

 LANGEBERG MUNISIPALITEIT MUNICIPALITY MASIPALA	DOCUMENT NAME	SITE SAFETY HEALTH AND SAFETY SPECIFICATION (SSHSS)		
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OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION

Introduction

A responsible Occupational Health and Safety management is **essential** to protect the client, consultants, contractors, employees, visitors and the public to provide a work environment that encourages a health and safety culture.

Purpose

The purpose and objectives of this Specification is to ensure that all Contractors (herein referred to as the “*Contractor*” (including Principal Contractor, Contractors, Subcontractors, Service Providers, consultants or similar) shall enter into a **contractual agreement** / relationship with Langeberg Municipality (herein referred to as the “*Client*”). Such Contractor shall achieve and maintain an acceptable level of Occupational Health and Safety performance whilst conducting work for or on behalf of the Client.

These health and safety specifications (“*specifications*”) have been prepared in terms of the Occupational Health & Safety Act, Act 85 of 1993 (hereinafter referred to as the “*OHS Act*”) and the regulations promulgated there under and as amended, in particular the Construction Regulations 2014 and guidelines published there under and **must be complied with**.

It is a **requirement** that Contractor’s shall **provide a safe and healthy working environment** and to direct his activities in such a manner that his employees and any other persons, who may be affected by his activities, are not exposed to hazards to their health and safety, maintain OHS Act legislative compliance and minimize the risks of incidents, injuries, contracting diseases and damage to the employees’ health, environment, assets or property of the Client.

Scope

This **document is part of** the tender requirement, all contracts, principal agreements, applicable service level **agreements** and legal **appointments** entered into with Langeberg Municipality and a Contractor or service provider.

The Contractor is required to use and apply it when **developing** Health and Safety documentation for implementation on sites. This document will carry equal weight to the contracts, principal agreements, service level agreements and legal appointments as far as enforcement, compliance and breach is concerned.

These **specifications form an audit guideline** and management tool for the use of the Contractor to **ensure compliance with the OHS Act and Regulations, Directions, Directives, Notices and Guidelines** promulgated there under and updated from time to time. **CoVid-19 compliance requirements is included in the OHS Direction as published.**

Any **contradiction** between these specifications and the OHS Act, the OHS Act take preference except where explicitly stated. When these specifications do not cover specific health and safety requirement, the **OHS Act must be used as the standard requirement**.

Adherence

The specifications are **mandatory before the commencement** and for the duration of any contract works to be conducted on any Langeberg Municipality premises (owned or leased). These specifications shall be implemented and be subject to audits, without prior announcement from time to time.

It is the responsibility of the contractor to familiarise himself with the **contents of this specification** and any subsequent updates hereto. The latest version should always be kept in the contractors file on site.

Failure to adhere to this specification may result in disciplinary action, penalties and a breach being raised in the event of continuous non-conformances.

Reputational impact

Any action or inaction taken relevant to this Specification which may have potential to incur reputation risk for Langeberg Municipality, i.e. likely to result in material criticism and / or censure of Langeberg Municipality by key stakeholders or opinion formers (including clients,

market counterparties, regulators, government officials, law enforcement agencies, media or NGOs) should be escalated to the appropriate committee.

Penalties

Penalties may be implemented for continuous non-compliance to sample provisions set out later in this specification.

Interpretation

The SSHSS contains clauses that are generally applicable to building / construction / civil work and to impose pro-active controls associated with activities that impact on human Health and Safety as it relates to plant and machinery.

Compliance to the requirements of the OHS ACT is in addition to the requirements of the SSHSS and is part of the Contractor's responsibility. The CLIENT will monitor that the Contractors comply with the requirements of the OHS ACT and will not prescribe to the Contractor how such compliance is achieved.

Definitions

For the purpose of this SSHSS some of the definitions / acronyms given hereunder have been extracted (but not limited) from the Construction Regulation shall apply:

"Construction Work" (as defined in the Construction Regulations, 2014) means any work in connection with –

- a) The construction, erection, alteration, renovation, repair, demolition or dismantling of or an 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.

"Hazard Identification, Risk Assessment and Risk Control" means a documented plan, which identifies hazards, assesses the risks and detailing controls.

"Site" means the area in the possession of the Principal Contractor after site hand-over for the construction of the works. Where there is no demarcated boundary it will include all adjacent areas, which are reasonably required for the activities for the Principal Contractor, and approved for such use by the Client's representatives / Engineer.

"The Act" means, unless the context indicates otherwise, the Occupational Health and Safety Act, 1993 (ACT NO. 85 of 1993) and Regulations promulgated there under.

"Client" means Langeberg Municipality.

"Hazard" means a source of or exposure to danger (source which may cause injury or damage to persons or property)

"Risk" means the probability or likelihood that a hazard can result in injury or damage

“Principal Contractor’s Responsible Person” means any person appointed in writing by the Principal Contractor to supervise construction or building work. The appointment shall be as required by the OHS ACT which shall stipulate Health and Safety responsibilities, area of responsibility and the proposed duration of the project.

“Employer’s Personnel” means any Employee of the Principal Contractor , Contractor or Sub Contractors.

“SSHSS” means Site Specific Health and Safety Specifications / Occupational Health and Safety Specification.

Health and Safety Plan

The Contractor shall be required to develop and provide for review and approval by the client’s representative, a comprehensive site and project specific Health and safety plan, prior to work commencement.

Such plan shall be specific to the scope of work of the contractor including his sub-contractor scope of work, addressing the requirements set out in this specification.

Such plan must follow this specifications layout and shall detail the Contractor’s planned methods of management on site for the duration project. The detail required shall provide the client with a clear indication of how the Contractor (as well as his sub-contractors) intends to address, implement and manage the requirements of this specification in terms of his own scope of works.

The contractor’s health and safety plan must include a **Table of Content (INDEX)**.

The CIDB has gazette a best practice Standard for Health and Safety Plans and auditing requirements (Grade 2 to 9), Vol 641 9 November 2018 No 42021. The potential principal contractor should adopt such **standard for the layout of the Principal Contractor’s Health and Safety Plan**.

Such health and safety plan audit standard gazetted by the CIDB ensure that every contractor’s health and safety plan is evaluated fairly.

1. Project information

This health, safety and environmental specifications have been prepared for the preparation of construction work. Thereafter the enforcement of these specifications will be applicable during the construction phases. The appointed contractor’s health and safety plan cannot override the client’s specifications.

A general description of the type of work activities involved in the project.

This description of the works is not necessarily complete and shall not limit the work to be carried out by the principal contractor and contractor under this contract.

The Scope of Work consists of:

OVERVIEW OF THE WORKS

The Construction of a new Fire station on Erf 8250, Kerk Street, Robertson, 6705.

The Scope of works includes the general specifications issued by the South African Association of Quantity Surveyors for building contracts: "Model Preambles for Trades2008".

The works consist of the construction of a new fire station building with related civil and electrical works as per architectural and engineer drawings and specifications, located on Erf 8250, Kerk Street, Robertson, Western Cape, South Africa.

SUBSOIL INVESTIGATIONS AND TEST RESULTS

An Engineering Geological Report: TG21-030/1 was conducted in October 2021 that form part of the contract documents. Tenderers / Contractors should acquaint themselves with conditions on site.

LOCATION OF WORKS

Erf 8250, Kerk Street, Robertson, Western Cape, South Africa

EXISTING SERVICES

Known services

INFORMATION ABOUT SERVICES BELOW THE SURFACE OF THE SITE

No record drawings of existing services, except those which are shown on construction drawings, are available. The successful tenderer will have to consult with the relevant authorities to point out existing services prior to commencement construction activities.

The Contractor shall take whatever precautions are required to protect these services from damage during the period of the contract. The Contractor must take every effort to locate such services which may be damaged as a result of construction.

TREATMENT OF EXISTING SERVICES

The treatment of existing services, i.e. their termination, diversion or continued use, either temporarily or permanently, is shown on the relevant drawings. Any services encountered on site which are not on the drawings, must be pointed out to the Engineer. The Engineer will issue further instructions with regard to the treatment of these services.

Construction activities may also include, but are not limited to:

- a. Public safety and security;
- b. Protection of environment;
- c. Site Organization, Establishment and Barricading / Hoarding;
- d. Site handover meeting and progress meetings;
- e. Deliveries and other Construction Vehicles;
- f. Manual Handling of Material and Equipment;
- g. Earthworks (Excavation);
- h. Backfilling;
- i. Compacting and Filling;
- j. Construction of Access Roads;
- k. Road Signs and - markings;

- l. Demolition works;
- m. Installation of Services;
- n. Electrical Reticulation;
- o. Steel reinforcing;
- p. Concrete Works;
- q. Bricklaying & Plastering;
- r. Plumbing;
- s. Roof Erection;
- t. Scaffolding & Working on ladders;
- u. Working in elevated positions;
- v. Welding and gas cutting;
- w. Fire prevention;
- x. Hoisting and lifting Operations;
- y. Landscaping; and
- z. Subcontractors and Visitors on site.

Throughout the construction process it is required that the contractors are compliant to the require regulations.

Health and Safety is everyone's responsibility, report Unsafe Acts and Unsafe Conditions to your superior immediately.

Project program or schedule details, including start and finish dates, showing principal activities and intermediate stages.

i. Project Program / schedule details

A project program with schedule detail need to be prepared by the appointed contractor once the tender has been assigned. Such program must be updated and recorded in the meetings and site-specific health and safety file of the contractor.

ii. Start and finish dates

Once an appointment has been made the official starting date will be confirmed with the contractor and site handover arrange once all documentation work, including the approval of the health and safety plan and the site-specific health and safety file, has been approved.

iii. Principal Activities

Within the Scope of Works section, a general list of activities was described. These activities form part of the Hazard identification process

iv. Intermediate stages

This SSHSS was prepared for incorporation during stage 4 to form part of the Tender documentation to ensure that the potential contractor make provision for these requirements during Stage 5 and 6. Stage 5 is the construction phase and stage 6 the close-out stage. Within the construction period different progress stages may also be defined by the professional team.

2. Client's requirements for health and safety management on project.

2.1 Health and Safety Responsibilities

The principal contractor's health and safety responsibility are delegated following an organizational structure whereby the involvement of management, contractor's and employees are coordinated through both their skills, training and experiences to be acceptable **competent persons** to perform their delegated duties.

A diagrammed **Organogram** (See annexure below as sample) must be included in the Contractor's health and safety plan and kept up to date in the health and safety file on site. When a **change of management** occurs, the client must be notifying and supplied with the required CV, which shall include the qualification and health and safety training for such person, for approval. Legal appointments must be updated when a change of management occur.

Each appointment letter shall indicate:

- a. Legal reference to the appointment requirement;
- b. The name of the person appointing and his / her designation;
- c. The name of the company who this person represents;
- d. The name of the appointee and the appointment;
- e. The detail of the site / address
- f. Period of validity of such appointment (not longer than 3 year);
- g. Signature of the Company's representative making the appointment & date of signature;
- h. Duties or reference to requirements in regulations (to include Checklists & Registers);
- i. Acceptance of appointment;
- j. Signature of acceptor and date; and
- k. Designation.
- l. Training certificate (where applicable)

All contractors including the professional team members has to ensure that an arrangement is in place to ensure all their employees have valid medical certificates of fitness.

2.2. H&S goals

The project team and contractor's management must commit to the implementation of Health, Safety & Environmental standards from management down.

During the following goals need to be adhered:

- Site supervisor must be on Site at all times;
- Employees and client employees required to comply by wearing minimum required PPE – Personal Protective Equipment;
- Construction Supervisors to ensure all employees were supplied PPE as Job Category register to ensure employees work safe;
- Work safely;
- Report all Near-Hits to the Client;
- Comply with SHE Management System;
- Comply with site-specific Work Rules;

- Prevent and/or correct unsafe behaviours;
- Prevent and/or correct unsafe work conditions;
- Implement Specifications;
- Security required at site entrance;
- Will be managed through Monthly site audits and Weekly inspections, PTO's, SWP, DSTI's.
- Site Manager and Safety Managers to supervise this on a daily base.

To achieve such goals the contractor must **monitor and review** these goals, targets, key performances indicators, etc.

2.3. Hazard identification and risk assessments

Baseline Risk Assessment

The client prepared a baseline risk assessment to cover all the possible identified risks on the project as required by Construction Regulation 5.(1)(a). The Principal Contractor shall take cognisance and incorporate this baseline risk assessment into their construction risk assessment.

The Contractor shall submit their "construction" **risk assessment** (can also be referred to as a project "**method statement**" with reference to a project schedule / plan) for the project, which shall form part / addendum when submitting the Health and Safety plan and place in the health and safety file. The above incorporate "RAMS" (Risk Assessment and Methodology Statement) methodology.

The Risk Methodology applied should follow the hierarchy of controls mitigation and must form part of the Risk Assessment, and be included in the Health and Safety File. Within such documentation the Principal Contractor shall address the risk rating strategy (Matrix) used.

Should the Principal Contractor commence work without approval of the risk assessment, or should the risk assessment not reflect the activities being undertaken, the CLIENT may instruct the work to be immediately halted, and the Principal Contractor will have no claim against the CLIENT in such a case for lost time or costs, irrespective of whether it can be demonstrated that the work was being safely undertaken

The risk assessment should include the following:

- (a) The identification of the risks and hazards to the Health and Safety to which persons may be exposed;
- (b) The analysis and evaluation of the hazards identified;
- (c) A documented plan and safe working procedures to mitigate reduce or control the risks identified;
- (d) The monitoring and review plan of the risks and hazards; and
- (e) The relevant personal protective equipment or clothing.

The Principal Contractor shall ensure that all persons entering the site are informed of all hazards on site; record of this is to be kept on the Health and Safety File (Inductions).

