-style-type: none"> appointed supervisor Signage for barricading to be installed at access to excavation 					
19	Handling and storage of excess spoil	Excess spoil (Rocks, stone boulders etc.)	Injury Fatal Property damage	ENV.+S+H+BI /AD	3	3	13H	<ul style="list-style-type: none"> Excess spoil will be removed from excavation work area with tipper Spoil remain in work site area for backfilling purposes will be stock piled in safe area All spoil will be stored further than 2m way from excavation edges and outside barricading Stock pile will not cause restriction to access/egress of work area 	1	1	2	3L	Supervisor
20	Placing spoil	Excess material/spoil (Excavation sides collapsing)	Injury Fatality Property damage	S+H+ENV	3	4	18H	<ul style="list-style-type: none"> No excess spoil will be placed within 2m from excavation All excavation sides will be shored to prevent collapsing of materials Spoil at edges will not exceed height of 2m and will be shored 1-2 at all times 	E & A	1	4	10M	Supervisor
21	Barricading visibility	Poor after dark barricading and excavation visibility	Injury Property damage	ENV+S+H	3	3	13H	<ul style="list-style-type: none"> Excavation must be backfilled as soon as possible after work completed All possible other smaller holes, trenches and hollows must also be backfilled as soon as practicable Areas to be barricaded until backfilling can be executed 	1	1	2	3L	Supervisor
22	Off-loading of shutters from	Access and egress not	Injury	S+H+BI/AD	3	4	18H	<ul style="list-style-type: none"> A ladder to be used for access and egress 	A	1	4	10M	Supervisor / Induna / Storeman

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	back of truck	provided for climbing on back of truck	Fatality					<ul style="list-style-type: none"> Ladder is to be tied down at all times on the top When workers is climbing up and down an additional worker to hold ladder below Ladder is to be numbered and colour coded and placed on register Monthly inspection to be done by competent appointed person 						
		Employees falling of the back of truck	Injury Fatality	S+H+L&R	3	4	18H	<ul style="list-style-type: none"> All employees working at heights must be trained and found competent. All employees to receive training on safe usage of safety harnesses and storage of harnesses All harnesses to be inspected monthly and colour coded and on register Fall protection plan to be in place Rescue procedure to be in place Working at heights recue team to be on site Safety harnesses to be used and employees must latch up when stationed 	A	1	4	10M	Supervisor	
		Shutter at the back of truck stacked unsafely	Injury Fatality	S+H+L&R+B I/AD	3	4	18H	<ul style="list-style-type: none"> Before truck enter site, the person escorting truck must ensure that loads are not stacked unsafely No truck will be allowed 	A	1	4	10M	Supervisor	

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								<ul style="list-style-type: none"> on site if stacking is unsafe • Loads not to exceed 5m in height • Driver to comply with all induction guidelines 					
		Nip points	Injury	S+H	3	2	8M	<ul style="list-style-type: none"> • Shutter hands and assistants to off load and work with shutters • When offloading employees are to start with the outer layer of piles, top sides and work to the bottom • Supervisor must ensure that task conducted in correct procedure 	A	2	2	5L	Supervisor
		Stacking and storage done unsafely	Serious Injury	S+H+ENV	3	3	13H	<ul style="list-style-type: none"> • Foreman to be appointed as per construction Regulation 26 stacking and storage supervisor • All shutters to be stacked in a demarcated area with responsible person name, surname and contact number on barricading signage • To ensure proper access in and out of stacking area • No unauthorised sign to be used • If rebar is not in area that has the above all the rebar must be capped • Site supervisor must ensure correct procedure 	E&A	1	2	3L	Supervisor
		Excavation not shored No access	Injury Fatality	L&R+S+H+E NV.	3	4	18H	<ul style="list-style-type: none"> • Excavation checklist to be completed daily (appointed person) 	I	1	4	10M	Supervisor

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		Excavation not barricaded						<ul style="list-style-type: none"> • Safe access to be in place • Solid barricading around excavations • Supervisor to ensure that excavations are shored and barricaded at all times 					
23	Housekeeping	Pieces of reinforcing off cuts and binding wire on ground	Injury	ENV	3	4	18H	<ul style="list-style-type: none"> • All material and off cuts to be cleared between and after each shift • All off cuts to be placed in an area away from walk way • Off cuts to be contained in drums and containers and disposed correctly 	A	1	4	10M	ALL
24	Pouring of concrete by ready mix truck	Substandard trucks on site	Injury Disability Fatality Property damage	ENV+S+H+Q A	3	4	18H	<ul style="list-style-type: none"> • Only client approved trucks and operators to be allowed on site • Daily pre-use inspection to be completed and signed off • Supervisor to ensure all vehicles inspected prior of entering site • Operator to have valid driver licence 	A	1	4	10M	Supervisor
		Trucks on incorrect route/site	Injury Disability Fatality Property damage	S+H+R/S/C	3	4	18H	<ul style="list-style-type: none"> • Trucks to be escorted in and out of site at all times • Only routes as per approved traffic plan to be utilised • Operator to obey all road signs and instructions • Induction to be conducted with operator prior entering site 	A	1	4	10M	Supervisor
		Incorrect placing and	Injury	S&H	3	4	18H	<ul style="list-style-type: none"> • Flagman to be in place at all times to instruct 	E	1	4	10M	Supervisor

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		positioning	Fatality Property damage	BI/AD QA R/S/C				operator <ul style="list-style-type: none"> Flag man to be inside "safety den" (20m radius) Operator to obey only flag man instructions Truck must be positioned on level and stable area Supervisor available at all times 					
		Uncontrolled movement of truck	Injury Fatality Property damage	S+H+AD	3	4	18H	<ul style="list-style-type: none"> Driver to ensure truck lock out when not in cab Stop blocks to be used when equipment parked Stop blocks only to be removed when equipment leaving site 	A	1	4	10M	Supervisor
25	Handling of concrete	Workers and hand tools (Shovels)	Injury	S+H+ENV	3	3	13H	<ul style="list-style-type: none"> Only trained and competent employees to conduct task DSTI and tool box talk to be attended before commencement of task Sufficient space must be allowed between workers to allow for swinging and movement radius Long socks must be worn with gumboots Only approved and inspected hand tools to be used 	A	1	2	3L	Supervisor
		Safe work platform	Injury	L&R+S+H	3	4	18H	<ul style="list-style-type: none"> Safe working platform for employees standing on rebar must be provided to prevent feet and leg injuries Safety gum boots to be worn at all times 	A	1	4	10M	Supervisor / Safety Officer

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								<ul style="list-style-type: none"> All rebar in an upright position will be fitted with end caps 					
26	Vibrating concrete	Incompetent operator	Injury	L&R+S+H	3	3	13H	<ul style="list-style-type: none"> Only competent operators to be utilised Ensure proper motor guarding with no exposed components to vibrator motor. Operator to have firm footing and proper grip-hold on vibrator Correct PPE to be worn at all times Supervision at all times 	P	1	2	3L	Supervisor / Safety Officer
		Defective vibrator	Injury Property damage		3	3	13H	<ul style="list-style-type: none"> Vibrator and motor must be inspected prior commencement of task Vibrator and motor to be listed on monthly register 		1	2	3L	Supervisor / Storeman
27	Housekeeping	Spilled concrete	Environmental Injury	QA+BI/AD	3	4	18H	<ul style="list-style-type: none"> Waste and spilled concrete must be cleaned up and removed from work area immediately Ensure that affected area is properly cleaned Safety department to be notify All tools and equipment to be removed from work area after each shift 	E	1	4	10M	ALL
		Poor vision	Injury Property damage		3	3	13H	<ul style="list-style-type: none"> No work to be conducted after sun set Adequate lightning to be available 		1	2	3L	ALL