The risk assessment should take into consideration the following key processes for this project, but are not limited (nor exhausted) to:

- Site Establishment inclusive of long-lasting hoarding separating construction area with the operations of the other contractors

- Identification of existing services, exposure and protection thereof
- Access Control of Public, including Students, to site
- Backfilling of trenches
- Bricklaying
- Brush / Bush Cutting
- Chainsaw use
- Compacting and Filling
- Compacter Operations
- Cutting of Concrete, Road Surfaces or Kerbs
- Cutting of Steel
- Demolition
- Electrical Tools and Electrical Installations
- Electrical works and connection/disconnection of electricity to municipal supply or other
- Excavating of trenches / foundations (hand and mechanical)
- Fire
- Flammable Liquids / Gas
- Fragile materials
- Goods - / Material - / Passenger Hoist Operations
- Hand Tools
- Hazardous Bio-waste
- Hazardous Chemicals
- Hygiene requirements
- Hot Works
- Kerb Laying
- Lifting Operations
- Manhole Rings and Pipes Storage
- Manual Handling of General Items
- Members of Public, including Students
- Movement (transport) of Construction Vehicles (Inclusive of light vehicles)
- Noise and dust
- Overhead Services
- Painting
- Paving
- Plant / Vehicle and Equipment operations
- Plastering
- Plumbing
- Precast slabs
- Road Construction / - Marking
- Road Working
- Rope Access Work
- Scaffolding (Erection / Inspection and Dismantling)
- Site Strip
- Skipping of concrete with hoist / crane
- Temporary Works (Shoring / Scaffolding or False Works)
- Tower Cranes
- Traffic Management
- Underground Services
- Working at Heights
- Working during inclement weather

- Working near sewage water
- Working near water environments
- Work near underground services

All health hazards that can be present during any of the above activities should include individual, dusts, gases, fumes, vapours, noise, extreme temperatures, illumination, vibration and ergonomic hazards.

Preventative measures must first address the elimination of the hazard or risk. Should PPE be required to reduce risk then appropriate equipment or clothing must be used and be SABS approved.

Issue Based Risk Assessment

As circumstances and needs arise, separate risk assessment studies will need to be conducted. These will be associated with a system for the management of change. An additional risk assessment will need to be conducted and submitted to the CLIENT for verification when for example:

- (a) A new machine is introduced onto site;
- (b) A system for work is changed or operations altered;
- (c) After an accident or a 'near miss' has occurred
- (d) New knowledge comes to light and information is received which may influence the level of risk to employees on site.

Continuous Risk Assessment

This is the most important form of risk assessment which should take place continually, as an integral part of day-to-day management.

This should be conducted by Construction Manager on site and it is essential that formal training be provided to enable this process to be efficient.

The Principal Contractor shall be responsible for making sure that all employees under his / her control are conversant with the content of the Risk Assessment and what appropriate measures have been put in place to either eliminate or reduce the identified risks. The Principal Contractor shall outline to employees what role they are expected to play in the Risk Assessment and control measure process. Records are to be kept of this communication. Such information can also be communicated through Safe Work Procedure (SWP), Safe Operation Procedure (SOP), Toolbox talks, Job Base Analysis (JBA) or Task Bases Assessment (TBA).

Continuous Risk Assessment is also commonly known as a Daily Safe Task Instruction (DSTI's).

2.4. Design Information

In terms of Construction Regulation (2014), regulation 6.(1)(c&d), the designer must -

- Make available in a report all relevant health and safety information about the design, the geotechnical-science aspects and loading that the structure is designed to withstand; and

- 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.

An alteration in the design requires the principle contractor to review the *management of change* procedure to anticipate if any hazards may arise due to such alterations.

- Relevant existing records available on services would either be obtained through the Project Implementing Agent or from the Municipality's building Inspectorate.
- Surveys, site-investigations and Geotechnical reports conducted on behalf of the client can be requested through the Project Implementing Agent should it be available.
- "As-built" drawings could be sourced from the appointed Architect.
- The municipality has traffic flow statistics should density and traffic flow information be of relevance to a project.
- Should any change of design occur the contractor must address how this will be received on site, recorded and distributed. Liaison with the PIA on design changes must be recorded. The latest version of any new design must always be available on the site.
- The line of communication is discussed under a later section, but the principle contractor should note this in his plan at this point as well.
- An arrangement how on-site changes, potential health and safety implication of variation orders (VO's), Request for Information (RFI's and site Instructions to be explained.
- Due to the institution's continuous use of facilities all areas need to be available most of the time. Should areas be demarcated permission must be sought and approved through the PIA.
- Should new work "packages" be handed over during the project the incorporation of such work package be into the existing programs to be indicated.
- An arrangement for continuous interaction with the client representatives must be indicated where the design is on-going.

2.5. Communication and Consultation

2.5.1 Communication: Client

The Contractor must provide the client with their client communication procedure that shall include:

- Reporting prior to work commencement on any client site with:
 - an approved health and safety plan;
 - an in-dated letter of good standing;
 - stamped Notification of Construction work (each contractor); and
 - Certificate of Compliance (COC) to commence after the implemented health and safety file has been audited.
- Reporting site mobilisation and site establishment for a site inspection;
- Reporting of review and approvals of appointed sub-contractors to perform work on the client site (in line with a.i-iv above);
- Notifying the client if there is any change to the site management;
- Ensure all employees has previously been approved with security clearance;**
- Notify the client of any incidents, accidents or served notices by any regulatory authority while on site and during the project;
- Reporting to the client site inspection and audit findings;

- h. Report corrective and preventative actions (non-conformance close-out) within 48 hours;
- i. Advise the client in writing of any emergencies including actions taken.

2.5.2 Communication: Workforce

The Contractor must provide the client with their workforce consultation and communication procedure that shall include, but not limited to:

- a. CoVid-19 hygiene, sanitising, awareness and PPE;
- b. Medical conditions, restrictions or recommendations;
- c. Health and Safety Rules;
- d. Incident and near miss reporting;
- e. Report findings and corrective actions in incident investigations;
- f. Lessons from non-conformances and audits;
- g. Communicating of Risk Assessments for the work to be performed;
- h. Awareness (posters) & Toolbox Talks;
- i. DSTI communication
- j. OHS meetings to initiate, promote, maintain and review measures of ensuring the health and safety of persons on site. Note that this may be included in the progress or site meetings as an agenda item.

2.6. Co-operation between contractors

The contractor must coordinate and make arrangements:

- a. Identifying where works by one contractor and their assessment and control of risks may affect the works of another contractor;
- b. Between all contractors such as where the type and frequency of health and safety meetings are described;
- c. For preventative and control measures where more than one contractor may be exposed to the same risk; and
- d. for Health and safety surveillance and/or assistance between various contractors.

2.7. H&S Monitoring

A contractor must document:

- a. How the Health and Safety performance on site is going to be monitored?
- b. How the Health and Safety performance of others especially contractors is going to be measured and monitored?

2.8. H&S Inspections

General Inspection, Monitoring and Reporting

A table of intended inspections (with the stipulated frequency) are to be included in the Health and Safety plan and placed on a Site Calendar for ease of reference. Inspection registers and checklists must be kept in the Health and Safety File.

Internal Audits

The Principal Contractor shall conduct monthly Health and Safety audits of the project Health and Safety Management System, including the sub-contractor records, to ensure compliance with the OHS Act and OHSS. Records of audits must be kept and non-conformance reported, investigated and corrective action must be taken and reported to

prevent re-occurrence to the client. Proof hereof recorded as a non-conformance close-out must be submitted to the client's agent within 24 hours after the non-conformance was reported on an internal audit report.

External Audits

The CLIENT, or its relevant Representative, shall conduct monthly Audits on site. All documentation held by the Principal Contractor shall be available for inspection. The Principal Contractor shall provide any additional information required. The Principal Contractor is required to (must) participate in the Audit and adheres to the section of these specifications.

A copy of the Close-out report must be submitted to the client's representative within 48 hours of audit report placed in Principal Contractors Health and Safety File. The Principal Contractor has 3 (three) working days after hard copy of audit was placed in contractors file to rectify any non-conformances.

As information the full process of health and safety documentation approval is stipulated as follow:

- a. Invited contractor's health and safety file be electronically submitted and approved;
- b. Evaluation of health and safety plan of potential contractor during tender evaluation;
- c. Discuss, negotiate and approve health and safety plan after appointment of contractor;
- d. Evaluate the implementation of the health and safety file on site with site establishment;
- e. Conduct monthly audits and where required bi-weekly site visits. Reports on such must be documented and provided by auditor in hard copy to the site within 7 days after the audit was conducted signed by auditor and a site supervisor who were present during the visit;
- f. Audit close-out report on findings documented and distributed to client's representative within 3 days after the documented hard copy of audits / visit was placed in contractors file;
- g. Final project close-out, when zero working hours are reached, submitted to the client to include:
 - i. Withdraw, close, retract and cancel all legal appointments;
 - ii. Consolidated list of contractors (Name, Area of work, Contact number & email)
 - iii. Final month's Health and Safety audit report and Certificate of Compliance
 - iv. Minutes of the Health and Safety Committee meetings (when applicable)
 - v. Summary of Incidents & IOD report (Incidents on Duty)
 - vi. Summary of WCA /COIDA Claims
 - vii. Total project Man-hours and DIFR (Disable Injury Frequency Rate / 200,000 hours)
 - viii. Environmental rehabilitation status
 - ix. Current or outstanding Health and Safety Non-conformances.
 - x. Ensure that all registers and checklist are closed with the last sentence being on the document marked as "CLOSED" with the applicable date and "closed" marked across the full page.

2.9. Health and Safety Review

Contractors must ensure that health and safety documentation included in the health and safety file be reviewed **annually** or when any change of management occur. The responsibility of review lies with the contractor's management and the responsibility must be designated.

The results of such review must be submitted for approval by the client.

2.10. Training

Health and Safety Training

The Construction Regulation requires that ***“A Client must ... ensure that potential principal contractors submitting tenders have made adequate provision for the cost of health and safety measures”***.

The Principal Contractor shall at project start-up conduct a training needs analysis (**training / skill matrix**) to ascertain what Health and Safety training is required and what already exist. The training needs should specifically be based on the scope of work in relation to supervision with daily risk assessment qualification / experience, first aider, incident investigation, ladder inspection and tool inspection competencies.

The single page in tabular format as intended plan of action should be drafted and included in the Health and Safety file and **submitted with the tender**.

Once the identified people have attended training, the Principal Contractor must ensure copies of the certificates are kept in the Health and Safety File.

Where a Part-time OHS Practitioner is appointed the Construction Managers and / or - supervisors are required to have, as minimum, **legal liability training** with SAQA US certificates. SAQA US for CIVIL is 120344.

Excavation supervisors and construction manager must have a SAQA US 365183 competency certificates.

The following skills training to be considered:

- a. Legal Liability;
- b. Excavation Supervisors;
- c. Fall Protection;
- d. Fire Equipment Inspector;
- e. Fire Marshal;
- f. First Aider;
- g. Formwork & Support;
- h. Hand Tool Inspector;
- i. Health and Safety Representatives;
- j. Legal Liability Training for Management;
- k. Machine Operator;
- l. Scaffolding Erectors;
- m. Scaffolding Inspectors;
- n. Stacking & Storage Supervisor;
- o. Welder, grinding / cutting machine operator;
- p. Working at heights;

Induction

The Principal Contractor shall conduct Site Specific Inductions to all new employees and visitors on site. Proof of inductions in a form of attendance registers must be kept in the Health and Safety File.

Should any new equipment or plant be brought to site employees should be inducted on such ensuring the understanding, **blind spots, risks** and coordination when these units are being used.

Within the Contractor's Health and Safety Plan a layout of such induction to be performed should be indicated that will include Safety Rules. An attendance register must be kept and signed by all attendees.

Awareness

The Principal Contractor shall conduct, on site, periodic toolbox talks, preferably weekly or before any hazardous work takes place. The talks shall cover the relevant activity and an attendance register must be kept and signed by all attendees.

A record of who attended and the content of the topic will be kept in the site Health and Safety file as evidence of training.

Competency

After the Principal Contractor has identified the training to be conducted, based on the Hazard Identification & Risk Assessment (HIRA); he/she shall send the relevant persons on appropriate courses and keep the accredited certificates of training for reference in the site health and safety file. A maximum grace period of 30 days from the start of the project are provided for this training to be conducted and proof must be submitted to the client's representative.

2.11. Purchasing

The contractor has to ensure that the purchasing procedure include the evaluation of competencies and adequate resources of the contractors, suppliers and manufacturers. No Principal Contractor may appoint a specialist contractor who then appoints a subcontractor for such services.

2.12. Site rules

The Contractor shall ensure that all persons working under his control observe the health and safety rules of the client at all times and shall not permit any person who is not directly associated with the work from entering the site.

These specifications express various rules and other restrictions on contractors, suppliers and manufacturers such as permit-to-work procedures and arrangements for compliance by others with the rules herein and those of the contractor's health and safety plan.

2.13. Permits

The Contractor must implement a permit system for high risk activities, but not only limited to:

- a. Concrete pouring;
- b. Confined spaces;
- c. Electricity and other energy sources;
- d. Excavations;
- e. Explosive, corrosive or toxic gases or atmospheres;
- f. Extreme temperatures;

- g. Hazardous substances or Radioactive material;
- h. Hot work or Steam;
- i. Isolation of the fire alarm or fire suppression;
- j. Lifting operations;
- k. Night work;
- l. Operations requiring lockout
- m. Possibility of drowning in bulk material / tanks;
- n. Restricted access, exit and movement
- o. Welding, grinding or any other operation that could result in sparks;
- p. Working at heights, - isolation;
- q. Working in close proximity to water environment
- r. Working on live/pressurized equipment
- s. Working on public holidays, weekends and during a shutdown period;

The permit shall include the arrangements for competence and authority for issuing, acceptance, renewal (validity) and clearance of permits to work.

The Contractor shall ensure that work for which a permit is required by legislation, this specification or own permit to work procedure, is not performed by his employees prior to obtaining such permit. The Contractor shall additionally also ensure that Langeberg Municipality or the Municipalities permit for specific work procedure (way leave) is prior obtained and complied with on site, for the duration of the project.

2.14. Site security, access and transport arrangement

Security

The Principal Contractor shall ensure that each person working on or visiting a site, and the surrounding community, shall be made aware of the dangers likely to arise from on-site activities and the precautions to be observed to avoid or minimise those dangers.

The construction area should be permanently hoarded-off to prevent access of non-construction staff into the construction area. This should further be able to prevent excessive dust. Appropriate Health and Safety signage shall be posted at all times.

The Principal Contractor have a duty in terms of the OHS ACT to do all that is reasonably practicable to prevent members of the public and others being affected by the construction processes to be aware and put preventative measures in place.

The visitors to site shall go through a visitor's Health and Safety induction detailing hazards and risks they may be exposed to and what measures are in place to control these hazards and risks. A proof of such induction must be kept on the safety file for audit purposes.

Each of the Contractor's employees must be issued with a company identification card which must be displayed on his/her person at all times whilst on site (card only when required).

Such identification **cards** shall include as a minimum:

- a. Company Logo;
- b. Employee name and surname;
- c. Employee photo; and
- d. Identity number.

A list of employees with their next of kin must always be available on site (COLD requirement as well).

The Contractor acknowledges that its employees, vehicles as well as that of its agents, subcontractors and service providers may be subject to security searches at any time, and the Contractor shall ensure the aforementioned parties co-operate fully with such searches.