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28	Off-loading of scaffolding on site	Incompetent operator Area not barricaded No supervision No PPE Nip points Slip and fall	Injury Property damage	S+H+ENV+L &R	3	3	13H	<ul style="list-style-type: none"> Stacking of material to be neatly done Area to be barricaded Constant supervision Correct PPE to be worn Material to be passed carefully and in a safely manner Employees to be aware on falling objects No employee to be loiter around truck when off loading Supervisor to be present at all times Life line to be use when load exceeds 18m Employees to wear full body harness and attached lanyard to life line 	A	1	2	3L	Supervisor
29	Start with level solid floor	Incompetent erectors Scaffold not levelled Scaffold jacks over extended Sole boards not flat on ground	Injury Property damage	L&R+S+H+A D/BI	3	3	13H	<ul style="list-style-type: none"> All scaffold erectors to be certified and appointed Ensure ground area is level Scaffold Jack not to be extended more than a 3rd of its length Ensure sole boards are flat on ground and not gaps under sole boards Scaffold to be checked for any defects Erecting of scaffold not to be conducted during night hours or rainy conditions soft soil double sole boards 	A	1	2	3L	Supervisor
30	Put sole boards where standards will be placed	Poor ground conditions PPE not used	Injury Fatality	ENV.+QA+S +H+BI/AD	3	4	18H	<ul style="list-style-type: none"> Scaffolds to be built to SANS 10085 standards Scaffold to be erected on sole boards that are 	A	1	4	10M	Supervisor

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								continuously supported					
								<ul style="list-style-type: none"> Material under sole boards to be well compacted For very hard or rocky ground conditions not subject to soil erosion, the length of the sole boards should be 450mm per standard PPE to be worn at all times 					
31	Get 4 standards with base jacks for the 4 corners Get 4 ledgers to make the frame of the scaffold	Scaffolds not built to standard Manual handling Material in lay down area falling over Employee not taking material from the top PPE not used Falling object Slip and trip	Injury Property damage	S+H +L&R+BI/AD	3	3	13H	<ul style="list-style-type: none"> Employee not to carry material weighing more than 25kg Material to be stacked properly in standards Material always to be taken from the top Leather gloves to be worn when handling scaffold material 	A	1	2	3L	Supervisor
32	Get 4 ledgers for the top rail	Employees not wearing safety harness Material not secured No unsafe to use sign	Injury Fatality	S+H+L&R	3	4	18H	<ul style="list-style-type: none"> Install scaffold in "progress" sign during erection and dismantling when taking down Employees to wear double lanyard safety harness and to be attached at all times Good communication between erector and assistants when passing material hand to hand Install unsafe to use sign 	A	1	4	10M	Supervisor

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33	Put hook on boards on top of ledgers (at least 2 boards)	Employees not wearing safety harness No communication No supervision PPE not worn	Injury Fatality Property damage	L&R+BI/AD	3	4	18H	<ul style="list-style-type: none"> Material to be passed by hand over hand Employees to ensure boards are placed so they can work from and not stand on ledgers Area below to be barricaded Constant supervision at all times 	A	1	4	10M	Supervisor
34	Installing ladders	Employees not wearing safety harness No communication Falling objects No Supervision	Injury Fatality Property damage	L&RBI/AD+S+H	3	4	18H	<ul style="list-style-type: none"> Good communication between erectors and assistants when passing material from hand over hand Ladder to extend at least 900mm Ladders to be installed on the inside of scaffold with trap doors closed when not in use No cat ladders will be used on project unless authorised by the Project Manager PPE to be worn at all times Constant supervision at all times 	A	1	4	10M	Supervisor
35	Fixing of cross bracing	No bracing installed No lanyard for tools No supervision Falling objects	Injury Property damage	S+H+QA+BI/AD	3	3	13H	<ul style="list-style-type: none"> All scaffolds to be adequately braced to ensure stability Tools to be secured to erector at all times by means of a lanyard Chinstraps to be used while working at heights Supervision at all times 	A	1	2	3L	Supervisor
36	Climb up the ladder and stand on floor boards with	Employees taking shortcut	Injury	S+H+L&R+BI	3	3	13H	<ul style="list-style-type: none"> Employees to always use ladders as access Employees to ensure 	A	1	2	3L	Supervisor

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	safety harness hooked onto structure	Employees not hooking the harness Slip and fall						that the harness is hooked as high as possible <ul style="list-style-type: none"> • Double lanyard safety harness with shock absorbers to be used • Rescue team to be presented on site • Only safety harnesses as per HSE guideline to be used with big scaffold hooks 					
37	Passing material to next person	Falling material No supervision	Injury Property damage	BI/AD+S+H	3	3	13H	<ul style="list-style-type: none"> • No material to be thrown • Material to be passed from hand over hand • Ensure eye contact at all times • Supervisor to be present at all times • Demarcate area 	A	1	2	3L	Supervisor
38	Scaffold safe to use sign placed at entrance of scaffold	Scaffold not safe Scaffold still under erection No supervision Employees using unsafe scaffold Scaffold collapse	Injury	S+H+L&R	3	3	13H	<ul style="list-style-type: none"> • Red board to be placed on scaffold when declared unsafe to use • No scaffold to be used during inclement weather • Appointed scaffold inspector to inspect scaffold. • Employees to use only scaffold when green board attached to scaffold and safe to use 	A	1	2	3L	Supervisor
39	Working in wet conditions	Scaffold is slippery when wet Slip and fall No supervision	Injury	S+H+L&R	3	4	18H	<ul style="list-style-type: none"> • No erection of scaffold to be taken place in wet conditions • After rain supervisor to inspect material to ensure it is safe for employees to work • Employees to ensure all mud from boots are 	A	1	4	10M	Supervisor / Safety Officer

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								<ul style="list-style-type: none"> removed before working on scaffold Scaffold inspector to inspect all scaffolds after inclement weather. 					
40	Scaffold inspections	Falling from heights Slip and fall	Injury Disability Fatality	L&R+S+H	3	4	18H	<ul style="list-style-type: none"> No employees allowed on scaffold that has not been trained and found competent on working at heights Only trained and competent scaffold erectors to erect or dismantel scaffold Only trained and appointed scaffold inspector allowed to declared scaffold safe to use During and after scaffold erected the scaffold inspector must docket down on a register form. No employee to do alteration unless scaffold inspector Scaffold to be inspected on a daily basis prior commencement of work 	A	1	4	10M	Supervisor
41	Fitting and adjustment of safety harness	Harness does not fit properly	Injury Disability Fatality	S+H	3	4	18H	<ul style="list-style-type: none"> Employee to be informed in toolbox talks correct fitting of safety harnesses. Employee to help other employees when fitting safety harness Supervisor to inspect workers that safety harness fit correctly 	A	1	4	10M	Safety Officer/ Supervisor
42	Moving with	Loose loops	Injury	S+H	3	4	18H	<ul style="list-style-type: none"> Rescue kit to be present 	A	1	4	10M	Supervisor/Safety