Access

The Contractor is required at all times to be aware of all subcontractors on site and ensure that they have means of identification and proof to verify their authorization to be on site. It is important to note that failure to produce such means of authorization for site work will result in the immediate eviction of the subcontractor from the site.

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 – daily inspections to be conducted by the Contractor with action to be taken without delay.

The Contractor must upon site establishment identify and **demarcate** designated walkways. Signage should be displayed indicating it as a designated and safe to use walkway. Walkways should be safe to use in terms of distances from hot works, works with electrical tools, overhead work, and trenches and should be of such that persons using the walkway do not disturb any work activities taking place in the area.

Transport of Workers

The Principal Contractor shall refer and comply with the requirements set in the National Road Transport Regulations, 2000. The Principal Contractor shall, and not be limited to:

- Not transporting persons together with goods or tools unless there is an appropriate area or section to store them;
- Not transport persons in a non-enclosed (top) vehicle, e.g. truck, there must be a proper canopy (properly covering the back and top) with suitable sitting area. Workers shall not be permitted to stand or sit at the edge of the transporting vehicle;
- Not transporting workers on the back of open light motor vehicles;
- Provision of a serviced portable fire extinguisher in vehicles at all times;
- Driver must have a valid PDP license transporting people; and
- Adequate seating arrangement specifically in respect of social distances.

2.15. Deliveries

The contractor must make arrangement and get approval from the client for deliveries, any restriction such as delivery times, demarcation, reserved storage areas, loading and unloading areas, and working area for prefabrication to be put in place. Banksman / direct supervision from contractor's side must be present receiving, offloading and departure of delivery vehicles.

2.16. Construction employees' facilities

The Principal Contractor shall provide facilities for

- a. Safekeeping, e.g. lockers etc.;
- b. Temporary shaded structure to serve as a mess room or eating area;
- c. Sufficient toilets for each gender (1 toilet per 30 workers);
- d. Hand washing facilities;

- e. Soap and toilet paper;
- f. Disposable paper hand drying material;
- g. Where there is a risk of exposure to HCS separate lockers shall be provided for clean and soiled/ contaminated clothing for each employee;
- h. **COVID-19 requirement;**
- i. Waste bins must be strategically placed around the site and emptied regularly but no less than weekly;
- j. Workers must not be exposed to HCS while eating and must be provided with adequate, sheltered eating areas complete with benches and tables separated from the work areas; and
- k. Stores may not double up as change rooms, mess areas or eating areas.

The weather conditions might be unsuitable for workers to be exposed to, e.g. in rainy season.

2.17. Waste

The responsibility to ensure that all Contractors enforce, in terms of their waste management, environment sustainable methods, the disposal, keep sufficient waste containers for different waste types as described below and record such in a waste management plan.

Contractor to reduce the amount of waste that is generated and where waste is generated ensures that useable waste is re-used / recycled or recovered in an environmentally sound manner before being safely treated and disposed of.

Any waste of material value the client needs to be informed and when and where possible handed over to the client.

Waste will be classified in the following categories and these requirements incorporated into the contractor's waste management plan:

LIQUID WASTE:

- a. When mobile toilets are used it must be serviced on a weekly basis and waste dispose by the service provider in an acceptable manner;
- b. Service records must be documented;
- c. Cleaning of the inside of the toilets are part of the hygiene requirement and recording must be daily conducted;
- d. The contractor must provide sufficient toilet paper for such toilets as required by the facilities regulation;
- e. Cleaning of paint buckets / brushes and disposal of paint may not be through the storm water system;
- f. Run-off from wash bays must be intercepted
- g. Chemical spills must be contained and cleaned

SOLID WASTE:

- a. Any littering is prohibited;
- b. Bins must be provided and cleaned on regular basis, preferably by end of each week or whenever possible;
- c. Disposal must be to a legal dumpsite;
- d. Sites must be swept of material that could cause injury or damage to persons or vehicles;
- e. Hand mixing of cement is only permitted inside a batch mixing bucket (brimmed area) or on the footprint of a construction area.
- f. Contaminated ground / soil must be treated or be removed and the area rehabilitated immediately.

HAZARDOUS WASTE:

- a. Hazardous materials may only be disposed of at an appropriately permitted landfill or disposal sites for hazardous material;
- b. Dedicated containers clearly marked for Hazardous waste must be used and only be used for designated purpose as designed; and
- c. Hazardous waste registers to be maintained.

GENERAL WASTE REQUIREMENTS

- a. Disposing of waste must be conducted as soon as possible at a legal dumpsite, skip or on permitted municipal landfill site;
- b. Contractor must monitor the presence of litter on the work sites;
- c. Waste must not be allowed to stand on site to decay resulting in bad odours;
- d. Poisonous or material capable of fermentation, putrefaction or constituting a nuisance shall be treated or disposed of by methods approved by the local authorities.

2.18. Personal Protective Equipment

Personal Protective Equipment (PPE)

A PPE needs analysis is to be conducted in accordance with the HIRA. PPE is to be issued free of charge. The Principal Contractor is to indicate procedure for Lost or Stolen and Worn Out or Damaged PPE.

At the beginning of the project each employee to receive two three ply cloth masks. Such cloth masks need be washed regularly and damaged masks be replaced immediately.

The following PPE shall be used on site as minimum required for everyone on site:

- Steel-Toe Safety Shoes/Boots;
- Hard-hat;
- Two Piece Overalls;
- Protective gloves where required; and
- Hi-Viz Vest **in cases where visibility is impaired.**
- Employees working at access points need to wear cloth masks and **face shield** when recording employees and visitors entering the site.

2.19. Working hours

The regional sectorial requirement in terms of the BCEA should be complied with. Contractor must document their working hours and breaks. Total working hours per week not to be exceed legislative requirement.

An arrangement for working at night, after hours, over weekends and during holidays with supervision must be documented in health and safety plan.

All works will be supervised on site.

Where accelerate work programs are implemented adherence to undisturbed weekly or two weekly rest period (BCEA 15.(1) & 15.(2)) should be adhered to (weekly is 36 consecutive hours and fortnight basis is 60 hours).

Night Work

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

All works must be supervised directly by management on site.

NB: risk assessment to be revised should night works be approved.

2.20. Notice boards

Different notice board may be required depicting the following information on a site:

The professional team involve in the project (external Organogram); and

Displaying health and safety pictographs, access control, PPE requirement and contact details to the site management (Internal Organogram).

A layout for the professional team will be provided by the Consulting engineer / Program Implementing Agent. Only approved erecting locations may be used. The requirement and provision for the implementation of Notice Boards will be indicated within the Bill of Quantity.

2.21. Emergency and first aid

Emergency Procedures

The Principal Contractor shall submit a detailed Emergency Procedure for approval by in the Health and Safety File.

The procedure shall detail the response plan including the following key personnel:

- List of key personnel,
- Details of emergency services,
- Actions or steps to be taken in the event of the emergency; and
- Information on hazardous material / situation, including each material's / hazardous potential impact or risk on the environment or human and measures to be taken in the event of an accident.

Emergency procedure(s) shall include, but not be limited to, fire, spills, accidents to employees and use of hazardous substances.

A contact list of all service providers (Fire department, Ambulance, Police, Medical and Clinic, etc) must be maintained and available to site personnel.

First Aid Box and First Aid Equipment

General Safety Regulations 3.(2) Where more than 5 employees are employed .. provide a first aid box ... at or near the workplace. (4) Where more than 10 employees are employed, ... at least one person is readily available.

The Principal Contractors shall provide an on-site First Aid Box, adequately stocked (19 items as prescribed) at all times, and ensure that the First Aid Box is accessible and fully controlled by a qualified First Aider.

2.22. Medical certificates

The contractor has to ensure that an arrangement is in place to ensure all the management and employees have valid medical certificates of fitness specific to the construction work to be performed.

2.23. Medical surveillance

OCCUPATIONAL HYGIENE

- a. Proper health and hygiene measures must be put in place to prevent exposure to hygiene hazards.
- b. Prevention should include the prevention of accidental inhalation, ingestion, and absorption of any hazardous substance or high noise level exposure.

MEDICAL SURVEILLANCE

The Contractor shall provide in the OHS Plan for the management of employee medical surveillance and ensure that:

- a. All employees on site to undergo routine medical examinations specific to the work to be performed taking into account the hazard and risk exposures;
- b. This should address pre-employment examination, periodic monitoring and exit examinations;
- c. Exit examination will be compulsory for employees working with hazardous chemicals;
- d. A declaration should be noted in the close-out report declaring all employees fit on completion of the project;
- e. All employees performing work on site must be declared medically fit for the work they are to perform (especially for working at heights);
- f. Employees will be notified the results of their medical examinations and any concerns made available that may become evident from medical examinations;
- g. Copies of valid medical certificate of fitness must be available on site as a duty of care towards employees to ensure employees are made aware of any health conditions or health restrictions which may have resulted from or may be aggravated by work activities on site.
- h. The consultation, notification and communication with the employee should, with the employees' written consent, be made available upon request for verification by the client, regulatory authority or their representatives.

CONTACT TRACING

- a. Records kept on site of employees and visitors entering the site for contract tracing purposes.

2.24. Reporting fatality, permanent injury and occupational diseases

The Contractor shall provide in the OHS Plan a summarized section providing information pertaining to his incident management procedure which should include at least the framework of the procedure and noting the requirements set out below.

Incident management procedure

In addition to the above the Contractor shall be required to prepare a comprehensive incident management procedure to be implemented on the client's sites. The procedure should address at least, but not limited to:

- a. Incident classifications
- b. Incident and near miss reporting process
- c. Incident reporting timeframes
- d. Investigation teams
- e. Investigation techniques/methods to be used
- f. Investigation timeframes
- g. Investigation reporting

h. Corrective action implementation

Without derogating from the generality of the above, the Contractor shall ensure incidents are investigated by, where appropriate, a competent multidisciplinary team within 7 days. The Contractor shall ensure all incident and investigation records shall be available in the OHS File.

The Contractor shall notify the client of any incidents, accidents and notices served by any regulatory authority while on site. The client shall further be provided with copies of any written documentation relating to any incident. The Contractor will be responsible to inform the relevant authorities of any Reportable Incidents which may occur in terms of the applicable legislation.

All correspondence with the relevant authorities regarding these incidents must be copied and kept in the OHS File.

Incident management documentation

The Contractor shall note in the OHS Plan the incident management supporting documentation which should provide for and include, at least:

- a. Legislative reporting and recording documents
- b. Contractor's own reporting and recording forms (near miss to be provided for)
- c. First aid kit contents list
- d. First aid kit inspection checklist
- e. First aid dressing register / treatment register

Medical procedure – CoVid-19

The following documentation should be submitted to the Compensation Commissioner

- Employer Report of an Occupational Disease (W.CL.1)
- Notice of an Occupational Disease & Claim for Compensation (W.CL.14)
- Exposure and Medical Questionnaire
- First Medical Report in respect of an Occupational Disease (W.CL.22) (Should list the diagnosis as U 07.1 ICD-10 code for COVID-19)
- Exposure history (W.CL.110) and/or any other employment history
- A medical report from Dr and/or Specialist
- Progress medical reports (W.CL.26)
- Final medical report (W.CL.26) once MMI reached

2.25. Method statements

Method statements, Safe Work Procedures (SWP), Safe Operating Procedures (SOP), Daily Safe Task Instructions (DSTI's)

Certain changes have been made in the Construction Regulation of 2014 in these regards and are extracted below to indicate current requirements.

Extractions from the Construction Regulations where reference to "**method(s) or method statements**" appear:

QUOTE

Construction Regulation 2003

“method statement” means a written **document detailing the key activities** to be performed in order **to reduce** as reasonably as practicable the **hazards identified in any risk assessment**;

Construction Regulation 2014

“Method statement” The description of a Method Statement was removed from definition section. ...

Risk Assessment for construction work 9.(1) ... (b) ... documented **method**;

Fall protection Plan 10.(1) ... (2) ... procedures and **methods** used to address all the risks ...

Temporary works 12.(1) ... (3) A contractor must ensure that - ... (n) a temporary works drawing or any other relevant document includes construction sequences and **methods statements**; ...

Excavation 13 (2) A contractor who performs excavation work – ... (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 ...

Demolition work 14. ... (2) A Contractor must ensure that before any demolition work is carried out, and in order to ascertain the method of demolition to be used, a detailed structural engineering survey of the structure to be demolished is carried out by a competent person and that a **method statement** on the procedure to be followed in demolishing the structure is developed by that person. ...

(11) Where the demolition work involves the use of explosives, a **method statement** must be developed in accordance with the applicable explosive legislation, by an appointed person who is competent in the use of explosives for demolition work ...

Cranes 22. A contractor must, in addition to compliance with the driven Machine Regulations, 1988 ensure that where tower cranes are used – ... (b) a relevant risk assessment and **method statement** are developed and applied; ...

UNQUOTE

It is therefore a legal requirement that method statements be prepared for:

- a. Temporary Works;
- b. Excavation;
- c. Demolition Work; and
- d. Cranes.

Anywhere else, but not exhausted, where method(s) is used the contractor must prepare at least the applicable SWP / SOP or DSTI for such method statement.

2.26. Health and Safety File

Based on the scope of work the health and safety file shall include and address, but not limited to, the items set out in the relevant specifications as stipulated by Langeberg Municipality.

2.27 Hand tools

The purpose of this procedure is to ensure employees understand and practice the general safety requirements when using hand tools.

There is a big variety of hand tools in the market. The objective of this is to cover the basic safety principles of a hand tool. The responsibility lies with the Contractor to ensure employees are aware of the safety requirements on any given specific hand tool

Hazards / Risks

- Hand injury from broken or homemade tools.
- Hand injury from incorrect storage of hack saw / “Stanley” knife.
- Eye injury from using a hammer and chisel.
- Hand/body injury from forcing tools beyond their stress capability.

Control Measures to Minimize Risks

- Fitter/leather Gloves to prevent cuts from sharp edges.
- Safety glasses to prevent eye injuries when using tools that can projectile foreign objects (Chisel, Copper hammer, etc.)
- Routine inspections to ensure tools are in safe working order.
- × Never throw a tool to another person.
- × Never leave your tools lying around.
- × Never use a hammer with a loose head.
- × Never use none insulated tools for live electrical work.
- × Never use tools which have been declared unfit/unsafe.
- × Never use another spanner as leverage on a spanner.
- × Never leave tools lying on ladders.
- ☐ Always keep your work area clean and neat.
- ☐ Always wear safety glasses and gloves if you are going to work with a hammer, metal file, hand saw and any tool that might produce flying objects and sharp edges.
- ☐ Always report damaged or worn tools by end of shift.
- ☐ Always grind off mushroom heads on chisels and copper hammers.

Pre-Start Procedure

1. Check the condition of the tool before use.
2. Make sure the tool is the correct tool for the job. (Example: correct size and fitment)

Job Steps

1. Inspect tool for wear and damages.
2. Put your gloves, safety glasses and long sleeve overalls on if necessary.
3. Store the toolbox or tool bag out of walkways.
4. Select a tool that is appropriate for the job.
5. Do the job safely
6. Place tool in a carry container until the tool is going to be used again.

2.28 Registers & Checklists

A tabular layout should be included in the contractor’s Health and Safety Plan. It is important that the legal required frequencies are adhered to and must therefore be stipulated. (Sample included in Annexure below)

2.29 Legal Appointments

A tabular layout should be included in the contractor’s Health and Safety Plan to correspond with the contractor’s organogram depicting a list of legal appointments. (Sample included in Annexure below.) Section 2.1 above depict the layout of such appointments.

2.30 Health and Safety Budgets

Construction Regulation 5.(1)(g) requires that the client must ensure that a potential contractor has made adequate provision for the cost of health and safety measures. This

includes the following, but not only limited to: Medicals, PPE, Fire-fighting, First Aid, Health and safety personnel, Facilities, Fall Protection, Vehicle and equipment upgrade for use on site, Lifting machinery and equipment, Insurance, First Aid, Training, Signage, Electrical & Plant and Scaffolding.

A contractor should prepare and submit, in tabular form as an annexure, their health and safety budget.

Should a contractor exclude various items as noted above or indicate a no costs, in his own discretion, to an item it will be understood that such costs are included in the contractor's tender costs.

Re-useable items (equipment) costed and claimed in such Budget and approved by the client, e.g. road cones, testing equipment, fire extinguishers, etc., become the ownership of the client after the project has been completed.

3. Environmental restrictions and existing on-site risks arrangements

3.1 Fall protection

Where a fall protection plan is required a competent fall protection planner with SAQA US 229994 certificate must be made available with such plan.

Where employees then work at heights / elevated positions those employees must be trained with a SAQA US 120362.

The person(s) erecting scaffolding must proof competencies with a SAQA US 263205 and for a scaffolding inspector SAQA US 263205.

Where fall arrest systems are implemented SAQA US 229995 and SAQA US 229998 be required.

- a. An additional pre-emptive Risk Assessment will be required for any work to be carried out where there is a fall risk and will be classified as "Working at Heights".
- b. 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, as required by the risk assessment contemplated above, shall wear and use a full body harness that will prevent the person falling from the platform or other device utilised. 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 length that the person will not be able to move over the edge.
- c. Any platform, slab, deck or surface forming an edge over which a person may fall must be fitted with suitable 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.
- d. Where the requirement above is not practicable, the person will be provided with a full body harness that will be worn at all times and shall be attached above the wearer's head at all times. The lanyard must be fitted with a shock-absorbing device or the person must be attached to a fall arrest system (anchorage connector; body wear; and connecting device).
- e. Where the requirements above are not practicable, a suitable catch net must be erected. Employees working at heights must be trained to work without risk to their health and safety or that of others and be declared medically and psychologically fit

to perform work at elevated positions. Proof of medical fitness and working at heights training must be maintained in the Contractor's OHS File.

- f. Where work on roofs is carried out, a risk assessment must be performed and take into account the possibility of persons falling through fragile material, i.e. skylights and openings in the roof. The Risk Assessment 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.
- g. The Contractor shall ensure a comprehensive fall protection plan and rescue procedure is drafted by an appointed competent person who is trained and knowledgeable in the development of such plans.
- h. All employees required to perform work in elevated positions shall be trained and conversant with the requirements of the fall protection plan and the rescue procedure.

Fall Arrest Equipment:

- a. Each employee required to perform work at elevated positions shall be issued with a body harness for his/her exclusive use. No harnesses should be shared
- b. Fall arrest equipment shall be inspected prior to use by a competent person
- c. Fall arrest equipment must be stored in such manner as to not compromise the integrity of the equipment
- d. Employees required to use fall arrest equipment shall be sufficiently trained in the correct use thereof
- e. Records of training and inspections shall be maintained in the OHS File.

3.2 Fall prevention

Elevated positions including roof work

The Principal Contractor shall ensure that a detailed fall protection plan, rescue plan and HIRA has been undertaken and submitted for approval to the CLIENT before commencement of such activity on site. Such plan shall include (but not limited or exhausted) to: Introduction, Scope, Goals, Definitions, Worksite Information, Fall Protection Risk Assessment, Designations and Responsibilities, Training Management, Employee Health Management, Equipment Management, Operating Procedures, Rescue Procedures, Document Review and Amendments, Records – Training, Records – Medical Certificate of Fitness, Records – Inspection Registers & Records – Staff Register and Personal Details.

Where working on roofs take place the slope of the roof may cause edge protection to be implemented.

Working at heights –height of +1.5m

The Principal Contractor shall ensure that a detailed fall protection plan, rescue plan and HIRA has been undertaken and submitted for approval to the CLIENT before commencement of such activity on site.

All work at height must be:

- Appropriately supervised;
- Properly planned; and
- Carried out in a manner which is safe.

A detailed risk assessment and a fall protection plan that is site and task specific must be approved before working at height may be done. Please ensure that supervision is conducted as per Construction Regulation section 10, a competent person qualified for fall protection development.

Suitable and sufficient means must be provided to prevent workers falling from height. This must include the following measures supplied by the contractor appointed on the project:

- a. Scaffolding to allow safe access, both externally and internally;
- b. Scaffolding to be signed off weekly and after inclement weather;
- c. Internal Scaffolding to be erected for roof work acting as a working platform;
- d. Suitable working platforms to ensure safe access to all elevated areas;
- e. Suitable fall protection for worker working at height (harness); and
- f. Lifelines.

Ladders must only be allowed when it is not possible to use other more suitable access equipment (Scaffolding or platform / podium steps) for access or work of short durations (less than 10 minutes) and where 3 points of contact can be maintained at all times by the person working on the ladder. Suitable platforms must be used where both hands are required to be free and only in cases where it is not possible to use other more suitable access equipment e.g. scaffolding.

Where a slab is being prepared solid edge protection should also be put in place at a height of 1m above floor level.

Ladders and Ladder work

The Principal Contractor shall ensure that all ladders are numbered and inspected regularly keeping record of inspections. It should be noted that Aluminium ladders are preferred to wooden ladders. Ladders must be selected as suitable for the work to be performed.

3.3 Roof work

When working at heights during the roof erection work scaffolding will be erected in the inside of the structure to prevent the employees from falling to the ground.

Again, the employees working at height are required to make use of safety harnesses and fall prevention techniques to be put in place like safety cables / attachment slings.

Where work on roofs is carried out 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 to support the roof structure.

The Risk Assessments shall place specific emphasis on the placing and handling of roofing materials which when exposed to windy conditions represent a serious safety hazard or overload factor.

Where working on roofs take place the slope of the roof may cause edge protection to be implemented.

All life lines and secure/anchor points must be designed and signed off by a competent appointed person or Design Engineer.

Life lines, fall arrest equipment and fall prevention equipment must be inspected prior to use and have a SWL displayed and the SWL certificate must be kept on site.

All fall arrest and fall prevention equipment shall be subject to inspections and tests as required by the Regulations and SANS standards and records of such inspections and tests kept in the site health and safety file.

3.4 Falling objects

Erect a catch platform or net above an entrance or passageway or above a place where persons work or pass under, or fence off the danger area if work is being performed above such entrance, passageway, or place so as to ensure that all persons are kept safe where there is a danger or possibility of persons being struck by **falling objects**.

3.5 Structures

Existing structures

Contractor will always have in place an emergency plan. The prevention of fire damage, fragility and stability of existing structures is of utmost importance to complete this project in time.

Existing structures with recognized hazard will be reported to the client and Contractor will assist the client to improve the quality of compliance to structural integrity of such structure.

New Structures

During construction Contractor will adhere to the design specifications of the appointed engineering consultant. Pre-cast inspections of steel lay down are implemented in the registers and engineers have to approve pre-cast registers on site. Contractor will adhere to the removal of supports in accordance to the requirements to prevent any uncontrolled collapse of such structure.

When environmental conditions create bad conditions employees will not be allowed to use such uncompleted structure as a hiding place during inclined weather.

3.6 Temporary works

Contractor will adhere to the erection and removal of temporary structures for the casting of slab supports in accordance to the requirements to prevent any uncontrolled collapse of such structure. The engineering design or competent person will stipulate safe removing of such support and document such in the register.

3.7 Excavations and Ground Conditions

Excavation

Survey must be done to determine soil conditions, compaction and location of underground services. Where the uncertainty pertaining to the stability of the soil exists, the decision (documented) from a professional engineer or a professional technologist competent in excavation shall be decisive and such a decision shall be in writing and signed by both the excavation supervisor and the professional engineer or technologist as the case may be.

Excavation supervisors and / or construction manager must have a SAQA US 365183 competency certificates (or obtain one within the first month after appointment).

The following conditions should also be complied with for excavation:

- a. Excavation should be sloped to prevent collapse;
- b. Excavation should be shored / braced to prevent caving / falling in;
- c. Soil dumped at least 1m away from edge of excavation
- d. On sloping ground soil should be dumped on lower side of excavation;
- e. Use of stop blocks and signs for dumpers and place a banksman;
- f. If more than 2-meter-deep shoring must be used and safe access be provided and must be seen as a confined space entry;
- g. Protect vehicles from falling into excavation;
- h. Provide barriers and signage and lights at night;
- i. Beware of undermining adjacent structures integrity;
- j. Appoint only a competent person as excavation supervisor;
- k. Ensure that no load or plant is placed near excavated areas; and

Work strictly according to the plans provided by the client when searching for current and existing services. Stop work when the current or existing services have not been found within a radius of 1 meter and consult the client's representative before commencing. Preliminary safety talks will be noted and the potential hazards explained to all employees prior to works. Digging will commence with hand tools at all times when looking for existing services.

Caution should be taken and emergency measure put in place when digging in areas where flooding may occur

The Excavation Supervisor to inspect:

- I. Daily, prior to each shift;
- II. After an unexpected fall of ground;
- III. After any damaged to supports, bracing or shoring;
- IV. After Rain

3.8 Demolition works

The Contractor must ensure that before any demolition work is carried out, and in order to ascertain the method of demolition to be used, a detailed structural engineering survey of the structure to be demolished is carried out by a competent person and that a method statement on the procedure to be followed in demolishing the structure is developed by that person.

The Contractor is required to appoint a competent person to supervise and control all demolition work on site. During demolition, the competent person must inspect the structural integrity of the structure at intervals determined in the method statement, in order to avoid any premature collapses.

Contractors who perform demolition work must ensure that:

- a. no floor, roof or other part of the structure is overloaded with debris or material in a manner with regard to a structure being demolished;
- b. Sufficient steps to ensure that all reasonably practicable precautions are taken to avoid the danger of the structure collapsing would render it unsafe;

- c. When any part of the framing of a framed or partly framed building is removed or when reinforced concrete is cut would render it safe; and
- d. Precautions are taken in the form of adequate shoring or other means that may be necessary to prevent the accidental collapse of any part of the structure or adjoining structure.

Further:

- a. Ensure that no person works under overhanging material or a structure which has not been adequately supported, shored or braced;
- b. Ensure that any support, shoring or bracing contemplated above, is designed and constructed so that it is strong enough to support the overhanging material.
- c. Where the stability of an adjoining building, structure or road is likely to be affected by the demolition work on a structure, take steps to ensure the stability of such structure or road and the safety of persons;
- d. 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 demolition work, take the steps necessary to render circumstances safe for all persons involved.
- e. Cause every stairwell used and every floor where work is being performed in a building being demolished, to be adequately illuminated by either natural or artificial means.
- f. Cause convenient and safe means of access to be provided to every part of the demolition site in which persons are required to work.
- g. Erect a catch platform or net above an entrance or passageway or above a place where persons work or pass under, or fence off the danger area if work is being performed above such entrance, passageway, or place so as to ensure that all persons are kept safe where there is a danger or possibility of persons being struck by falling objects.
- h. Ensure that no material is dropped to any point, which falls outside the exterior walls of the structure, unless the area is effectively protected.
- i. Ensure that every chute used to dispose of rubble is designed and managed in accordance with the relevant section for waste management of this specification.

3.9 Tunneling

Where tunnelling work encounter the Contractor will appoint a competent tunnelling supervisor and have the required documentation / registers in place. No work will be conducted in tunnels with a height dimension smaller than 800mm.

3.10 Scaffolding

Scaffolding

The Principal Contractor shall ensure that a detailed fall protection plan and HIRA has been undertaken and submitted for approval to the CLIENT before commencement of such activity on site. The Principal Contractor shall appoint and train scaffolding inspectors and erectors to ensure all scaffolding is erected according to SANS 10085.

Form and Support Work for Structures

Should the design require this type of work, the Principal Contractor shall ensure that formwork and support work structures are examined and checked for suitability by a

competent Person, Structural Engineer, before use, during and after placement of concrete. Records of such examinations are to be kept on the Health and Safety file.

3.11 Suspended platforms

If suspended platforms are used a competent person will be appointed to design such requirement that will provide a designer's health and safety report and certificate for the design. A competent person will be appointed to erect such platform following an operational compliance plan developed by a competent person.

Copies of the design and competent certificates for the suspended platform will be delivered to the regional Chief-Inspector for recognition.

3.12 Rope access work

Where rope access is used the contractor must ensure compliance to section 18 of the Construction Regulation and ensure that a competent person is appointed in writing as a rope access supervisor with the duty of supervising all rope access work on the site, including ensuring health and safety compliance in respect of rope access work.

In addition to the required of section 10 of the Construction Regulation, fall protection, the contractor shall provide a site, work and environment specific fall protection plan for rope access work developed by a competent person prior to the commencement of the work.

The fall protection plan contemplated above shall include:

- a. Risk assessment;
- b. Procedure to evaluate employee's medical fitness;
- c. Training for the work to be conducted;
- d. Procedure addressing the inspections, testing and maintenance of equipment; and
- e. Rescue plan.

3.13 Material hoists

The Principal Contractor shall ensure that lifting machinery and tackle is inspected before use and/or on a monthly basis. The Principal Contractor shall have lifting machinery and tackle inspector who will inspect the equipment daily or before use, taking into account that:

- All lifting machinery and tackle have a safe working load clearly indicated;
- Records of inspections and load testing certificates are kept on site.
- There is proper supervision in terms of guiding the loads which includes a trained banks man to direct and check lifting tackle if it is safe for use.