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	safety harness on scaffolding/structures	and buckles of safety harness hooking onto scaffold and structures	Disability Fatality					<ul style="list-style-type: none"> at all times Employees to be trained and found competent by accredited person Workers to be trained on how to use safety harnesses and to tighten loops and buckles Rescue training to be done Employees to be hooked up to a secure point before he is unhook himself from existing point before going forward to designated area At work saturation employee will hook both safety belts on a secure point 					Officer
		Tie-off points not suitable for attaching safety harness	Injury Disability Fatality	S+H + L&R	3	4	18H	<ul style="list-style-type: none"> Supervisor to ensure that tie-off points/lifelines are inspected prior to commencing work Scaffolding inspections to be conducted Lifeline inspections to be conducted 	A	1	4	10M	Safety Officer/ Supervisor
		Workers not metally fit for working at heights	Injury Disability Fatality	S+H	3	4	18H	<ul style="list-style-type: none"> Psychological questionnaire to be conducted prior to commencing work Check for hypertension with clinic management 	A	1	4	10M	Supervisor/ Safety Officer
		Harness tie-off point to allow for vertical movement	Injury Disability Fatality	S+H	3	4	18H	<ul style="list-style-type: none"> Tie-off point to be at a level higher than worker to limit vertical fall Toolbox talks Training 	A	1	4	10M	Safety Officer/ Supervisor

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43	Barricading	Falling objects	Injury Fatality	L&R	3	4	18H	<ul style="list-style-type: none"> Areas below activity to be barricaded off and signage to be in place 	E	1	4	10M	Supervisor
44	Working at heights with hand tools	Falling objects	Injury Fatality	L&R +S+H	3	4	18H	<ul style="list-style-type: none"> All tools to be fitted with lanyards Toolbox talks on hand tools to be done on regular basis 	E	1	4	10M	Supervisor/Safety Officer
45	Working in wet/muddy conditions	Slip and trip Working with electrical equipment in wet conditions	Injury Disability Fatality	L&R + S+H	3	4	18H	<ul style="list-style-type: none"> No working at heights in wet conditions No electrical work to be conducted in wet conditions 	E	1	4	10M	Supervisor
46	Scaffold inspections	Falling from heights	Injury Disability Fatality	BI/AD+S+H	3	4	18H	<ul style="list-style-type: none"> No employees allowed on scaffold that have not being trained and found competent Only trained and appointed scaffold erectors allowed on scaffold when erecting Only trained and appointed inspectors to declare scaffold safe to use Scaffolds to be inspected every 7 days and after strong wind or rain and docket down on register 	A	1	4	10M	sUPERVISOR SAFETY Officer
47	Using of a grinder pre-use inspection	Unauthorised user No checklist Disc worn out and approaching end of grinding surface Inspection not done	Injury Disability Fatality	L&R + S+H + AD/BI	3	4	18H	<ul style="list-style-type: none"> Competent and trained user Checklist to be done before use Discontinue use of worn out disc Pre use inspection should be done on following items: <ul style="list-style-type: none"> Plug Cord 	A	1	4	10M	Storeman/ Supervisor/ Safety Officer

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								<ul style="list-style-type: none"> • Cutting flange • Cutting disc • Switch • No permanent lock switch allowed • Correct PPE to be worn at all times including face shield 					
48	Changing of cutting or grinding disc and brush	Grinder not made safe Incorrect tool used to change disc Damaged disc not in place Safety guard not in place Incorrect disc fitted	Injury Disability Fatality	S+H + L&R +BI/AD	3	4	18H	<ul style="list-style-type: none"> • Ensure grinder is unplugged • Ensure correct tool is used to change disc • Only competent person to change disc • Disc that are wet or lay in water should not be used • Defective cutting disc should not be used • Ensure cutting disc is properly secured • Grinder to be inspected that the safety guard in place • Grinding disc for grinding operations • Steel cutting disc for cutting steel • Masonry disc for use correct type of use • Cutting concrete • Wire brush to clean steel 	A	1	4	10M	Storeman / Supervisor
49	Use of angle grinder on metal, reinforcing and steel	Fatigue Dust from grinding process Noise from cutting process Sparks generated from cutting	Injury Disability Fatality	S+H +ENV.	3	4	18H	<ul style="list-style-type: none"> • Fatigue management plan to be implemented • Other employees to be made aware of cutting/grinding and to stand clear • Dust mask to be worn • Ear plugs to be worn • Eye protection to be 	A	1	4	10M	Supervisor

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		process Incorrect posture Inadequate work space Flying objects Fire Loose clothing						worn <ul style="list-style-type: none"> • Face shields • Apron to be worn • Employees to stand properly in order for the sparks to go pass them • Work should have enough space for use of grinder • Material to be secured by another person when cut • Off cuts to be contained in a drum (store properly) • Fire extinguisher • Correct PPE • Ensure employees not wearing loose clothes whilst grinding 					
50	Storage of baby grinder	Incorrect storage	Theft	BI/AD	3	2	8M	<ul style="list-style-type: none"> • Proper storage space to be provided • Grinder not to be left unsupervised when used on site 	A	1	2	3L	Storeman
51	Working in wet/muddy conditions	Electric shock Slip and trip Burns	Injury Fatality	S=H	3	4	18H	<ul style="list-style-type: none"> • No electrical equipment to be used when raining 	E	1	2	3L	Supervisor
		Combustibles in immediate area	Injury Fatality	S+H	3	4	18H	<ul style="list-style-type: none"> • Check and ensure area isj clear of combustibles 	E	1	2	3L	Supervisor

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		Hot flux potential for ignition	Injury Fatality	S+H	3	4	18H	<ul style="list-style-type: none"> • Fire extinguisher in area where welding is in operation • Welder to declare area safe prior to moving off • Used welding rods to be placed in drum and kept near welder 	E	1	2	3L	Supervisor
52	Pre-use inspection	Inspection not done and on register	Injury Equipment damage	S+H + L&R	3	2	8M	<ul style="list-style-type: none"> • Inspection to be done by competent person • User of drilling machine to be trained and found competent • Checklist to be signed off by competent appointed supervisor • Permanent lock switch not allowed 	A	1	2	3L	Storeman
53	Changing of drill bits	Drilling machine not made safe	Injury Property damage	S+H	3	2	8M	<ul style="list-style-type: none"> • Only trained and found competent employees to change drill bits on a drilling machine • To ensure drilling machine is unplugged 	A	1	2	3L	Supervisor
		Incorrect tools used Incorrect bit fitted Bit fitted wrong way Damaged bit fitted	Injury Fatality Property damage	S+H + QA BI/AD	3	3	13H	<ul style="list-style-type: none"> • Equipment needs to be inspected prior entering site • Proper tool (Chuck key) to be use • Supervisor to ensure correct bit is provided and fitted • Bit to be inspected prior of fitment by competent and trained employee 	A	1	2	3L	Supervisor
54	Use of drilling machine (drilling thru concrete)	Drilling machine used by incompetent	Injury Disability	S+H + QA	3	3	13H	<ul style="list-style-type: none"> • Only trained employees allowed to work with drilling machine • Ensure drilling machine 	A	1	2	3L	Supervisor

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		employee						not to be left unsupervised					
		Noise Dust	Injury Disability	ENV + S+H	3	3	13H	<ul style="list-style-type: none"> • Ear plugs to be worn when drilling • No loose clothing to be worn • Dust mask to be used • Correct PPE to be worn at all times 	A	1	2	3L	Supervisor
		Bit coming off while working with drilling machine	Injury Property damage	S+H	3	3	13H	<ul style="list-style-type: none"> • Employee to ensure drill bit is attached properly and secured with suck key 	A	1	2	3L	Supervisor
		Employee injured as a result of an electric shock	Injury Fatality	S+H	3	3	13H	<ul style="list-style-type: none"> • Drilling machine not to be used while standing in water • Drilling machine to be inspected before use • Faulty equipment to be removed from site • No drilling operations to be done during rain 		1	2	3L	Safety Officer / Storeman / Supervisor
55	Storage of equipment	Incorrect storage of drilling machine	Property damage	BI/AD	3	3	13H	<ul style="list-style-type: none"> • Proper storage space for drilling machine to be provided • Storage to be controlled by a trained and competent store man 	A	1	2	3L	Storeman
56	Maintenance	Defects not reported	Injury Property damage	BI	3	2	8M	<ul style="list-style-type: none"> • All defects on drilling equipment must be reported to supervisor and storeman 	A	1	2	3L	Supervisor/ Storeman
57	Use of mobile compressor	Unauthorise d persons using equipment	Injury Fatality	S+H	3	4	18H	<ul style="list-style-type: none"> • Only authorised trained employees to use equipment • Supervisor to be present at all times 	P&A	1	4	10M	Supervisor/ Safety Officer
		Operator not knowing where	Injury Fatality	S+H + L&R	3	4	18H	<ul style="list-style-type: none"> • Supervisor to give employee on the job training as to the 	A	1	4	10M	Supervisor