3.14 Bulk mixing plant

Where bulk mixing plants is used the contractor shall ensure compliance to Construction Regulation 20 for the construction, maintenance and operation of a bulk mixing plant on site.

Only competent and trained supervisors and operators shall be appointed in writing as bulk mixing plant operators. No person may be authorised to operate a bulk mixing plant that is not declared competent.

Safety devices provided to prevent the accidental starting of the bulk mixing plant are to be maintained and operational at all times. All machinery and dangerous moving parts of the mixer shall be adequately guarded or fenced and no such guard or fence shall be removed or modified.

Compliance to General Safety Regulation section 5 for confined spaces entry shall be adhered to when as a precautionary measure when entering any silo.

3.15 Explosive actuated fastening device

Where explosive actuated fastening devices are used the Contractor shall ensure that all the requirements and provisions of Construction Regulation 21 are implemented and maintained for explosive actuated fastening devices.

Controllers, inspectors and operators of explosive actuated fastening devices are to be competent persons appointed in writing and specifically trained and proof of training held on record.

Operators shall be issued with suitable protective equipment and the use thereof enforced. A cartridge issue and return register shall be maintained by the appointed person and cartridges shall be kept in a lockable facility and under the control of the appointed person at all times.

Warning signage to be prominently displayed in areas where explosive actuated fastening devices are used on site and such area shall be demarcated to prevent access of unauthorised persons.

3.16 Cranes

Projects classified as a CIDB Category C project may require the use of mobile cranes or truck mounted cranes.

Referencing Construction Regulation 22, Construction Regulation 27, Driven Machinery Regulation 18 and SANS 12480- 1, cranes and lifting equipment must be designed and constructed in accordance with generally accepted technical standards and operated, used, inspected and maintained in accordance with the requirements of the Driven Machinery Regulation.

The requirements of Construction Regulation 22 and Driven Machinery Regulation 18 are to be stringently applied and maintained in respect of all tower cranes, mobile cranes, lifting tackle and lifting operations. SANS 12480 shall further be applicable for the installation and use of tower cranes.

Prior to the establishment of the base area of a tower crane, the soil conditions for the base area must be signed off by a registered professional engineer. Prior to use, a full inspection by an independent LMI shall be conducted after erection of a tower crane and documented proof of such inspection kept in the site safety file.

In addition to the required legal appointment of operators, supervisors and inspectors in respect of cranes and lifting machines, appointments shall also be made for Slingsmen and Banksman/Signallers, with the required proof of competency and experience.

All persons so appointed and trained must be registered with an LMI. Furthermore, all training providers in respect of operators of lifting machines and cranes are required to be accredited by the Transport Seta as contained in notice R.910 of 2015 (G.G. 39252 of 02/10/2015). Proof of such accreditation by the Transport Seta is to be attached to any certification issued by such training provider.

Evacuation procedures, risk assessments, safe working procedures and lifting plans are to be developed in respect of tower cranes and communicated to all relevant persons involved in the operation of tower cranes. Documented proof of such communication is to be kept in the site safety file. Documented proof of tower crane services and maintenance are required. The last major service record is to be present in the safety file, and services should be conducted every 1,000 hours.

The tower crane operating log book and all other legal documentation is to be available for inspection and audit. The Principal Contractor shall be responsible for ensuring that the necessary inspections and performance tests by a competent registered LMI as outlined in the Driven Machinery Regulations for tower cranes and lifting equipment are conducted, and documented proof of such inspections and performance tests retained in the health and safety file.

DMR 18(5): Annual inspection and performance test of the whole installation and all working parts;

DMR 18(6): Ropes, chains, hooks or other attaching devices, sheaves, brakes and safety devices at intervals not exceeding six (6) months;

DMR 18(10)(e): Lifting tackle at intervals not exceeding three (3) months.

All lifting operations are to have a clearly defined and demarcated safe operating area below the lifting area, with warning signage strategically placed and a watcher/spotter shall be deployed to prevent unauthorised access to the lifting operations area.

Where the lifting arc shall cause loads to be moved above public roadways and pedestrian walkways and thoroughfares, such areas shall have barricading erected to prevent persons from passing below suspended loads. Where barricading is not practicable, the Principal Contractor shall provide dedicated enclosed safe walkways, constructed in such a way and utilising material able to adequately protect pedestrians from any potential falling load.

As per the requirements of SANS 12480-1, guide ropes or steady lines shall be fitted to the slings of tower cranes and lifting equipment to eliminate manual handling of suspended loads. Worn and damaged steel wire ropes, slings and lifting tackle must be discarded (not used any further for lifting purposes, regardless of the load) when excessive wear and corrosion is evident. Furthermore, under normal operating conditions the ropes must be examined by a competent person every three months for this purpose and the results recorded.

If required, the Contractor shall notify the Civil Aviation Authority of the erection of a tower crane or use of a mobile crane that exceeds the allowable limits.

3.17 Construction vehicles and plant

Construction Plant

“Construction Plant” encompasses all types of plant including but not limiting to, cranes, cherry pickers, piling frames, boring machines, and excavators, draglines, dewatering equipment and road vehicles with or without lifting equipment.

It is envisaged that such plant will be used on this project and where the need arise the Principal Contractor shall ensure that all such plant complies with the requirements of the OHS Act. The Principal Contractor shall inspect and keep records of inspections of the tools and equipment used on site. Only authorised persons are to use machinery under proper supervision. All operational manuals requirements should be complied with and checklists duly completed. Appropriate PPE and clothing and as specified by the HIRA, shall be provided and maintained in good condition at all times.

Where construction plant (hired included) operates with a joystick a “joystick protection bar” should be installed to protect the operational mechanisms from objects falling on or persons falling on the operational mechanism in case of a slip. Should a contractor not comply with this requirement the principal contractor will be fined in terms of section 1.9 as a severe non-conformance.

Hired Plant and Machinery

The Principal Contractor shall ensure that any hired plant and machinery brought to site is safe for use. The necessary requirements as stipulated by the OHS ACT as well as those that are stipulated by this OHS Specification, shall apply (see also 1.6.1).

The Principal Contractor shall ensure that operators hired with machinery (seen as a contractor) have proof of competency to operate the machinery, proof of medical certificate of fitness and undergo a Health and Safety induction, appropriate tool box talks and be issued with the necessary PPE.

3.18 Electrical installations and machinery

High Voltage Electrical Equipment and any electrical works

The Principal Contractor shall ensure that, where the work is under, on or near high-voltage electrical equipment that a SWP is drafted and approved by a competent person and the client's representative and that such approval document to be kept in the Health and Safety File.

Such SWP shall include relevant risk management procedures (e.g. **Lock-out Procedure**). The Principal Contractor shall communicate with and receive approval from the relevant representatives prior to commencement of any **live** or tie-in electrical works.

Portable Electrical Tools / Explosive Power Tools

The Principal Contractor shall ensure that use and storage of all explosive powered tools and portable electrical tools are in compliance with relevant legislation. The Principal Contractor shall consider that:

- A competent person undertakes routine inspections;
- Only authorised persons use the tools;
- There are safe working procedures applied;
- Awareness training is carried out and compliance is enforced at all times; and
- PPE and clothing is provided and maintained.

Telescopic Link sticks or Hot sticks

- Telescopic Link sticks or Hot sticks are used by linesman to open and close solid links (open/close circuits) on overhead lines. Linesman use telescopic link sticks to carry out maintenance operations on links, fuses, live line surge arrestors and rocker isolators. These are used to provide restoration of power to sectionalised sections of overhead networks without having to climb poles.
- The cylindrical shaft provides mechanical strength to the unit. Fibreglas units are foam filled at the end section for the first meter. The remaining sections are fibreglass with the telescopic buttons.

- It is important to observe the minimum working distances between the operator and the live conductor. Although the telescopic link stick is tested to standards all instruments are manufactured from the highest grade electrical rated fibreglass to meet or exceed all applicable industry performance criteria including ASTM F711, ASTM F1826, and OSHA 1926.951(d). Eskom approved link sticks are manufactured to **SAP 021 2806 number D-DT-12600 standards**.
- Valid Test certificates should accompany this equipment and be available in Safety files.

3.19 Flammable and hazardous materials

Hazardous Chemical Substances (HCS)

In addition to the requirements in the HCS Regulations, the Principal Contractor must provide proof in the Health and Safety Plan that:

- Safety Data Sheets (SDS's) of the relevant materials/hazardous chemical substances are available prior to use by the Principal Contractor. Mention should be made how the Principal Contractor is going to act according to special/unique requirements made in the relevant SDS's. All SDS's shall be available for inspection by the agent at all times.
- Risk assessments are to be done when new HCS are introduced on site.
- How the relevant HCS's are being/going to be controlled by referring to:
 - a) Limiting the amount of HCS
 - b) Limiting the number of employees
 - c) Limiting the period of exposure
 - d) Substituting the HCS
 - e) Using engineering controls
 - f) Using appropriate written work procedures
- The correct PPE is being used.
- HCS are stored and transported according to SABS 072 and 0228.
- Training with regards to these regulations is conducted.

The Health and Safety plan should make reference to the disposal of hazardous waste on classified sites and the location thereof (where applicable).

The First Aider must be made aware of the SDS and how to treat HCS incidents appropriately.

Asbestos (Not to be used on new construction site)

The Principal Contractor/Contractor shall comply with the Provisions of Asbestos Regulations should they have to work with asbestos related materials.

No new asbestos contained material should be use on this project.

3.20 Water environments

Unless water is accumulated within excavations the Contractor need to ensure that any water entrapment where public could gain access be barricaded and access restricted to such environment.

However, should such areas exist on the site the Contractor will have a trained first aider on site to assist with medical conditions as, when and where possible.

3.21 Housekeeping and general safeguarding

Contractor will provide proper storage of materials for housekeeping. In the waste management plan the disposal procedures for waste is described. No materials be place where it would interference with other operations.

Where chutes are required when waste is removed from higher levels (3 levels 9m) Contractor will install the required mechanisms.

When internal waste storage area is provided it will be fenced off and will have access control via a lock. No waste bins or other collection articles will be place at entrances or passageways, but rather on an outside wall or under an overhead screen.

The construction manager and all other employees must ensure and maintain at all time during work that;

- a. A housekeeping supervisor will be appointed
- b. Housekeeping will be managed on a **daily basis**

The appointed person will make use of daily/weekly and Monthly checklists.

- ◆ Housekeeping is continuously implemented and maintained;
- ◆ Materials and equipment are properly stored;
- ◆ Scrap, waste and debris is removed;
- ◆ Materials placed for use are placed safely and not allowed to accumulate or cause obstruction to the free-flow of pedestrians and or other employees;
- ◆ An unimpeded work space is maintained for every employee;
- ◆ Every workplace is kept clean, orderly and free of tools, materials and the like that are not required for the work being done;
- ◆ As far as is practicable, every floor, walkway, stair, passage and gangway is kept in good state of repair, skid-free and free of obstruction, waste and materials

3.22 Stacking and storage

Stacking of Materials

The Principal Contractor shall ensure that there is an appointed stacking and storage supervisor for all materials, scaffolding and all equipment that are stacked and stored in accordance with legislation.

All materials shall be neatly stacked in a designated lay down area within the confines of the Principal Contractor's allocated construction area.

3.23 Fire precautions

The importance of fire protection and precautionary measures is recognised and arrangements shall be implemented to ensure that adequate procedures are adopted to **prevent risk** of injury or damage from fire.

Non-Smoking signs will be placed in close proximity of the stores and where any flammable materials are stored.

Good maintained fire-equipment will be placed at appropriate intervals.

Sufficient number of employees will be trained with fire equipment.

Contractor will be reliant on the existing Escape plan of the institute or otherwise put in place its own Escape and evacuation plan.

Competent **Fire Fighter must be appointed** for this project and will manage all Hot works and any other task that may result in possible fire. Such competent person should carry the correct SAQA qualification. Additionally, to a Fire Fighter a **Fire Equipment Inspector** must also be appointed with at least a similar qualification as the Fire Fighter.

Fire prevention procedures require HOT work Permits to be in place with the required Fire Equipment available on site, Site require trained employees when any Hot work is required.

Once Hot Work Permit is signed and in place work may commence.

Smoking will be limited to smoking area.

No open flames are allowed in or near ABSA site.

All electrical equipment will be checked for loose wires.

All flammable substances are removed from hot works area.

Fire Extinguishers and Fire Fighting Equipment

The Principal Contractor shall provide adequate regularly serviced fire extinguishers located at strategic points on site. The Principal Contractor shall keep spare serviced portable fire extinguishers. Safety signage shall be posted up in all areas where fire extinguishers are located.

Employees should be trained on using the correct type extinguisher for the correct application (electrical, wood, chemicals, etc).

The Principal Contractor shall have adequate persons trained or competent to use the Fire Fighting Equipment.

3.24 Construction employees' facilities

Where the client does not authorize the use of existing facilities the Contractor will provide at least 1 shower for each 15 employees on site. Contractor will provide at least one sanitary facility for each sex and for every 30 employees. There will be changing facility for each sex. A temporary shelter eating area will be erected and made available to employees.

3.25 Contaminated land

Any contaminated land will be handled through the environmental management plan.

3.26 Client activities (risks)

The client may have ongoing lectures or students occupying residential facilities there for the Contractor will accommodate such activity. Where major work is required adjacent to such lecture rooms Contractor will pre-warn the facility of such activities and mutually agree upon action to be taken.

3.27 Manual handling of materials

Manual material handling will occur and Contractor will find the most **ergonomic** manner to work with such requirement ensuring that no employees stand chance for injuries.

3.28 Noise and vibration

Noise Induced Hearing Loss (NIHL)

Where noise is identified as a hazard, the requirements of the NIHL regulations must be complied with and means of compliance is to be stipulated in the Health and Safety Plan.

The Contractor is to ensure that noise is minimised to acceptable levels and try to conduct noisy activities at times where it would not make any nuisance to the institution. Proper planning and finding means of reducing noise levels with regards to these activities is highly encouraged. (See also section 3.31)

Vibration:

Any excessive vibration can cause Hand-arm vibration syndrome (Raynaud's phenomenon).

Employees working on vibrating equipment must take regular breaks.

When working on vibrating equipment a kidney belt is to be worn where applicable.

3.29 Working near fragile materials

Cautionary manners will be implemented when working in close proximity of fragile materials. A no-smoking - and use of mobile phone policy must be in place.

3.30 Traffic planning

The contractor must ensure that all the necessary traffic/vehicle and pedestrian accommodation safety measures are taken into account to ensure the safety of personnel and members of the public (including site visitors) both on site and adjacent to site.

Such measures must be in accordance with recognized practices and be pre- approved by the Client and if required by the local municipality and traffic authority.