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		emergency stop button is.						<p>hazards and risk associated with the mobile Compressor and emergency preparedness</p> <ul style="list-style-type: none"> Only trained employees to use mobile Compressor 					
		No inspection done prior of commencement of work	Injury	L&R	3	3	13H	<ul style="list-style-type: none"> Inspection to be done daily by supervisor prior commencement of entering site. 	A	1	2	3L	Supervisor/ Storeman
		Leakage of diesel/petrol	Fire risk Injury Fatality Property damage	S+H + BI/AD + ENV.	3	4	18H	<ul style="list-style-type: none"> Material safety data sheets must be on site and communicated to all employees by supervisor Drip trays to be utilised No smoking or open flames near Mobile Compressors that are in operation Contaminated soil will be properly disposed in line with construction EMP Disposal certificate will be kept on record Only certified companies used to dispose of hazardous waste 	A	1	4	10M	Storeman / Supervisor
		Oil decomposition	Injury Property damage	S+H	3	4	18H	<ul style="list-style-type: none"> Regular cleaning of cylinders and valves Supervisor to ensure employees comply 	E	1	4	10M	Supervisor
		Rotating parts	Injury Disability	S+H	3	3	13H	<ul style="list-style-type: none"> All rotating parts must be guarded. Supervisor to ensure that items are covered in pre start inspection 	E	1	2	3L	Supervisor

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		Cleaning of clothes and skin with compressed air	Injury	S+H	3	3	13H	<ul style="list-style-type: none"> Supervisor to ensure no employees uses compressed air to dust off clothes or skin as irritation can occur Communicate to employees in Toolbox Talk Warning signs to be displayed 		1	2	3L	Safety officer / Supervisor
58	Hazardous chemical storage	<p>Employees not familiar with MSDS</p> <p>Liquid splashing</p> <p>Employees inhaling fumes</p> <p>Liquid spilling from container</p> <p>No information of hazardous substance signage</p> <p>No fire extinguisher</p>	<p>Injury</p> <p>Disability</p> <p>Fatality</p>	ENV +S+H + BI/AD	3	4	18H	<ul style="list-style-type: none"> Obtain formal approval of flammable store from the relevant local authority and display the certificate at the entrance to the store Flammable liquid store to conform all legal requirements Assessment to be carried out to determine the quantity of flammable liquid kept on site No open flames and no smoking symbolic signs to be displayed in the vicinity of flammable liquid store All material safety data sheets (MSDS) to be available at all times Liquid bulk storage tanks to be banded. Each bund to be capable of containing the maximum volume of the tank +10% Fire extinguisher to be in 10 meter radius 	A&E	1	4	10M	Supervisor/Storeman/ Safety Officer

APPROVAL				REVIEW RECORD			
Company	LDM CONSULTING	PRINCIPAL BUILDING CONTRACTOR	CLIENT Safety Agent / Sobuya Safety Consultant	3			
Representative Name	FEZAL JUMOORTY		ADAM PETERS	2			
Job Title	Lead Risk Assessor	Contracts Manager/Director	Client Agent / Safety Consultant	1			
Signature				0			
Date	28/06/2020		28/06/2020	Rev No	Date Reviewed	Reviewed By	Signature