The contractor must place the necessary emphasis on safe pedestrian walkways and routings throughout the construction stage. The site is located in a densely populated area with pedestrian walkways on two sides of the site.

Roadways are situated directly behind these walkways. Traffic and pedestrian accommodation drawings must be available on site as a source of reference and to assist with daily inspections and enforcement.

During construction the contractor must ensure that dust suppression through watering is utilized. When mud damage to the adjacent roads is due to the construction on site the contractor will remove these obstacles from the adjacent roads.

3.31 Monitoring of noise, silica and dust levels

Contractor need to implement sufficient precaution to ensure that the construction activities reduce their noise to the lowest possible level.

Silica and dust levels are kept to an acceptable level and that it do not pose a threat to the Health and Safety of employees, adjacent residents or the public on the premises.

3.32 Confined spaces

Areas identified as confined spaces as defined in General Safety Regulation GNR 1031 of May 1986 are (but not limited to):

- All tank manholes;
- Dispenser Sumps;
- Trenched less than 1m wide and deeper than 1.5m;
- Ceiling crawl space;
- Canopy crawl space;
- Chambers;
- Sewer Pipes;
- Pipes;
- Pit;
- Container;
- Calve;
- Pump Sump or Construction equipment, machinery, dangerous liquids or dangerous concentration of gas; and
- Any object where a dangerous vapour, dust fumes may be present.

Entering and working in a confined - or enclosed space requires a Confined Space Permit. The Principal Contractor shall provide his supervisor / contractor with the permit authorized through the Client's representatives with the work procedure for authorized persons prior to work commencement.

The responsibility for safe work procedures, both at the time of entry and during the entire operation of entering and working in confined spaces, rests with the Contractor.

3.32.1 The Contractor shall ensure that:

- a. All persons working in a confined space or managing entry to a confined space are appropriately trained;

- b. Adequate steps are taken to eliminate or control hazards. Before working in an area that contains dust, the area is to be ventilated and hosed down to settle and dampen the dust; and
- c. All necessary equipment to manage confined spaces, including all necessary monitoring and rescue equipment (such as tripods, breathing equipment and the like) made available.

3.32.2 Records to be maintained by the Contractor:

- a. Confined space entry permits;
- b. Confined space entry registers;
- c. Safety harness registers; and
- d. Atmospheric monitoring results.

3.32.3 Compulsory requirements during work in and entry to a confined space:

- a. Continuous supervision and monitoring;
- b. Adequate ventilation;
- c. Communication (radio) and
- d. Trained emergency rescue teams

3.32.4 Safety equipment where applicable, but not limited to:

- a. Employees issued with gas monitoring equipment, safety harnesses and self-rescuers;
- b. Trained with the safe use of the proper safety equipment;
- c. Upon entering an excavation, the requirements of work in confined spaces, must be observed;
- d. Any confined space may only be entered after the air quality has been tested to ensure that it is safe to breathe and does not contain any flammable or noxious air mixture;
- e. The confined space must be purged and ventilated of any hazardous or flammable gas, vapour, dust or fumes if and when such hazardous or flammable gas, vapour, dust or fumes have been identified;
- f. The safe atmosphere must be maintained and, where necessary;
- g. Employees are to be provided with breathing apparatus and must wear a safety harness with a rope with the free end of the rope being continuously attended to by a person outside the confined space;
- h. An additional person, trained in resuscitation, to be in full-time attendance immediately outside the confined space;
- i. Additional serviceable breathing and rescue apparatus is kept immediately outside the confined space for rescue purposes;
- j. All pipes, ducts etc. that may leak into the confined space to be blanked off sufficiently to prevent any leakage or seepage;
- k. The contractor must ensure that all employees have left the confined space after the completion of work; and
- l. Where flammable gas is present in a confined space no work may be performed in close proximity to the flammable atmosphere.

4. H&S File requirements

4.1 H&S Practitioner preparing the file

Contractor must provide detail of the Practitioner who prepared the health and safety plan in this section that includes skills, experience and if any base is use in preparing such document.

4.2 Contact detail to H&S Practitioner

Contractor must provide contact detail of the Practitioner who prepared the health and safety plan in this section.

4.3 Copy of CWP / NC

Where a Construction Work Permit (CWP) is required the client will prepare and submit such application. CWP must be conspicuously display at all entrances to the construction site.

Each Contractor must submit a Notification of Construction work, where the conditions specified under regulation 4. (1)(a-d) is triggered, 7 days prior to commencing on site to the department of employment and labour's provincial office. As recommendation the Somerset-west and Paarl offices may also assist with the stamping of such document. Take 2 copies of the document and ask for a stamp at the reception.

An appendix added to the specifications give a sample layout of the required notification also found in the Construction Regulation. An electronic copy of this document may also be available from the project manager.

4.4 Complete Contact details for parties

The contractor shall place a tabular sheet in their health and safety plan that depict the detail of the Client, Professional team and Contractors management involve on the project (Annexure 1).

4.5 Physical Address for construction site and site office

This information will be depicted in the tender document and must be noted in Annexure 1 of the contractor.

4.6 Nature of the work describe

The full scope of work for the project are described in the tender documents and need to be recorded in the contractor's health and safety plan.

4.7 Commencement and completion date

Once a contractor has been appointed this information will discussed and made available.

The appointed contractor is required to provide a work schedule for the project and submit for approval before work may commence on site.

4.8 List of Contractors appointed by PC

Principal Contractor must have a list of the entire appointed contractor in the H&S file on site where it also indicates the status of each contractor in respect of man-days / month, LOG, H&S Plan approval, Notification date, Audits Conducted, etc.

4.9 Procedures to ensure PC maintain H&S file

Client's representatives will perform CR 5.1.o-p requirement audit and documentation verification on all contractors, as specified in the definition above.

4.10 Updated record of "as-built" drawings and plans

Any changes in design will be communicated to client and as build drawings for the responsible area communicated.

4.11 Criteria for design loadings for structural elements

The Client normally contract a consulting engineer for the design to handles such responsibility. Should this not be the case the principal contractor should inform the client immediately of any loading requirements to ensure all structures has the capacity to withhold the increased load capacity.

4.12 Detail of potential hazard included in structure eg. Pre- or Post –tension beams or slabs

The Client normally contract a Civil Engineer for the design to handles such responsibility. Should this not be the case the principal contractor should inform the client immediately of any encountered potential hazards.

4.13 General details of construction methods and materials

Matter expert contractors are contracted for specific scope of works. No contractor may appoint a 3rd party as matter expert to perform their contracted scope of works. Where a conflict to the contracted **contractor's competencies and resources** occur, the detail must be declared to the Client's representatives before approval may be granted.

4.14 Equipment and maintenance of facilities within the Structure

Contractor depends on the client's available equipment and maintenance of facilities in the structure. When a contractor completed his scope of works any residual risk must be convened to the client's representative in writing and communicated with the relevant facility maintenance management.

4.15 Maintenance procedures and requirements provided for the Structure

Contractor depends on the client's maintenance procedures of facilities in the structure. Should it be found that additional requirements be implemented the contractor must inform the client in writing through the client's representative (facility managers).

4.16 List and proof of appointments of each contractor

Contractor will include in the H&S file a list of appointed contractors. Refer to 4.8 & 4.13 above as well.

4.17 Procedures to approve, monitor and review all Contractors H&S files on site for the project

The Principal Contractor shall implement a Contractor Management System to ensure compliance to the OHS Act and OHS Specifications. The Contractor Safety Management System procedures are to be stipulated in the Health and Safety Plan.

Contractor will implement the following process for contractor evaluation:

- a. Provide the Contractor with the Client's Health and Safety Specifications (this specifications);
- b. Provide the Contractor with the Principal Contractors Health and Safety Plan;
- c. Negotiate and approve the contractors Health and Safety plan;
- d. Approve Contractors competencies, resources & budget;
- e. Approve Contractors implementation of Health and Safety file to site by issuing a Certificate to Commence ("CCC");
- f. Monthly compliance documentation verification and site audit ("Periodic Site Audit");
- g. Submit a **hard copy** to the contractor within 7 days (CR 5.(1)(p))
- h. Issue PSA certificate on audit;
- i. Site visit reports and closure of audit findings; and
- j. Close-out report and indicate man-days of project per contractor.

4.18 Manuals for operating and maintenance procedures and schedule for plant and equipment

Contractor will keep Risk Assessment; operational manuals & Checklist accompanied any plant or equipment.

When a contractor completed his scope of works any residual risk must be convened to the client's representative in writing and communicated with the relevant facility maintenance management.

4.19 Details of location and nature of utilities and services (emergency and fire-fighting systems)

The Client will ensure that the contractor be inducted on site indicating access to all the arrangements, utilities and services on the site.

Should this not be the situation then the Contractor will prepare an induction and provide this to its employees and appointed contractors.

4.20 Responsible for “as-build” drawings

Any changes in design will be communicated to the client and as build drawings for the responsible area communicated and handed over to the client after the project is completed.

4.21 Procedures for marking–up drawings to as-build

The Client contracted a Civil Engineer for the design and handles such responsibility.

4.22 Procedures to pass on residual risk information to those who need such

In accordance to section 6.(1)(d) of the Construction Regulation the designer are responsible to document in a report to the client the residual risk of the design before the project goes out on tender.

Any changes in design need to be communicated to the client and as build drawings for the responsible area communicated.

4.23 General Record Keeping

The Contractor shall keep and maintain Health and Safety records to demonstrate compliance with the OHSS and the OHS Act in the frequency describe in the contractor’s health and safety plan. The contractor shall ensure that all records of incidents, spot fines, training etc. are kept on site.

All documents shall be available for inspection by the CLIENT, his nominated representative or the Department of Employments and Labour’s Inspectors.

4.24 Unanticipated Hazards (Inclusive of adverse weather such as strong winds)

Any contractor shall immediately notify the CLIENT of any hazardous or potentially hazardous situations arising during the performance of activities.

A record must be minute in the monthly progress meetings regarding **rainfall and working days lost**.

4.25 Occupational Health and Safety Signage

The Contractor shall ascertain and provide adequate on-site Warning, Prohibition, Mandatory and General Signage and adhere to those instated by the Client.

The Contractor shall be responsible to maintain the quality and replacement of signage.

4.26 Occupational Safety

4.26.1 Site Access, Speed Restrictions and Protection

The Contractor shall ensure that a separate entrance/exit to the construction site is opened and erected for the sole use of construction activities.

The exact opening shall be discussed and agreed upon with the client representatives. The Contractor shall ensure that all persons in their employ and all those that are visiting the site are aware and comply with the site speed restriction(s).

The speed limit is set to not exceed 20km/h when entering grounds/site.

4.26.2 Pressure Equipment or Gas Bottles Including Operations

Should such equipment be used, the Principal Contractor shall comply with Pressure Equipment Regulations, including:

- Providing competency and awareness training to the operators;
- Providing PPE or clothing;
- Providing and maintain appropriate signage in areas where Pressure equipment are used;
- Inspect equipment regularly and keep records of inspections;
- Providing appropriate firefighting equipment (Fire Extinguishers).

4.27 General Machinery

The Principal Contractor shall comply with the Driven Machinery Regulations, which include inspecting machinery regularly, appointing a competent person to inspect and ensure maintenance, issuing PPE or clothing and training those that use machinery and enforce compliance.

As a precautionary matter it is a requirement that a **protective bar** be placed over the joystick / control of movement of machinery to prevent any uncontrolled operation of the machinery if a person or material falls on top of the controls.

The Principal Contractor shall report in the minutes of the progress meeting the type of machinery on site.

4.28 CIDB Health and Safety Plan Audit

The CIDB has gazette a best practice Standard for Health and Safety Plans and auditing requirements (Grade 2 to 9), Vol 641 9 November 2018 No 42021 and the principal contractor should adopt such layout as **standard for the layout of the Principal Contractor's Health and Safety Plan to ensure a fair evaluation.**

4.29 HIV/Aids Programme (when applicable)

CLIENT commits itself to providing guidance and leadership in the implementation of HIV and AIDS, TB and Sexually Transmitted Infections (STI) programmes by all stakeholder organisations. It is a requirement that Principal Contractors shall provide HIV/Aids awareness training and roll out an HIV/Aids Programme for all employees.

The HIV/Aids Awareness Programme Requirements:

- HIV Programme Coordinator appointed (part-time)
- Appoint and train Peer Educator/s (Part-time)
- Male condom dispensers, sufficient male condom available and is it placed in high trafficked areas.
- Female condom dispenser, sufficient female condoms available and is it in high trafficked area

- All types of HIV/Aids related posters displayed in a high trafficked area and in a good condition.
- HIV/Aids Awareness workshops/tool box talk
- HIV/Aids Prevention Measures
- HIV/Aids Care and Support
- Free voluntary HIV testing

Duties of the HIV/AIDS Coordinator:

- Ensure on-site programme implementation
- Ensure Peer Educators are elected, trained and active and supported
- Ensure Voluntary Counselling and Testing takes place
- Ensure awareness talks and education initiatives take place
- Posters, awareness materials and condoms are freely available on site
- Ensure that evidence of programme implementation is readily available
- Facilitate Site Management commitment

No Principal Contractor shall require an employee, or an applicant for employment, to undertake an HIV test in order to ascertain that employee's HIV status. As provided for in the Employment Equity Act, employers may approach the Labour Court to obtain authorisation for testing.

All Personnel must be encouraged to undertake voluntary testing. Voluntary Testing and Counselling (VCT) must be encouraged by all Principal Contractors.

4.30 Non-Compliance to set requirements

Should it be found that the principal contractor is in non-compliance with the specifications or their approved Health and Safety Plan, the Occupational Health and Safety Practitioner has the responsibility and authorization to stop any activity or all construction until compliance has been reached. The cost of stoppage on site due to non-compliance will be borne by the principal contractor / contractor

In the event of extra audits being done by the OHS Practitioner due to ongoing non-compliance, non-availability of Safety File or an audit score less than 80%, the **cost of that additional audit will be borne by the principal contractor** / contractor and will be equal to the amount as stipulated in the agreement with the client.

The appointed Safety Officer for the principal contractor will be required to draft a **close-out report** after each audit. The close-out report must address all non-conformities identified during the audit and highlight the measures taken to rectify the non-conformity. This report must be forwarded to the OHS practitioner **within 24-72 hours of receiving** date of the audit.

Should the construction work run longer than the anticipated project period the Principal Contractor / Contractor will be liable for the cost of the additional health and safety audits.

4.31 Handling conflict of interest

The following is accepted during the course of the contract:

The potential Principal Contractor may appoint only one construction manager for the project and various construction supervisors on each area of responsibility should work be active on more than one area.

The client's health and safety practitioner can assist the Principal Contractors management to ensure the health and safety requirements, as set out by these specifications and the Health and Safety Plan of the Principal Contractor, are complied with at a cost to the Principal Contractor.

Should the Principal Contractor appoint a contractor these contractors can request the client's health and safety practitioner to prepare their required documentation for health and safety compliances on this project without any conflict of interest.

4.32 Penalties

Should, at any time, the works, or part of the works, be stopped due to unsafe acts or non-compliance with the Clients or PCs OHS Plan; neither the PC nor any other Principal Contractor or Contractor shall have a claim for extension of time or any other compensation.

In cases of any **repetitive non-conformances**, the non-conforming party shall be penalised as per the table below:

The following constitute examples of the types of non-conformances that will attract penalties:

<u>Minor:</u> Fine: R50/count	<u>Medium:</u> Fine: R500/count and a non-conformance	<u>Severe:</u> Fine: R5, 000/count, a non-conformance and/or activity stoppage
Non-use of basic PPE supplied (e.g. Overalls, Safety Shoes, Hardhats) per person	Toilets not supplied or regularly serviced; lack of drinking water	Principal Contractors working without OHS Plan approval
Non completion of registers for plant and equipment on site	Principal Contractors not audited	Workers transported in contravention of the OHS Plan or legal requirements
Lack of OHS signage at work areas	Working without training or the appropriate OHS SWP / HIRA	Invalid/expired Letters of Good Standing with licensed Compensation Insurer
Tools and equipment identified in poor condition during inspections	Non-conformances identified during the previous audit and not addressed within the agreed time frame	Allow people to work at heights without proper training and PPE

	No internal monthly Audit Report on file.	Fall Arrest Harness not tied off / worn when a risk of falling exists
	No Medical Certificates of Fitness for relevant workers	Threat to the OHS of persons
	Unsafe work at heights	3rd Offence on Unsafe Work at Heights
	Poor Housekeeping	Failure to submit consolidated Health and Safety report and relevant document.

All penalties shall be communicated to the Principal Contractor on a monthly basis.

The Principal Contractor will be expected to confirm receipt of such penalties. The total deductible amount as per penalties issued shall be tabled in the Monthly Progress Meeting for noting purposes. All monthly penalties shall be deducted from the Certified Certificates submitted by the Principal Contractor.

4.33 Project Close - Out Requirements

Upon completion of the project, the Principal Contractor shall submit a well-documented consolidated Health and Safety file (to be in electronic form) confirming the H & S history of the project.

The following **summary** of information is required in the file, but not limited to:

- Final closure of all registers and checklists;
- Monthly Health and Safety audit reports;
- Minutes of the Health and Safety Committee meetings (Min every 3 months);
- Summary of Incidents & IOD report;
- WCA /COIDA Claims;
- Total Man-hours and DIFR (0:200,000);
- Environmental rehabilitation status;
- Copies of Pre and Post Employment Medical Certificates of all employees that worked on the project (Medical surveillance and final declaration) where applicable;
- Health and Safety Non-conformances (current / outstanding); and
- Copies of all Hazardous Waste Disposal Certificates (where applicable)

Handover of the consolidated Health and Safety file can only commence once all personnel has been demobilized and **nil man-hours** are recorded. Electronic submission must be provided to the CLIENT, or its Health and Safety Advisor, who are required to store this information for 3 subsequent years.

The Health and Safety Advisor or - Agent will evaluate the Health and Safety performance of the Principal Contractor i.e. compliance, performance, quality and refer in a cover letter which will be added to the Principal Contractors consolidated file with the contractor's close-out report.

Acknowledgement:

I, _____ representing _____ as Contractor have satisfied myself with the content of the Occupational Health and Safety Specification (OHSS) and shall ensure compliance and that the personnel and other people visiting the site comply with all relevant obligations in respect thereof.

Signature of Principal Contractor

Date

Signature of Principal Agent

Date

Signature of Client

Date

Comments:

Annexure 1 – Professional team and information on this project
Annexure 2 - Notification of Construction work
Annexure 3 - Organogram
Annexure 4 - Legal Appointments
Annexure 5 - Registers & checklists
Annexure 6 - Returnable Documents
BASELINE Risk Assessment

Annexure 1 – Professional team and information on this project

<u>CLIENT:</u>	Name	Person	Email
Name of Client	Langeberg Municipality		
Address	Langeberg Municipality, 28 Main Street, Ashton		
Project Name	New Fire Station, Robertson		
Client's Representative			
Principal Agent	Tusk Construction Support Services (Pty) Ltd	Adriaan Norman	072-246.37.22, adriaan@tuskcss.co.za
Address	3 High Street, 1st Floor Rosenpark, Tygervalley, Bellville		
<u>DESIGN TEAM:</u>			
Consulting Engineer			
Electrical Engineer			
Fire Consultant			
CHS Consultant	Phayona SHE Consulting (Pty) Ltd	Fadley Valley	082-405.71.21, fadley.valley@gmail.com
<u>PRINCIPAL CONTRACTOR</u>	<u>Tender</u>		
Name of PC:			
16.1			
16.2			
8.1			
8.7			
<u>CONTRACTORS</u>	To be announced	List of contractors will be in H&S file	
Plumbing			
Electrical			
<u>MAJOR SUPPLIERS</u>	To be announced	List of contractors will be in H&S file	
<u>EXTENT AND LOCATION OF:</u>			
Relevant existing records		To receive from client	
Surveys		To be conducted with appointment	
Site investigation & Geotechnical reports		To be conducted with appointment	
Records of "as-built" drawings		To receive from client	
H&S File			In site office
Maps			

Annexure 2 – Notification of Construction Work

ANNEXURE A- NOTIFICATION OF CONSTRUCTION WORK**Regulation 4 of the Construction Regulations, 2014**

1 (a)	Name and postal address of principal contractor:	
(b)	Name and telephone number of principal contractor's contact person:	
2	Principal contractor's compensation registration number:	
3 (a)	Name and postal address of client:	Langeberg Municipality, 28 Main Street, Ashton
(b)	Name and telephone number of client's contact person or agent:	Fadley Valley, 082-405.71.21, fadley.valley@gmail.com
4 (a)	Name and postal address of designer(s) for the project:	Tusk Construction Support Services, PO BOX 53741, Wierda Park, 0149
(b)	Name and telephone number of designer's contact person:	Adriaan Norman, 072-246.37.22, adriaan@tuskcss.co.za
5	Name and telephone number of principal contractor's construction manager on site appointed in terms of regulation 8(1):	
6	Name/s of principal contractor's subordinate managers on site appointed in terms of regulation 8(2):	
7	Exact physical address of the construction site or site office:	Erf 8250, Kerk Street, Robertson, 6705
8	Nature of the construction work:	Construction of new building
9	Expected commencement date:	
10	Expected completion date:	
11	Estimated maximum number of persons on the construction site:	Total: Male: Female:
12	Planned number of contractors on the construction site accountable to principle contractor:	
13	Name(s) of contractors already selected:	

Principal contractor

Date

Client's Agent (where applicable)

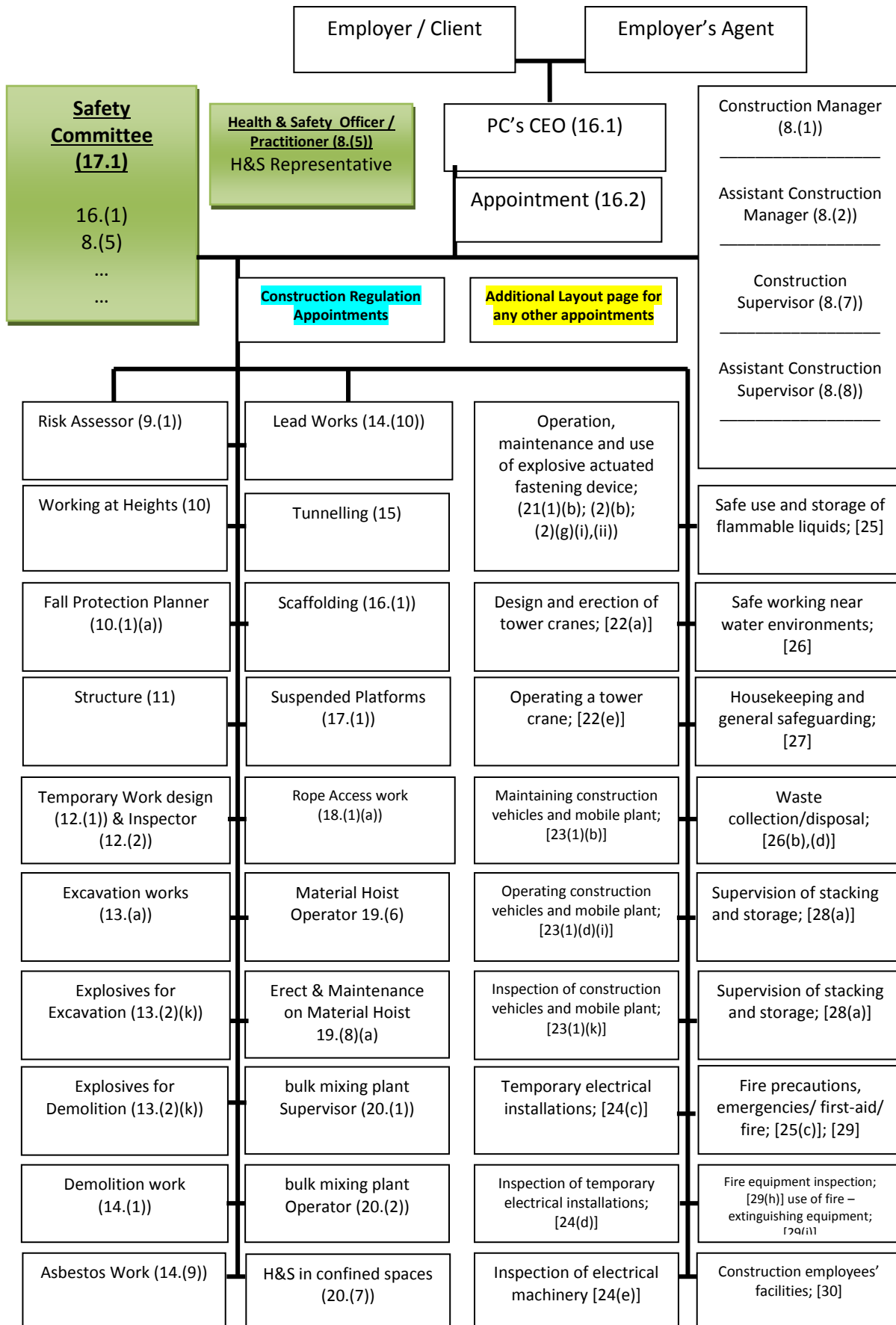
Date

Client

Date

THIS DOCUMENT TO BE FORWARDED TO THE OFFICE OF THE
DEPARTMENT OF LABOUR **PRIOR TO COMMENCEMENT** OF WORK ON SITE

Annexure 3 - Organogram



Annexure 4 – Legal appointments

Each appointment letter shall indicate:

- Legal reference to the appointment requirement;
- The name of the person appointing and his / her designation;
- The name of the company who this person represents;
- The name of the appointee and the appointment;
- The detail of the site / address
- Period of validity of such appointment (not longer than 3 year);
- Signature of the Company's representative making the appointment & date of signature;
- Duties or reference to requirements in regulations (to include Checklists & Registers);
- Acceptance of appointment;
- Signature of acceptor and date; and
- Designation.

All contractors including the professional team members has to ensure that an arrangement is in place to ensure all their employees have valid medical certificates of fitness.

Sample of tabular list to be included in health and safety plan (not limited or exhausted to only these

Appointment description (Safety File)	Appointment required in terms of	Appointed of the project YES/NO
Assistant to Chief Executive Officer	OHSACT Section 16(2)	Yes
Principal contractor for each phase or project	Construction Regulation 5(1)(k)	Yes
Construction Manager	Construction Regulation 8(1)	Yes
Construction Supervisor	Construction Regulation 8(7)	Yes
Assistant Construction Supervisor	Construction Regulations 8(8)	Yes
CHS Officer registered with SACPCMP	Construction Regulation 8(5)	Yes
Construction vehicle and mobile plant operator	Construction Regulation	Yes
Construction vehicle inspector	Construction Regulations	Yes
CoVid-19 Compliance Officer	Dept Labour and Employ. Guidelines	Yes
CoVid-19 Manager	Disaster Management Act	Yes
Demolition Supervisor	Construction Regulation	Yes
Electrical installation and appliances inspector	Construction Regulation 24	Yes
Emergency evacuation controller	Construction Regulation	Yes
Excavation supervisor	Construction Regulation 13 (1)	Yes
Explosive powered tool supervisor	Construction Regulation 21(2)	Yes
Fall Protection Developer	Construction Regulation 8	Yes
Fire Fighter	Construction Regulation	Yes
Fire Fighting Equipment Inspector	Construction Regulation 27	Yes
First-Aiders	General Safety Regulation 3	Yes
Hand Tool Inspector	General Safety Regulations	Yes
Hazardous chemical substances supervisor	Hazardous Chemicals Substances Regulations	Yes
Housekeeping supervisor	Construction Regulation	Yes

Incident Investigator	General Administrative Regulation 9(2)	Yes
Ladder Inspector	General Safety Regulation 13(a)	Yes
Occupational Health and Safety Committee	OHSACT Section 19	Yes
Occupational Health and Safety Representatives	OHSACT Section 17	Yes
Personal Protective Equipment Inspector	Construction Regulation	Yes
Portable Electrical Equipment	Construction Regulation	Yes
Risk Assessor	Construction Regulation 9(1)	Yes
Safety Harness inspector	General Safety Regulations	Yes
Scaffolding supervisor	Construction Regulation 14	Yes
Stacking and storage supervisor	Construction Regulation 28	Yes
Structures supervisor	Construction Regulation	Yes
Supervisor demolition work	Construction Regulation	Yes
Suspended platform supervisor	Construction Regulation 15	Yes
Temporary electrical installations inspector	Construction Regulation	Yes
Traffic management supervisor	OHSACT Section	Yes
Vessels under pressure supervisor (Fire)	Vessels under Pressure Regulations	Yes
Welding supervisor	General Safety Regulation	Yes
Working on or next to water supervisor	Construction Regulation	Yes

(Sample)**FIRST AIDER**

OCCUPATIONAL HEALTH AND SAFETY ACT, Act 85 of 1993
General Safety Regulations 3.(4)

... (legal reference)

I, _____ (Employer Responsible Person), for _____
(Company) do hereby appoint _____ (Employee) as First Aider and to ensure
that all first aid boxes are maintained in accordance with General Safety Regulation 3 at
_____ (Site/Address).

This appointment is valid from ___ / ___ / 20__ to the completion of the stipulated construction
work. (Not more than 3 years)

Signature: _____ Date: _____

Your duties are to:

- Ensure that the first aid box or boxes under your control remain properly stocked to meet all foreseeable incidents which may occur in your designated area of responsibility;
- Perform kit inspection by documenting the content on the provided checklist;
- Attend to and report incidents / accidents to the supervisor immediately;

...

Acceptance

I, _____, the undersigned do hereby acknowledge receipt of, understand
the duties in this appointment, are competent to perform this appointment with regards to
First Aid.

Signature: _____, Date: _____ & Designation _____

Annexure 5 – Registers & Checklists

Sample of tabular list to be included in health and safety plan (not limited or exhausted to only these registers & checklists)

Statutory Registers (Safety File)	Register Intervals	Required in terms of the project YES/NO
	Daily Before work commence	
Approval to Cast Concrete	Before Casting	Yes
Concrete and Mixer	Daily	Yes
Confined space entry		
Construction Vehicle inspection register	Daily	Yes
Daily Safe Task Instructions	Daily	Yes
Electrical installations Register	Daily before work commence	Yes
Electrical Tools Register	Monthly	Yes
Excavation Register	Daily, before each shift, etc	Yes
Explosive fastening device	Daily	Yes
Fall Protection Inspections Register	Daily before work commence	Yes
Fire Equipment Inspection Register	Monthly	Yes
First-Aid Box Content Register (vehicle)	Weekly	Yes
First-Aid Treatment Register	After each treatment	Yes
First-Aid Dressing Register	After each treatment	Yes
Formwork and support	Weekly	Yes
Hand Tool Inspection Register	Monthly	Yes
Hazardous Chemical Substances Register	After use of Substance	Yes
Health and Safety Rep Inspection Register	Monthly	Yes
Hygiene Inspection: Toilets	Daily	Yes
Induction training	Project Start	Yes
Ladder Inspection Register & Checklist	Monthly	Yes
Personnel Protective Equipment Issue Register	At start of project and at every issue	Yes
Personnel Protective Inspection Register	Weekly – Part of DSTI	Yes
Powered Tools Register	Daily before work commence	Yes
Safety Harness Inspection Register	At Start of project and then every month	Yes
Scaffold Inspection Register	Daily before work commence	Yes
Stacking and Storage Register	Weekly Per site	Yes
Structures Inspection Register	Weekly	Yes
toolbox talks	Weekly –	Yes

Annexure 6 - Returnable Documents

Health and Safety documents to be submitted with tender:

2. Health and Safety Plan
3. Health and Safety Budget (Construction Regulation 5.(1)(g))
4. Skills training / existing qualification matrix (Construction Regulation 5.(1)(h))

e.g.

a. Competencies for:

- Legal liability training (Min Construction Manager & Supervisor);
- Excavation Supervisor;
- First Aider on site;
- H&S Representative (CHSO/M qualification registration);
- Fire Fighter & Equipment Inspector,
- Risk Assessor;
- Incident Investigator;
- Fall Protection Planner / Developer; and
- Working on Heights

b. Resources evaluation:

- Scaffolding
- Mobile plant & construction vehicles
- Artisans registration (Plumbing / Electrical, etc)

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HIRA – Hazard Identification and Risk Assessment

TASK / ACTIVITY	HAZARD	RISK TO SAFETY, HEALTH & ENVIRONMENT	TYPE			RISK ANALYSIS			RESPONSIBLE ENTITY / PERSON
			H	S	E	L	E	C	
1. Project initiation and briefing session	- Appoint CHS Practitioner - Develop a health and safety brief for project - Determine the required competency for the matter expert consultants - Record scope of construction work project	- Non-compliance to construction regulation in later stages of project - Bad health and safety project profile	x	x	x	1	1	1	CLIENT / AGENT
2. Concept and feasibility study	- Attend to design and consultant meetings - Documenting project risk profile and health and safety policies that will affect cost estimation and budgeting for health and safety for project	- No records of decision making for health and safety implementation - Over / under calculation for health and safety budget requirements	x	x	x	2	2	4	CLIENT / AGENT
3. Design Development	- Prepare this Baseline Risk Assessment for intended construction work project. (CR 5.(1)(a)) - Prepare health and safety specification base on the this Baseline Risk Assessment (CR 5.(1)(b)) - Provide Designer with health and safety specifications as mentioned above. (CR 5.(1)(c)) - Receive the designers hazard report for use in tender process - Layout format of site health and safety file - Prepare health and safety plans for early works - Initial projects health and safety estimation / budgets	- To minimize design risk - Restrict legal liability exposure through constructability, maintainability and operability of structure - Non-compliance to construction regulation in later stages of project	x	x	x	2	2	4	CLIENT / AGENT
4. Tender documentation and procurement	- Define procurement process for health and safety - Assemble records in preparation for the construction work permit. - Ensure that the health and safety specifications, including hazard report from	- Non-compliance to construction regulation in later stages of project - Site Establishment delays due to	x	x	x	2	2	4	CLIENT / AGENT

TASK / ACTIVITY	HAZARD	RISK TO SAFETY, HEALTH & ENVIRONMENT	TYPE			RISK ANALYSIS			RESPONSIBLE ENTITY / PERSON
			H	S	E	L	E	C	
	designer, are issued to potential contractors tendering for the intended construction work project - Ensure that principal contractor to be appointed has the necessary competencies and resources to carry out the construction work safely - Prepare appointment documents for signature	construction permit issue - Non-clarifications on discrepancy in tender process - Appointment of non-compliant contractors - Delay in start of project							
5. Construction documentation and management	- Assess, discuss, negotiate and approve the implementation of plan - Apply for construction work permit - Ensuring Principal Contractors compliance to Construction Regulation and clients health and safety specifications - Ensure periodic audits are conducted - Design risk management	- Noncompliance to construction regulation in later stages of project - Liability exposure risk - Incidents / Accidents - Work stoppage - Financial lost due to delays	x	x	x	2	2	4	CLIENT / AGENT
6. Project close-out	- Recording of defects - Hand over Health and safety file to client - Close-out report	Noncompliance to construction regulation in later stages of project	x	x	x	2	2	4	CLIENT / AGENT
7. Site organization and establishment	- Insufficient infrastructure - Environmental impact assessment - Not sufficient or unknown location of services - Not enough hoarding - Access and traffic control - Creation of site office in containers - Erroneous off-loading - Inadequate facilities for staff - Stores - Unsecured storage of tools and materials - Excessive dust generated during site establishment	- unlawful persons entering site, grievance to people - Traffic disruption - Fatalities or injury to employees - Damage to property - Loss of time in maintenance	x	x	x	4	3	12	PRINCIPAL CONTRACTOR
8. Deliveries and other construction vehicles	- Vehicles movement entering / leaving site - Inadequate traffic plan - Inadequate signals in place when reversing and offloading - impact with equipment - Spillages from trucks & materials	- Injury to employees - Traffic disruption, - Injury to visitors - Damage to property - Environmental damage, Waste generation	x	x	x	4	3	12	PRINCIPAL CONTRACTOR

TASK / ACTIVITY	HAZARD	RISK TO SAFETY, HEALTH & ENVIRONMENT	TYPE			RISK ANALYSIS			RESPONSIBLE ENTITY / PERSON
			H	S	E	L	E	C	
9. Manual handling of materials & equipment	Carrying, lifting & positioning heavy & unmanageable pieces of material & equipment	- Injury to employees - Damage to property	x	x	x	4	4	16	PRINCIPAL CONTRACTOR
10. Excavations	- Unstable soil - Unsuitable access to working area Suitable access in and out of excavations not provided - Incompetent operators - Restricted view of driver - Employees assisting using hand tools when carrying out excavation work - Overcrowding of employees in trenches - Excavation conducted without supervision of competent person - Excavations not barricaded - Unidentified services - Unauthorised access - Extensive noise, Sparks operation in rocky soils	- Collapse of excavation and falling material - Machine getting stuck in wet soil condition - Properly planned escape routes not available - Collapsing of shoring - Employees injuries - Visitors or vehicles falling into excavations - Harm to property - Disruption of service supply to surrounding community - Damage to equipment	x	x	x	4	3	12	PRINCIPAL CONTRACTOR
11. Steel reinforcing	- Delivery vehicles on site - wrong off-loading by untrained personnel - Unsafe stacking and storage of reinforcing - Overcrowding walkways and access ways - Manual handling of heavy reinforcing - Incorrect PPE required	- Disruption of road traffic - Damage to property - Injury to employees - Injury to visitors	x	x		4	3	12	PRINCIPAL CONTRACTOR
12. Concrete works	- Delivery vehicles movement onto site - Incorrect handling of concrete pump and chute during discharge - Manual moving of concrete to remote location by wheel barrow or dumpster. - Concrete spills during activities - Environmental spillage due to washing out of ready mix delivery truck. - Incorrect PPE required	- Disruption of road traffic - Damage to property - Injury to employees - Injury to visitors - Unauthorised / untrained operator - Environmental damage, Waste generation	x	x	x	4	3	12	PRINCIPAL CONTRACTOR
13. Electrical Work	- Use of damaged hand tools when mixing plaster - Cement powder emissions from mixing plaster - Removal of rubble from area - Climbing onto working scaffolding	- Electrocuting or Injuries to employees - Inhalation of excessive cement powder	x	x	x	4	3	12	CONTRACTOR

TASK / ACTIVITY	HAZARD	RISK TO SAFETY, HEALTH & ENVIRONMENT	TYPE			RISK ANALYSIS			RESPONSIBLE ENTITY / PERSON
			H	S	E	L	E	C	
	Spillages from cement and other materials	Environmental damage through Waste generation							
14. Welding & gas cutting	- Operating of equipment by unskilled personnel - Poorly maintained equipment - Welder not in constant control over equipment - Incorrect earth on welding equipment - No welding screens between operations and other employees - No ventilation in welding areas - Not sufficient welding PPE - Argon / Oxygen pressure vessels free standing - Welding spats & sparks not captured	- Injury to employees - Inhalation of excessive gasses and fumes - Electrocution, fire, burns, Shocks - Arc eyes due to wrong PPE - Explosions, deaths, injury to employees - Damage to property	x	x	x	4	4	16	PRINCIPAL CONTRACTOR
15. Fire prevention	- Untrained and emergency drills not done on regular basis - Equipment in store rooms and not distributed on site - Poorly maintained firefighting equipment - Safety signs not adequate or put up - Emergency exists obstructed - Emergency plan not communicated	- Damage to property as a result of fire - Death and/or injury to employees	x	x	x	4	5	20	PRINCIPAL CONTRACTOR
16. Hoisting and Lifting equipment	- Untrained riggers - Failure lifting equipment due to poor rigging methods - Movement of employees under suspended materials during crane operations - Unattended loads without supervision - Swaying of lifted materials without guide rope	- Damage to material. - Damage to property - Loss of load - Falling material - Injury to employees	x	x	x	4	4	16	PRINCIPAL CONTRACTOR
17. Sub contractors on site	- No safety file for site - Unstructured employee force - Unskilled supervision - In experience employees - Not registered for COID - Foreign employees, language barrier - Poorly maintained equipment - Environmental disrespect	- Risk other employees - Delays due to non-compliance - Contravention notices - Delays in completion - Environmental risk due to uncontrolled dumping on sites	x	x	x	4	4	16	PRINCIPAL CONTRACTOR

Severity (Consequences)	Risk Rating Matrix	Likelihood				
		<Low (1) Not credible i.e. the team have never heard of event occurring in industry	Low (2) Conceivable but would require multiple failures of systems and controls	Medium (3) Less than average i.e. easy to postulate a scenario for accident but considered unlikely	>Medium (4) More than average i.e. the team do not have direct knowledge but suspect that event may have occurred and represents a credible scenario	High (5) Likely to occur and the team have knowledge of a similar event
	High (5) Multiple deaths, lung diseases, permanent debility or fatality. Major pollution with long-term implication and very high restitution costs	5	10	15	20	25
	>Medium (4) Involving a single death or severe injury, poisoning, sensitization or dangerous infection. Damage to equipment resulting in production shutdown and significant production loss. Severe pollution with short-term localized implications incurring significant restitution costs	4	8	12	16	20
	Medium (3) Event leading to a Lost Time Incident or persistent dermatitis, acne or asthma. Localized damage to equipment requiring extensive repair, significant loss of function or production or moderate pollution incurring some restitution costs	3	6	9	12	15
	Low (2) Minor injury requiring first-aid treatment or headache, nausea, dizziness, mild rashes. Damage to equipment requiring minor remedial repair, loss of production or impact to the environment	2	4	6	8	10
	<Low (1) Negligible injury or health implications, no absence from work. Negligible loss of function or production with no damage to equipment or the environment	1	2	3	4	5
1 - 6	MAY BE ACCEPTABLE: however, review task to see if risk can be reduced further					
8 - 12	TASK SHOULD ONLY PROCEED after consultation with personnel and assessment team. Where possible, the task should be redefined to take account of hazards involved or the risk should be reduced further prior to task commencement.					
15 - 25	TASK MUST NOT PROCEED. Almost inevitable that an incident would result. It should be redefined or further control measures put in place to reduce risk. The controls should be re-assessed for adequacy prior to task commencement.					

Construction Manager's responsibility is to review, implementation and monitoring the site assessment.

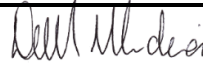
This risk assessment was prepared on known construction work, but must be re-assessed by the Principal Contractor's Construction Manager by walking the site to confirm that all hazards have been correctly identified and appropriate control measures specified are in place.

Employees are required to wear relevant PPE for tasks being performed.

All work to be carried out under a PERMIT TO WORK system is applicable to the specifications of that permit.

WHEN ACTIVITIES, HAZARDS OR RISKS CHANGES THE CONSTRUCTION MANAGER MUST –

- A. STOP THE JOB;**
- B. REVISE THIS RISK ASSESSMENT; AND**
- C. DISCUSS WILL RELEVANT EMPLOYEES.**

Team involved in the preparing of the risk assessment			
1. De Munck MENDEROI	2. Fadley Valley	3.	4.
5	6.	7.	8.
PREPARED BY: De Munck Menderoi	POSITION: OHS PRACTITIONER	SIGNATURE: 	DATE: Tuesday, 24 May 2022
CHECKED BY: Fadley Valley	POSITION: CHS Agent to Client	SIGNATURE: 	DATE: Tuesday, 24 May 2022
APPROVED BY:	POSITION: Construction Manager	SIGNATURE:	DATE: