

MQHAWE HIGH SCHOOL

OCCUPATIONAL HEALTH, SAFETY AND ENVIRONMENTAL SPECIFICATION

TABLE OF CONTENTS

1. Background	1
2. INTRODUCTION	1
2.1. Legal Framework	2
2.2. Risk Assessment.....	3
2.3. Disclaimer	3
3. DEFINITIONS.....	4
4. PROJECT DESCRIPTION AND SCOPE	6
5. MINIMUM HEALTH AND SAFETY ADMINISTRATIVE REQUIREMENTS FOR THE PROJECT.....	7
5.1. Occupational Health, Safety and Environment Plan	7
5.2. Health and Safety File (Also referred to as a Detailed OHSE Plan).....	7
5.3. Construction Work Permit.....	9
5.4. Health and Safety Policy	10
5.5. Appointments	10
5.6. Competency of Appointees	12
5.7. Health and Safety Organogram	12
5.8. Compensation for Occupational Injuries and Diseases Act 1993 (Act No. 130 of 1993) (COID Act) requirements	12
5.9. Sub – Contractors	13
5.10. Hazard Identification and Risk Assessment.....	13
5.11. Health and Safety Representative(s)	14
5.12. Health and Safety Committees.....	14
5.13. Medical Fitness	14
5.14. Health and Safety Training	15
5.15. General Record Keeping	15
5.16. Health and Safety Audits, Monitoring and Reporting	15
5.17. Incidents and Emergency Plan.....	17
5.18. First Aid Boxes and First Aid Equipment.....	18
5.19. Accident / Incident Reporting and Investigation.....	18
6. PHYSICAL REQUIRMENTS	19
6.1. Public Safety and Security	19
6.1.1. Hoarding.....	19
6.1.2. Warning / informative signs.....	19

6.1.3. Location of site office.....	20
6.2. Transportation of Workers	20
6.3. Personal Protective Equipment (PPE).....	20
6.4. Hazards and Potentially Hazardous Situations	21
6.5. Extreme Weather Conditions	21
6.6. Site Clearance	22
6.7. Delivery and Placing Park homes and Containers	22
6.8. Electrical Connections	22
6.9. High Voltage Electrical Equipment Installations.....	22
6.10. Demolishing	23
6.10.1. Method of demolishing Asbestos	23
6.10.2. Preparations for the works	23
6.10.3. Asbestos Waste Management	24
6.10.4. Hygiene Management.....	24
6.10.5. Housekeeping	24
6.11. Excavations	25
6.12. Edge Protection	25
6.13. Stacking of Materials	26
6.14. Speed Restrictions and Protections.....	26
6.15. Hazardous Chemical Substances (HCS)	27
6.16. Plant and Machinery.....	27
6.16.1. Construction Plant and Vehicle.....	27
6.16.2. Hired Construction Vehicles Plant and Machinery	27
6.16.3. Vessels under Pressure (VUP)	27
6.16.4. Earth Moving Vehicles	28
6.17. Fire Extinguishers and Fire Fighting Equipment	28
6.18. Working at Heights	28
6.18.1. Scaffolding.....	28
6.18.2. Ladders.....	29
6.19. Structures and Temporary Works	29
6.20. Concrete works.....	29
6.21. Lifting Machines and Tackle	30
6.22. General Machinery	30

6.22.1. Power tools	30
6.22.2. Pneumatic Tools.....	30
6.23. Portable Electrical Tools and Explosive Powered Tools	31
6.24. Hand Tools	31
6.25. Housekeeping	31
6.26. Waste Management	32
7. OCCUPATIONAL HEALTH AND ENVIRONMENTAL MANAGEMENT	32
7.1. Occupational Hygiene.....	32
7.2. Environmental Management.....	32
7.3. Welfare Facilities	32
7.4. Alcohol and other Drugs	33
8. CLOSE OUT REQUIREMENTS	33
9. CONCLUSION.....	34
10. HEALTH AND SAFETY DECLARATION.....	34
11. Risk assessment methodology.....	34
ANNEXURE A – CONTRACTORS DECLARATION	1
ANNEXURE B – OHSE FILE	Error! Bookmark not defined.

LIST OF TABLES

Table 1. List of regulations and standards	2
Table 2. Legal appointments.....	10
Table 3. Risk matrix for the identification of risks	Error! Bookmark not defined.
Table 4. Risk classification.....	Error! Bookmark not defined.

1. BACKGROUND

CIVPRO Engineering JV (CIVPRO) was appointed by the Development Bank of Southern Africa (DBSA) in response to their RFP 116/2018: Provision of Professional Services for Conditional Assessment, Detailed Planning & Design, Procurement Assistance & Tender Documentation, Construction Monitoring and Close Out for the Various school across the KwaZulu-Natal Province for a period of 3 years as and when required without any commitment to a quantum of work ordered.

In response, CIVPRO mobilized their team to conduct a site visit of each of these schools on the week of 20 May 2019. In this week 14 schools in KZN were visited to carry out inspections related to the refurbishment of these schools. This report details the occupational, health and safety risks identifies that by that process.

CIVPRO is committed to achieving the highest standards of health and safety for all stakeholders and others who may be affected by our activities e.g., students, staff, parents, customers, contractors and clients by:

- ensuring that all hazards and risks are identified and properly controlled so that employees and others can be protected from danger and ensuring that injury and ill health are prevented.
- providing adequate resources to support the full implementation of the policy.
- ensuring that all persons are competent to carry out the duties asked of them, providing information, instruction, supervision and training as necessary.
- consulting all employees, safety representative and subcontractors in the development of the OHS policy and encouraging them to participate in and contribute to improvements in the working environment.
- as a minimum standard, monitoring, reviewing and complying with Health and Safety legislation, regulations and other requirements that are relevant to our operations.
- providing and maintaining safe plant and equipment and a safe working environment.
- taking prompt and effective action to address any problems identified through monitoring the implementation of safe working practices and procedures.
- communicating openly with all persons working on behalf of the company in relation to health and safety matters; and
- reviewing and revising the policy and procedures at regular intervals and at least annually.

2. INTRODUCTION

In terms of Construction Regulation 5(1) (b) of the Occupational Health and Safety Act, 1993 (Act 85 of 1993), the Client and/or its Agent on its behalf, shall be responsible to prepare Health & Safety Specifications for any intended construction project and provide any Service Provider / Principal Contractor who is making a bid or appointed to perform construction work for the Client and/or its Agent on its behalf with the same.

The Service Provider / Principal Contractor and contractors shall be responsible for the Health & Safety Policy for the site in terms of Section 7 of the Act and in line with Construction Regulation 7 as well as the Health and Safety Plan for the project.

Project Location

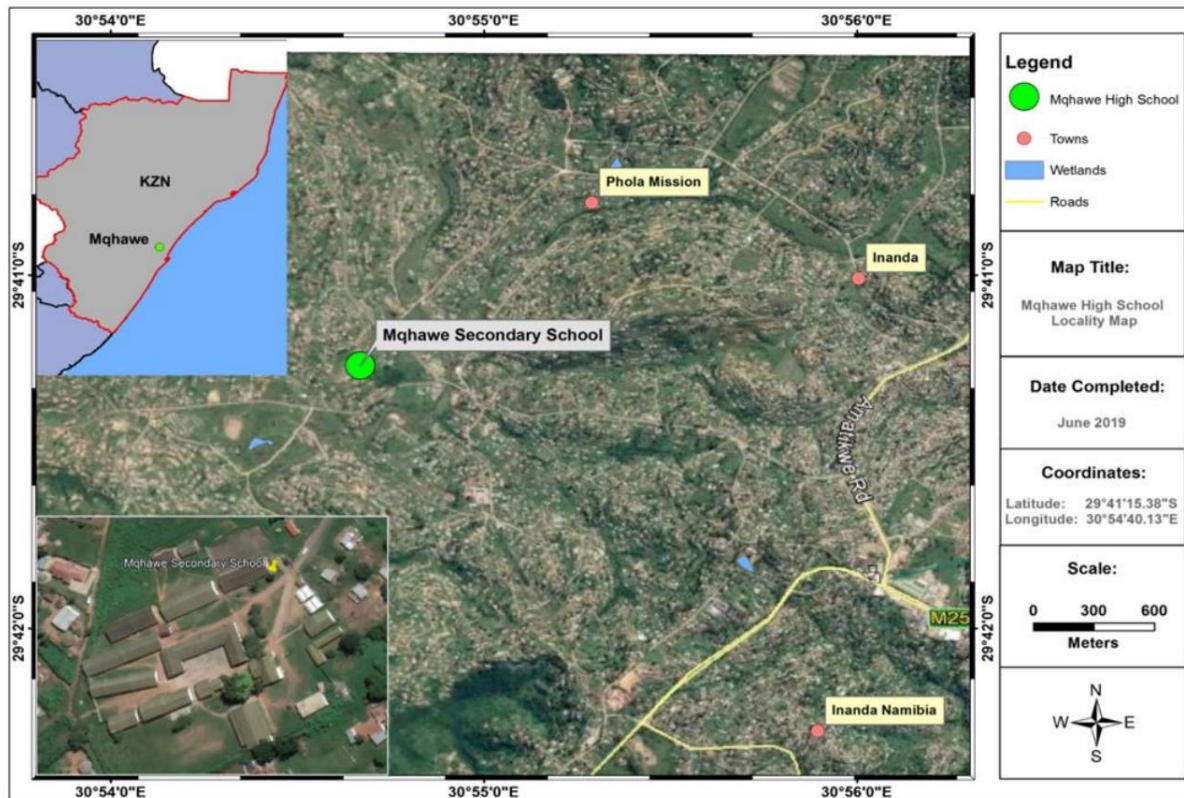


Figure 1: Locality Plan

2.1. Legal Framework

This 'Health and Safety Specifications' document is governed by the "Occupational Health and Safety Act, 1993 (Act No. 85 of 1993), hereinafter referred to as 'The Act'. It should be noted that no single Act or its set of Regulations be read in isolation. Furthermore, although the definition of Health and Safety Specifications stipulates 'a documented specification of all health and safety requirements pertaining to associated works on a construction site, so as to ensure the health and safety of persons', it is required that the entire scope of the Labour Legislation, including the Basic Conditions of Employment Act be considered as part of the legal compliance system. With reference to this specification document, this requirement is limited to all health, safety and environmental issues pertaining to the site of the project as referred to here-in. Despite the foregoing, it is reiterated that environmental management shall receive due attention.

The following legislative requirements and standards must be considered:

Table 1. List of regulations and standards

Reference Number	Description
ISO 45001:2018	Occupational health and safety management systems — Requirements with guidance for use
OHSAS 18001: 2007	Occupational Health and Safety Management Systems: Requirements
OHS Act & Regulations 23 rd Edition	Occupational Health and Safety Act, 85 of 1993, Edition 23 (latest edition) and the Construction Regulations, 2014
OHS Act & Regulations 23 rd Edition	Code of Practice: Managing Exposure to SARS-COV-2 in the Workplace and the Hazardous Biological Agents Regulations (the HBA Regulations)
COIDA	Compensation for Occupational Injuries and Diseases Act (Act 130 of 1993)
Construction Regulations, 2014	Construction Regulations, 2014
Asbestos Abatement Regulations, 2020	Asbestos Abatement Regulations, Government Notice R1196 in GG 43893 of 10 November 2020
National Environmental Management Act no. 107 of 1998	National Environmental Management
ISO 31000: 2009	Risk Management: Risk Assessment Techniques, Principles and Guidelines
SANS 10400	National Building Regulations
By-Laws	Municipal by-laws

2.2. Risk Assessment

Prior to drafting the Health and Safety Plan, and in consideration of the information contained herein, the contractor shall set up a Risk Assessment Program to identify and determine the scope and details of any risk associated with any hazard related to the supply and delivery of construction materials in order to identify the steps needed to be taken to remove, reduce or control such hazard. This Risk Assessment and the steps identified will be the basis or point of departure for the Health and Safety Plan. The Health and Safety Plan shall include documented 'Method Statements of Work' detailing the key activities to be performed when delivering/offloading of construction materials in order to reduce as far as reasonably practicable, the hazards identified in the Risk Assessment.

2.3. Disclaimer

Every effort has been made to ensure that this specification document is accurate and adequate in all respects. Should it however, contain any errors or omissions they may not be considered as grounds for claims under the contract for additional reimbursement or extension of time, or relieve the Service Provider from his responsibilities and accountability in respect of the project to which this

specification document pertains. Any such inaccuracies, inconsistencies and/or inadequacies must immediately be brought to the attention of the Agent and/or Client.

3. DEFINITIONS

“Purpose of the Act” –To provide for the health and safety of persons at work and the health and safety of persons in connection with the use of plant and machinery; the protection of persons other than persons at work against hazards to health and safety arising out of or in connection with the activities of persons at work; to establish an advisory council for occupational health and safety; and to provide for matters connected therewith.

"The Act" —means the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993); **“Agent”** — means a competent person who acts as a representative for a client; **“Client”** —means any person for whom construction work is performed;

"Construction manager" —means a competent person responsible for the management of the physical construction processes and the coordination, administration and management of resources on a construction site.

"Construction site" —means a workplace where construction work is being performed;

"Construction supervisor"—means a competent person responsible for supervising construction activities on a construction site.

"Construction work" —means any work in connection with -

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

“Contractor” – means an employer who performs construction work.

"Designer" means—

- a) a competent person who—
 - i. prepares a design;
 - ii. checks and approves a design;
 - iii. arranges for a person at work under his or her control to prepare a design, including an employee of that person where he or she is the employer; or
 - iv. designs temporary work, including its components;

- b) an architect or engineer contributing to, or having overall responsibility for a design; (c) a building services engineer designing details for fixed plant;
- c) a surveyor specifying articles or drawing up specifications;
- d) a contractor carrying out design work as part of a design and building project; or an interior designer, shop-fitter or landscape architect;

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

"Fall protection plan" —means a documented plan, which includes and provides for —

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

"Health and Safety File" —means a file, or other record containing the information in writing required by the Construction Regulations 2014;

"Health and Safety Plan" —means a site, activity or project specific documented plan in accordance with the client's health and safety specification;

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

"Method Statement" —means a document detailing the key activities to be performed in order to reduce as reasonably as practicable the hazards identified in any risk assessment;

"Service Provider" —means an employer appointed by the client to perform construction work;

"Risk Assessment" —means a program to determine any risk associated with any hazard at a construction site, in order to identify the steps needed to be taken to remove, reduce or control such hazard.

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

"Structure" means—

- a) any building, steel or reinforced concrete structure (not being a building), railway line or siding, bridge, waterworks, reservoir, pipe or pipeline, cable, sewer, sewage works, fixed vessels, road, drainage works, earthworks, dam, wall, mast, tower, tower crane, bulk mixing

- plant, pylon, surface and underground tanks, earth retaining structure or any structure designed to preserve or alter any natural feature, and any other similar structure;
- b) any falsework, scaffold or other structure designed or used to provide support or means of access during construction work; or
- c) any fixed plant in respect of construction work which includes installation, commissioning, decommissioning or dismantling and where any construction work involves a risk of a person falling;

4. PROJECT DESCRIPTION AND SCOPE

The scope of works for the asbestos replacement program for the Mqhawe High School consists of the following:

- Repair structural defects on existing facilities to be retained;
- Replace broken and missing window frames;
- Replace broken and missing window panes;
- Replace broken and missing timber doors including all ironmongery;
- Demolish one (2) retaining walls including the foundations;
- Demolish four (4) building blocks (Blocks H, K, N & P as per the SDP) including removal of foundations;
- Plaster to walls and fixing of wall cracks;
- Remove damaged / rotting purlins and replace with new purlins;
- Remove damaged / rotting rafters or trusses and replace with new rafters or trusses;
- Remove existing roof sheeting and replace with new roof sheeting, barge flashing and ridge capping and fascia boards;
- Remove damaged / collapsing rhino board ceilings;
- Install new brandering and new rhino board ceiling including cornices;
- Identify defective plaster, saw cut, demolish plaster, replaster and make good with polymer modified plaster;
- Prepare, sand, prime and paint all previously painted surfaces and newly plastered surfaces including window frames, doors, door frames and ceilings;
- Replace damaged/missing rainwater goods and replace with new aluminum seamless gutters and uPVC downpipes, elbows, bends and shoes;
- Repair/ install perimeter fence and reposition an internal fence to make way for a new access road;
- Repair / replace electrical reticulation and fittings;
- Install new electric connection, reticulation, fittings and connect to the main supply;
- Rip and reconstruct floors, screed and installation of vinyl tiles;
- Repairs and construct walkway, concrete aprons, v-drains and stormwater drainage;
- Construction new stormwater management infrastructure and water and sewer reticulation;
- Repairs / replace plumbing (sewer and water) drains and sanitary ware;
- Repair and replace chalkboards and pinning boards;
- Repair or install burglar doors and gates;
- Construct 7 new building blocks (Block M, S, T, U, V, W & X) to KZN DoE Norms and Standards;

- Construct a new paved assembly area (709m2);
- Construct a new surfaced driveway parking (44 + 1 disabled bays);
- Construct retaining walls;
- Construct covered walkways and uncovered walkways with stairs and ramps;
- Construct a new burn pit or bin area; and
- Construct a new surfaced access road.

5. MINIMUM HEALTH AND SAFETY ADMINISTRATIVE REQUIREMENTS FOR THE PROJECT

5.1. Occupational Health, Safety and Environment Plan

The successful bidder shall prepare a documented OHSE Plan as per CR 7(1) (a) based on the information/requirements contained in this specification and in ANNEXURE A to demonstrate how the health and safety requirements will be implemented during construction.

EHS Cost Base Estimate

The appointed CONTRACTOR must prepare and submit a Cost Base Estimate for EHS aspects, these may include but not limited to the following:

- EHS Resourcing
- Medical Examinations - Medical certificate of fitness for each CONTRACTOR worker on the project, these medical can only be done by an Occupational Health Practitioner and cost vary
- Notices & Signs
- Competency training e.g. working at heights, working in confined spaces
- First aid kits and /or equipment
- Training & Awareness material & posters
- Adhoc incident/accident investigations
- Personal Protective Ware & Equipment (risk based) for employees plus visitors
- Hard copies of latest Legislation
- Fines & penalties
- Site establishment
- Inductions
- COVID-19 Protocols & PPE
- Spill kits
- Storage for workers personal belongings
- Printers & Laptops
- Paper
- Confined Spaces (tools & equipment for monitoring and detection)
- Working at heights (rescue equipment and training)
- Access to work areas (scaffolding, MEWPS, aerial lifts)

5.2. Health and Safety File

The successful bidder must, in terms of CR 7(1)(b) compile and keep on site at all times a health and safety file that shall include all documentation required in terms of The Act, Regulations and this specification. The Principal Contractor must compile the health and safety file within 14 days of appointment and submit it to the Health and Safety Agent for approval before any work commencement on site.

No.	Item
1	Scope of Works
2	Critical Contractor Requirements
3	Agreements with Mandatory's 37(2)
4	Appointment as CONTRACTOR CR 5(1)(k)
5	Proof of registration and good standing with COID Insurer
6	Signed Project EHS Specification
7	Declaration of sub-contractors : The principal contractor must declare if subcontractor will be appointed. Subcontractors are required to submit the safety file for their company. The declaration to be in file.
8	Project EHS Policy
9	Appointments - All appointments to be in line with the OHSAct and applicable regulations. Each appointment to be accompanied by proof of competency.
10	Project Organogram
11	Employee list - With ID copies and next of kin details (name, contact, address, etc), valid work permit for personnel without SA citizenship.
	Proof of medical fitness - Valid proof of medical fitness in the form of CR Annexure 3 and stamped by an occupational health practitioner.
12	EHS Plan
13	Emergency Preparedness & Response Plan
14	Site Security Management Plan
15	Fall Protection Plan & Risk Assessment
16	Traffic Management Plan
17	Crane Plan/Lift plan/Rigging Study – If applicable
18	Hygiene Management Plan

No.	Item
19	COVID-19 Management Plan
20	Environmental Management Plan
21	Waste Management Plan
22	Scaffolding plan - Where applicable
23	Safe Work Procedures
24	Emergency Preparedness & Response Plan - plan to respond to potential emergencies associated with the contractors activities.
25	Excavation plan - Where applicable
26	Method statement - A detailed description of how work will be carried out.
27	Audit Checklist - audit checklist for audits to be performed on sub-contractors.
28	Proof of Induction Training
29	Training Matrix & Records - All other training records applicable to the scope e.g. Working at heights certificate; NR10, etc.
30	PPE Matrix - A document indicating the contractor's positions and the applicable PPE to each position as per risk assessment outcome.
31	PPE Records - Proof that employee was issued with PPE
32	HCS Register & MSDS's /Training on MSDS
33	Toolbox talks & JSA - Proof that system exists
34	Chemical Substance List - All chemicals that will be used by the contractor to be documented and filed.
35	Equipment maintenance (Calibrations, Safe Working load certificates etc)
36	Latest Copy of the OHS Act & Applicable Regulations
37	<p>Five (5) year synopsis of incident statistics per project including LTIFR, first aid cases and medical treatment cases:</p> <ul style="list-style-type: none"> – Budget for OHS on each of the projects – Actual cost for OHS on each of the projects – Total hours worked on each project – Fatal and lost time incidents to be described in detail

5.3. Construction Work Permit

The project shall require a Construction Work Permit. The Agent shall submit the application of the Construction Work Permit to the Provincial Department of Labour as per CR 3 and Annexure 1 requirements. Construction work shall only commence once the Construction Work Permit for the Project has been issued.

5.4. Health and Safety Policy

The Safety, Health and Environment Policy which should be signed by the Chief Executive Officer must form a part of the Health and Safety Plan. The policy must outline Health and Safety objectives and set out how they will be achieved and implemented.

5.5. Appointments

The Client shall appoint the Principal Contractor (successful bidder) for the works as per CR 5 (1) (k). A section 37 (2) agreement shall be signed between the Client the Principal contractor.

The Principal Contractor shall make appointments as per The Act and its Regulations; structured and guided by the scope of works to be performed.

It is acknowledged that the Principal Contractor may need to allocate more than one appointment to certain staff members. This practice may only take place if health and safety standards would not be negatively affected. Should the Health and Safety Agent deem such practice as having a negative effect on health and safety standards; then alternative arrangements will have to be made.

Due to the nature of the risks associated with the works a Full Time Health and Safety Officer who meets the following criteria shall be appointed for the works

- a) The person must either have completed a SAMTRAC (Safety Management Training Course), which is administered by NOSA, a 3 Week SHE Management Course, which is administered by Lexis Nexus, National Diploma in Safety Management or another course approved by Client's Agent as a minimum requirement.
- b) The Health and Safety Officer must be registered with the South African Council for Project and Construction Management Professions (SACPCMP)
- c) The CV and Qualifications of the Health and Safety Officer that meets the above- mentioned criteria must be submitted by all bidders with his/ her tender stage returnable documents.

The table below outlines the legal appointments that the contractor must appoint on site.

Table 2. Legal appointments

Item	Regulation	Appointment	Period of Provision	Responsible Person
1.	CR 8(1)	Construction Manager	Prior site handover	Principal Contractor

2.	CR 8(2)	Assistant Construction Manager	Need to be determined	Principal Contractor
3.	CR 8(5)	Full Time Health and Safety Officer	Prior site handover	Principal Contractor
4.	CR 8(7)	Construction Supervisor	Prior site handover	Principal Contractor
5.	CR 8(8)	Assistant Construction Supervisor	Need to be determined	Principal Contractor
6.	CR 9(1)	Risk Assessor	Prior site handover	Principal Contractor
7.	CR 10(1)(a)	Fall Protection Planner	Prior site handover	Principal Contractor
8.	CR 12(1)	Temporary Works Designer	Commencement with construction work	Principal Contractor
9.	CR 12(2)	Temporary Works Supervisor	Commencement with construction work	Principal Contractor
10.	CR 13(1)(a)	Excavation Supervisor	Commencement with construction work	Principal Contractor
11.	CR 14(1)	Supervisor Demolition Work	Commencement with construction work	Principal Contractor
12.	CR 16(2)	Scaffold Supervisor	Commencement with construction work	Principal Contractor
13.	CR 16(2)	Scaffolding Erector	Commencement with construction work	Principal Contractor
14.	CR 16(2)	Scaffolding Inspector	Commencement with construction work	Principal Contractor
15.	CR 17(1)	Suspended Platform Supervisor	Commencement with construction work	Principal Contractor
16.	CR 19(8)(a)	Material Hoist Inspector	Commencement with construction work	Principal Contractor
17.	CR 23(1)(d)	Construction Vehicle and Mobile Plant Operator	Commencement with construction work	Principal Contractor
18.	CR 23(1)(k)	Construction Vehicle and Mobile Plant Inspector	Commencement with construction work	Principal Contractor
19.	CR 24(d)	Temporal Electrical Installations Inspector	Commencement with construction work	Principal Contractor
20.	CR 28(a)	Stacking and Storage Supervisor	Commencement with construction work	Principal Contractor
21.	CR 29 (h)	Fire Equipment Inspector	Commencement with construction work	Principal Contractor
22.	CR 29 (i)	Fire fighter	Commencement with construction work	Principal Contractor

23.	EMR 9	Portable Electrical Inspector	Commencement with construction work	Principal Contractor
24.	GAR (9)2	Accident/ Incident Investigator	Prior site handover	Principal Contractor
25.	GRS 3(4)	First Aid Attendant – Level 2	Commencement with construction work	Principal Contractor
26.	GSR 9	Welding Flame/ Cutting Equipment Inspector	Commencement with construction work	Principal Contractor
27.	GSR 13 (a)	Ladder Inspector	Commencement with construction work	Principal Contractor
28.	HCSR 3(3)	Hazardous Chemical Substances Supervisor	Commencement with construction work	Principal Contractor
29.	OHS 8(2)(a)	Hand Tools Inspector	Commencement with construction work	Principal Contractor
30.	OHS 17	Health and Safety Representative	Commencement with construction work	Principal Contractor
31.	CR 7 (1) (c)	Sub – Contractors	Commencement with construction work	Principal Contractor
32.	EIR 6	Electrical Contractor	Prior site handover	Principal Contractor
33.	AR 21 (1) (i)	Registered Asbestos Contractor	Commencement with construction work	Principal Contractor

5.6. Competency of Appointees

Contractor's competent persons for the various risk management portfolios must fulfil the criteria as stipulated under the definition of Competent Person in accordance with the CR and The Act. All competency certificates SAQA accredited. The competency must be subjected to approval by the Health and Safety Agent.

5.7. Health and Safety Organogram

An organogram outlining the Health and Safety Management as per appointments under the OHS Act and the Regulations must be provided by the successful bidder and be kept in the health and safety file.

The Contractor must update the site Health and Safety Management Organogram when there are any changes in the Site Management Structure.

5.8. Compensation for Occupational Injuries and Diseases Act 1993 (Act No. 130 of 1993) (COID Act) requirements

The Principal Contractor must warrant that all employees are fully covered in terms of the COID Act and that such cover must remain in force for the duration of the project.

All bidders must supply proof of such insurance cover to the Client at the time of the bid. The principal Contractor must ensure that all Sub-Contractors appointed by him are fully covered in terms of the COID Act, and that such cover must remain in force for the duration of their contractual relationship with the Principal Contractor.

The Principal Contractor must also provide Public Liability Cover that must adequately make provisions for any losses and/or his employee's acts and/or omissions whilst working on the Client's premises.

5.9. Sub – Contractors

All Sub-Contractors shall be responsible for their own Health and Safety on site under supervision of the Principal Contractor. The Principal Contractor shall sign a section 37(2) mandatory agreement with the Sub – Contractors for the works. Health and Safety requirements for Sub – Contractors shall form part of their tender documents. Selection criteria for Sub- Contractors must include ability to meet health and safety requirements for the works.

All Sub-Contractors shall open their own health and safety files. These health and safety files shall be approved and Audited by the Principal Contractor's Health and Safety Officer and will also be subjected to evaluation by the Health and Safety Agent.

The Principal Contractor must monitor Sub-Contractors compliance on site.

5.10. Hazard Identification and Risk Assessment

The Principal Contractor must allow for and cause a Site-Specific Hazard Identification and Risk Assessment exercise to be performed by a Competent Person before commencement of construction work based on the provided Baseline Hazard Identification and Risk assessment found in ANNEXURE A. The risks assessed must form part of the Construction Phase Health and Safety Plan to be submitted by the contractor for approval by the Health and Safety Agent. The Risk Assessment must include:

A list of activities to be performed and hazards identified for tasks;

- Health, safety, and environment effects from exposure to hazards;
- Risk rating and its methodology / matrix;
- Control / mitigation measures to identified hazards;
- Safe working procedures for the high-risk tasks intended to eliminate, reduce and/or control the risks assessed;
- A monitoring and review procedure of the risk assessment as the risks change.

The Principal Contractor must allow for and ensure that all Sub-Contractors are informed, instructed and trained by a Competent Person/s regarding hazards, risks and related safe work procedures before any work commences and thereafter at regular intervals as the risks change and as new risks develop.

The Principal Contractor must allow for and be responsible for ensuring that all persons who could be negatively affected by construction operations are informed and trained according to the hazards and risks and are conversant with the Safe Work Procedures, control measures and other related rules (for example “tool box talk” strategy to be implemented).

Should the Health and Safety Agent or other Clients Representative identify alternative hazardous activities performed by the Principal Contractor or its Sub-Contractors on site for which a Risk Assessment was not performed, then the Principal Contractor will be required to perform such an exercise before continuing such work.

5.11. Health and Safety Representative(s)

The Principal Contractor and Sub-Contractors must allow for and ensure that Health and Safety Representative(s) who, after consultation, have been appointed and trained to carry out their functions as per section 16 and 17 of The Act.

The appointments must be in writing and the Health and Safety Representative must carry out regular inspections, keep records and report all findings to the Health and Safety Officer.

5.12. Health and Safety Committees

When there is more than one Health and Safety Representative on site a Health and Safety Committee must be developed as per the requirements of section 18 of The Act. The Principal Contractor must ensure that project Health and Safety Meetings are held monthly or as deemed necessary by the project requirements.

- Minutes must be kept on record and filed in the site health and safety file.
- Meetings must be organized and chaired by the Principal Contractor’s Responsible Person.

5.13. Medical Fitness

The Principal Contractor and all Sub-Contractors must ensure that every employee on site has a valid medical certificate of fitness specific to the construction work to be performed and issued by an Occupational Health Practitioner in the form of CR Annexure 3.

Annexure 3																			
Occupational Health and safety Act, 85 of 1993 Construction Regulation 7(8) Medical Certificate of fitness																			
Name of Employee _____										ID Number _____					Employee Number _____				
+		* Possible Exposure e.g. noise, heat, fall risk, confined space etc.										* Job Specific requirements e.g. Operating Mobile Crane, Digging Trenches, Erecting Formwork & Support Work etc.					* Protective Equipment e.g. Dust respirator (Light Duty), Welding Gloves etc.		
*		Occupation																	
*		The Employer to complete the information in the spaces marked with an * before sending the Employee for a medical examination																	
*		Declaration by the medical Examiner: I certify that I have, by examination and testing, using the above criteria specified by the Employer, satisfied myself that the <u>above mentioned</u> employee is fit to perform the duties as described by the employer in the matrix above. Occupational Medicine Practitioner / Occupational Health Nursing Practitioner _____																	
Signature _____										Practice Number _____					Date _____				
Address: _____																			

5.14. Health and Safety Training

1. Induction

The Principal Contractor must allow for and ensure that all site personnel undergo a site- specific health and safety induction training session before starting work. A record of attendance must be kept in the health and safety file. Induction training must also include training on the risks associated with the works to be executed, safe work procedures and emergency procedures.

All visitors to the site must also be subjected to site-specific induction training highlighting items such as site safety and health risks, steps to follow in the event of emergency, restricted areas and on the site health and safety rules upon entering the site.

2. Awareness

The Principal Contractor must ensure that, on site, regular toolbox talks take place at least once a week. These talks must deal with risks relevant to the construction work at hand.

3. Competency

All Competent Persons must have the knowledge, experience, training, and qualifications which are specifically applicable to the work they have been appointed to supervise, control, and execute.

The abovementioned competency requirements will be assessed on a regular basis by the Health and Safety Agent by means of Audits.

The Principal Contractor is responsible for ensuring that competent Sub-Contractors are appointed to carry out construction work.

5.15. General Record Keeping

The Principal Contractor must keep and maintain Health and Safety records to demonstrate compliance with this Specification, The Act and with the CR on the site health and safety file which must always be kept in the site office.

The Principal Contractor must ensure that all records of incidents/accidents, training, inspections, audits, and the like are kept in a site health and safety file held.

The Principal Contractor must ensure that every Sub-Contractors opens their individual health and safety files, maintains the files and makes them available on request by any duly authorized person.

5.16. Health and Safety Audits, Monitoring and Reporting

The Client's Health and Safety Agent shall at least once a month during the duration of the contract conduct Health and Safety Audits of the work operations. The audit shall be consisting of a full audit of physical site activities and well as an audit on the administration of health and safety. Copies of the audit reports will be forwarded to the Principal Contractor, Project Manager and all stakeholders within seven days. Copies of the Audit report must be kept in the site health and safety file. The Health and Safety Agent may at any time visit the site for an Audit without prior notification to the contractor.

The CONTRACTOR will review the project statistics at the end of each reporting period and on a three-monthly rolling basis identifying trends within the reports. Any trends identified and actions arising will be included in the deviation register.

Monitoring Plan

	Conducted by	Construction Pre-Start	Daily	Weekly	Monthly
CONTRACTOR's Site Inspection: Construction Manager/ Assistant Construction Manager, Safety Representatives and EHS personal	CONTRACTOR		X	X	X
Engineer Inspections: Project Manager,	CONTRACTOR		X	X	

Inspectors, EHS staff					
CONTRACTOR Audit:	CONTRACTOR				X
EHS Agent Audits	Pr.CHSA				X
PTO			X According to schedule		
CONTRACTOR EHS Management Systems Audit: CONTRACTOR Safety Advisor	CONTRACTOR CLIENT	X			

Table 1: EHS KPI's

Indicator Type	Criteria	Responsibility	Measure
Leading Indicators	External audit of specific project EHS management system	CONTRACTOR	Within 30 days of mobilisation
	Internal self-audit (monthly). Audit of CONTRACTORs	CONTRACTOR	> 85% compliance score to be achieved CONTRACTORs achieving <70% = stop work
	Principal CONTRACTOR EHS audits	EHS Agent	Within 30 days of mobilisation and then monthly
	Planned Task Observations (PTO's)	CONTRACTOR	100% execution of scheduled PTO's
	Pre-start meetings / Daily Safe Task Instructions (DSTI's)	CONTRACTORs	For each work team before each task commences
	Toolbox talks	CONTRACTOR	Daily
	Project EHS committee meetings	CONTRACTOR	1 per month
	Method statements, Risk assessments and Safe Work Procedures	CONTRACTOR	All tasks at all times
	Hazard and near miss reporting.	All personnel	100% of all near misses reported
Lagging indicators	Fatalities or serious disabling, immobilisation injury	CONTRACTOR	Zero

Indicator Type	Criteria	Responsibility	Measure
	Disabling injury frequency rate (DIFR)	CONTRACTOR	Zero
	Lost time injury frequency	CONTRACTOR	0
	Occupational illness	CONTRACTOR	0

5.17. Incidents and Emergency Plan

The Principal Contractor must allow for and submit with the safety file a detailed incident and emergency plan for approval by the Health and Safety Agent prior to commencement of work on site. The Plan must cover the following:

- List of emergency services telephone numbers
- List of emergency team members
- Means of contacting emergency services
- Emergency drills and evacuation sirens to be used
- Signage scheme to be implemented
- Specifications on how they are planning on dealing with the following possible events:
 - Vehicles accidents
 - Strike actions
 - Political / community protests
 - Falls from heights
 - Collapse of structures
 - Animals' attacks (snakes & bees)
 - Environmental Spills
 - Fire
 - Flash floods

5.18. First Aid Boxes and First Aid Equipment

The Principal Contractor must appoint in writing Level 2 First Aider(s) in terms of Regulation 3 of the General Safety Regulations under The Act.

The appointed First Aider(s) must be sent for accredited first aid training should they not have received such training prior to commencement of work on site, with any related costs being covered by the Principal Contractor or Sub-Contractor concerned.

Valid certificates to be kept on site in the site health and safety file.

The Principal Contractor must allow for and provide an on-site First Aid Station with first aid facilities with first aid boxes which must be kept adequately stocked at all times.

All Sub- Contractors with more than five employees on site must allow for and supply their own first aid boxes. In case of Sub – Contractors having more than 10 employees on site, they should have their own first aider. The previously mentioned shall not apply upon written agreement with the Principal Contractor.

First aiders must be trained to address any incidents of accidental exposure to hazardous chemical substances present on site.

5.19. Accident / Incident Reporting and Investigation

Injuries sustained on the site are to be categorized into the following categories:

- first aid;
- medical attendance (Doctor);
- disabling; and
- fatal injuries

All Sub- Contractors must report on any of the four categories of injuries to the principal

Contractor as soon as is reasonably practicable after the event causing injury. First aid cases must be recorded in the safety files dressing register.

Medical Attendance accidents must be recorded on the safety file as per Annexure 1, the Principal Contractor's competent person must investigate these accidents and forward a copy of the report to the Health and Safety Agent without within seven days for further investigation.

Disabling and fatal accidents must immediately be reported to the Health and Safety Agent telephonically after they occur. The Health and Safety Agent shall manage these accidents investigations. All incidents as described in Section 24 of the OHS Act must be reported in the prescribed period and manner to the National Department of Labour. Copies of Section 24 reports, including WCL 2 forms must be forwarded to the Health and Safety Agent.

The Principal Contractor must on monthly basis report all injuries sustained on site to the Health and Safety Agent in the form of a detailed injury report.

6. PHYSICAL REQUIRMENTS

6.1. Public Safety and Security

6.1.1. Hoarding

The Principal Contractor must hoard the construction site to prevent unauthorized entry and disruption to the active school. The hoarding must be as follows:

- The security fence must be bonnox fence of 1,6 - 1,8-meter-high and must fence the entire parameters of the site;
- 80% strength shade cloth of equal length and height to the fence must hoard the entire fence.
- The contractor is required to maintain hording intact and neat;
- A Lockable gate separate from the school's gate with a security must be provided to control access. All visitors to sign in when entering the site; and
- Hoarding parameters must be as per project's decanting plan.

6.1.2. Warning / informative signs

The entrance of the site must have construction safety warning signs which should contain a minimum of the following information:

- Construction activities ahead;
- No unauthorized entry;
- Type of Personal Protective Equipment required for the site as per risk assessment;
- Speed limit (10 km/h); and
- Visitors to report to the site office.

Warning signs must also be posted in different location of the site to create awareness of danger i.e. demolition in progress sign, required PPE and deep excavations signs.

Informative signs indicating the assembly point, location of fire extinguisher and first aid kit should also be provided on site.

6.1.3. Location of site office

The location of the site office should be in an area that will not require visitors to pass through or enter area where construction work is active and will not require the re-location of the office as the project progresses.

6.2. Transportation of Workers

The Principal Contractor and Sub-Contractors shall not:

- Transport persons together with goods or tools unless there is an appropriate area or section of the vehicle in which to store such goods;
- Transport persons on the back of trucks except if a proper canopy (properly covering the sides and top) has been provided with suitable seating areas;
- Permit workers to stand or sit on the edge of the transporting vehicle;
- Transport workers in light duty vehicle (LDV) unless they are closed / covered and have the correct number of seats for the passengers;
- No transporting of employees in the back of LDVs if they are not converted to be fit for purpose as people carriers.

- The driver of any LDV may not permit more than two passengers to occupy the cab of any LDV. Drivers of such vehicles must have a valid driver's license for the code of vehicle being driven by them.

6.3. Personal Protective Equipment (PPE)

The Principal Contractor and all Sub-Contractors must allow for and ensure that all site employees are provided and wear mandatory PPE which is safety boots and overalls and all required PPE as specified by the risk assessment of the task to be undertaken.

The Principal Contractor and all Sub-Contractors must allow for and make provision and keep adequate quantities of SABS approved PPE on Site at all times.

The Principal Contractor and all Sub-Contractors must clearly outline procedures to be taken when PPE is:

- Lost or stolen; and
- Worn out or damaged.

The Principal Contractor must at all times ensure that no person enters the site without the required PPE.

Visitors to the site must be provided by the Principal Contractor with the required PPE such as Hard Hats, Earmuffs and Eye Protection and other PPE required for the section visited.

Records of all PPE issued to staff must be kept on site in the health and safety file.

Employees are to be made conversant with the purpose of PPE and where and when it is required to be used by employees.

PPE that has been exposed to asbestos shall only be kept in the asbestos controlled section and shall never be taken off site.

Suitable eye protection must at all times be worn by employees when performing, for example, grinding, chipping, chasing and all activities which result in flying objects.

In the event that neighbouring areas, personnel may be struck by flying objects as a result of work being performed, allowances must be made for the provision of suitable temporary screens.

Any person performing welding or brazing work must wear suitable eye protection, gloves, aprons, and spats. Suitable screens are to be allowed for and be provided to protect onlookers from the harmful rays associated with such activities.

When employees are required to work with corrosive liquids, allowance must be made for suitable eye protection, gloves and acid resistant overalls to be provided.

Ear protection must be worn in designated noise zones (more than 85dB).

Suitable respirators must be provided to all employees to be working in and visitors entering areas where there are hazardous airborne substances.

All employees working in an elevated position (2m or higher) or where the potential exists that such employees may fall, each such employee must be provided with a suitably secured safety harness.

Any person refusing to wear PPE must be removed from the premises.

6.4. Hazards and Potentially Hazardous Situations

The Principal Contractor must immediately notify Sub-Contractors of any hazardous or potentially hazardous situations that may arise during performance of construction activities.

Should a hazardous situation require work stoppages, the work must be stopped, and corrective steps taken such as the issue of Written Safe Work Procedures and the issue of Personal Protective Equipment.

6.5. Extreme Weather Conditions

If the weather condition poses a threat to the health & safety of employees; be it extreme heat, cold, lighting or any adverse weather condition appropriate safety measures have to be taken as per the risk assessment control measures.

6.6. Site Clearance

Trees must cut under supervision of trained competent and experienced personnel/contractor.

Method statement for tree felling to be provided. Safe working procedures to be in place.

Safe vehicle, equipment, and hand tools to be used for the tasks, inspection records to be in place.

Safe tools to be used during site clearance

Employees operating chain saws to wear PPE (overalls with leg protection, reflective vests, safety boots, helmets and gloves).

6.7. Delivery and Placing Park homes and Containers

The Principal Contractor must ensure that the area where they shall be placed is stable and safe for placing containers.

Offloading not to be done under overhead cables.

Crane offloading the containers to meet CR 22 requirements.

Inspections to ensure all plant and equipment in the operation are safe for use. Supervisor to ensure that the task is done in a safe manner.

6.8. Electrical Connections

The Principal Contractor must ensure proper planning for temporal power supply taking into account unforeseen load requirements.

All electrical connections on site must be done by a registered electrical contractor

Temporary electrical installations must be inspected weekly and records must be kept on the health and safety file.

6.9. High Voltage Electrical Equipment Installations

All Contractors must identify the presence and location of High Voltage Equipment such as underground cables and overhead lines and ensure that the necessary precautionary steps are taken where work has to be executed in the vicinity of such equipment.

Precautionary measures such as Isolation and Lock-Out of electrical systems or the use of electrically isolated tools must be used.

6.10. Demolishing

6.10.1. Method of demolishing Asbestos

Asbestos demolition shall be conducted as per Asbestos Regulations, 2001; GNR 155, 10 February 2002. A Registered Asbestos Contractor shall demolish asbestos. The contractor must demolish asbestos in cognizance of the active school in the vicinity, they must ensure that there is no release and dispersal of asbestos fibres into the atmosphere. Asbestos must be demolished using a Wet Method, i.e. the suppression of asbestos containing material surfaces with a wetting agent before demolishing and maintain wetted until temporary stored in a safe manner.

6.10.2. Preparations for the works

The Asbestos Contractor must submit a plan of works at least 30 days prior to commencement of that work to an Approved Asbestos Inspection Authority for approval as per Asbestos Regulations, 2001 section 21 (a) (iii). The approved and signed plan must be

submitted to Department of Labour 14 days prior to asbestos work on site as per Asbestos Regulations, 2001 section 21 (a) (iii). During asbestos demolition, the approved plan must be fully implemented on site.

Employees conducting asbestos work must have medicals that includes working at height and lung function test.

Prior to demolishing a detailed structural engineering survey should be carried out on the structure by the contractor. A demolishing method statement should be established based on said survey and it should be fully implemented during demolishing to ensure safety. Demolishing method statement should address the following:

- Scope of work;
- Personnel involved;
- Construction vehicle and plant involved;
- Tools and equipment involved;
- PPE requirements;
- Signage requirements;
- Procedural steps;
- Health and safety measures;
- Training;
- Waste management and housekeeping; and
- Emergency preparedness.

Demolishing shall only take place once the demolishing method statement is approved by the Agent.

Asbestos demolishing area must be demarcated and be provided with signage. All asbestos activities and waste must be kept within the demarcated area.

The contractor must be allowed time to demolish asbestos. Personnel that are not involved in the task must not be allowed in the demolishing area.

6.10.3. Asbestos Waste Management

- An approved AiA will be onboarded to monitor and keep records as required by Asbestos regulations and report to the Department of Labour as mandated by the regulations.
- The contractor must ensure that asbestos waste is handled and temporarily stored in a manner that will prevent fibers emissions;
- Skips must be provided for temporary storage of demolished asbestos sheets. Skips should be kept covered;
- Plastic bags that shall remain closed must be used for storing broken asbestos pieces and debris;
- Waste collection area must be provided with signage;

- All water from asbestos demolishing must not be discharged to drains, they should be disposed of as asbestos waste; and
- Asbestos waste must be disposed of in an approved asbestos site. Certificates of safe disposal must be produced.

6.10.4. Hygiene Management

- Employees involved in asbestos demolishing must be provided with PPE which is disposable full body covering suits, and respirators. All personnel involved in the activity must wear this PPE;
- The contractor must provide decontamination camp for employees which shall include dirty and clean area;
- Vacuum cleaners must be provided for cleaning boots;
- All asbestos containing material must remain in the dirty area and be handled accordingly until decontaminated by vacuuming or disposed of;
- All PPE worn during asbestos demolishing must never be taken home and must remain in the dirty area until safely removed by the contractor; and
- Employees handling asbestos must not eat until they have decontaminated.

6.10.5. Housekeeping

High standards good housekeeping must be implemented and maintained in the asbestos area. The area must be continuously cleaned up to ensure that there is no dispersal of asbestos fibers. All asbestos waste to be stored in closed containers to prevent fibers dispersal.

At the completion of the task, the contractor must ensure that the area is cleaned up and that there is no visible dust or debris (airborne or settled) in the area or immediate vicinity.

The contractor must have a vacuum for cleaning areas or equipment that maybe be contaminated.

6.11. Excavations

Prior conducting any excavation, a detailed risk assessment taking into consideration the depth and the type of soil as per Geotechnical Reports must be conducted. Prescribed control measures such as shoring should be implemented.

All excavations must be carried out as per CR 13

Prior any excavation is carried out underground resources such as electrical cables, water or sewage pipe and all other resources that might be buried must be located. They depth and type must be specified. When locating underground electrical cables insulated tools and insulated gloves must be worn. Located underground services must be handled as per specifications of the discipline engineers. All excavations less than 1.5 meters deep made within the barricaded construction site must be

demarcated using the danger tape. All excavation deeper than 1.5 meters that are done within the construction site must be barricaded.

All excavations done outside the barricaded construction site boundaries must be barricaded.

Barricading to be used for excavation includes snow netting and any other material strong enough to restrain falls. The height of excavation barricading should be a minimum of 750mm high.

6.12. Edge Protection

All open edges from heights/ depths above 1.2 meters must be guarded with suitable guards that are strong enough to restrain a fully grown human from falls. Open edge protection must be a minimum of 1.1m high.

All edges that may be deemed by the Health and Safety Agent pose safety risks must be provided with protection.

Excavations between 0,5 and 1,2 metres in depth must have rigid barriers around the outside to prevent persons and material from falling, except when a safety distance of 1.5 metres is maintained at all times by visible safety chains or flexible mesh at 1.1 metre height. This is described in the below table:

		Safety Distance	
		None or < 1,5 metre	Over 1,5 metre
Depth	between 0,5 and 1,2 metre deep	Rigid barriers	Flexible mesh or visible safety chains
	over 1,2 metre deep	Rigid barriers and toe-board	Rigid barriers

A protective system to prevent collapse of the excavation or caves-in (i.e. sloping, sloping and benching, shielding, support systems) must be installed when the excavation is more than 1.2 metres deep. Safe means of access and egress shall be located in all trench excavations at least every 15 metres.

6.13. Stacking of Materials

Stacking and storage of materials must be performed under the supervision of a Competent

Person who has been appointed in writing as required by CR.

Storage areas must be designated, kept neat and under control. In addition to the abovementioned the requirements of General Safety Regulations published in Government Notice No. R.1031 dated 30 May 1986 and amendments thereto must be complied with.

Adequate space stacking, storage and lay down areas must be provided on site.

In the event that unauthorized persons enter an area where materials are stacked, such area must be barricaded off to prevent access to such area.

Hazardous chemical substances must be stored in dry storeroom as per specifications of their material safety data sheets.

6.14. Speed Restrictions and Protections

The maximum speed limit on site shall be limited to 10 km/h.

Vehicle movement routes on site must be clearly indicated where applicable.

Signage to ensure the safe movement of vehicles on site, as well as to ensure the health and safety of all employees and visitors on site, must be displayed in strategic locations.

6.15. Hazardous Chemical Substances (HCS)

All employees required to use Hazardous Chemical Substances or products containing Hazardous Chemical Substances must be adequately and comprehensively trained with regard to the requirements of the Hazardous Chemical Substances Regulations as published in Government Notice No. R. 1179 dated 25 August 1995 and amendments thereto, the potential sources of exposure and the potential risks to their health caused by exposure.

In addition to the abovementioned, Material Safety Data Sheets must be kept on site for all materials, which may contain hazardous chemical substances.

6.16. Plant and Machinery

6.16.1. Construction Plant and Vehicle

All Construction Plant must comply with and be used in conjunction CR 23. All records of inspections rendering such plant safe must be kept on site.

6.16.2. Hired Construction Vehicles Plant and Machinery

The Principal Contractor and Sub-Contractors must ensure that any hired plant and machinery used on site is safe for use.

The requirements as stipulated by The Act and CR must apply.

The Principal Contractor must ensure that operators hired with machinery are competent and that certificates are kept on site in the Site Health and Safety File. All relevant Sub- Contractors must ensure the same.

6.16.3. Vessels under Pressure (VUP)

The Principal Contractor and all relevant Sub- Contractors must comply with the Vessels under Pressure Regulations as published in Government Notice No. R. 1625 dated 4 October

1996 and amendments thereto including:

Allowing for and providing competency and awareness training to the operators;

Allowing for and providing PPE;

Inspecting equipment regularly and keeping records of inspections; and

Allowing for and providing appropriate firefighting equipment.

6.16.4. Earth Moving Vehicles

Drivers of vehicles must be instructed to avoid parking behind earth moving machinery in order to ensure that their vehicles are visible to the operators of earth moving machinery.

Right of way must be afforded to earth moving machinery at all times.

Vehicles must only be permitted to park, where possible, in designated areas.

Drip trays must be kept under earth moving vehicles

Servicing of vehicles will be permitted on a site. No Vehicles or machinery leaking oil will be permitted on site due to the risk posed to the environment. Any oil or diesel spilled on site must be cleaned up as per accepted environmental practice.

6.17. Fire Extinguishers and Fire Fighting Equipment

The Principal Contractor and Sub-Contractors must allow for and provide or ensure adequate provision of regularly serviced temporary firefighting equipment located at strategic points on site.

4.5 kg powder fire extinguishers must be provided on site and the placed with appropriate signage where the risk of fire exists.

6.18. Working at Heights

Working at heights includes any work that takes place in an elevated position more than 1.5 m above the level below.

The Principal Contractor must allow for the preparation of and submit a risk-specific fall prevention plan in accordance with the CR 10 requirements before this work is undertaken.

The fall prevention plan must be included in the health and safety file. Heights above 1.5 meters high must be accessed using a scaffolding. Heights less than 1.5 meters high can be accessed using a ladder. Depths more than 1.5 meters deep must be accessed using a ladder.

6.18.1. Scaffolding

Risk assessment for scaffolding must be carried out before it is used on site.

Competent persons appointed in writing must erect scaffolding (Scaffold Erector/s), Supervise Scaffold and Inspect Scaffolding after erecting, weekly and after inclement weather (Scaffold Inspector/s). Inspection registers must be kept on the safety file.

Scaffolding used on site must comply with the requirements of SANS 10085 standards and the copy of these standards must be available on site.

If there is more than one scaffolding on site; scaffoldings should be numbered to ensure effectiveness of checklists.

6.18.2. Ladders

A risk assessment for ladders must be done.

Ladders used on site must be safe and fitted with nonslip devices. They must be of correct height for the task, fastened and secured and are placed at a safe angle. Ladders used on site must be SABS approved and comply with General Safety Regulation 13A.

Competent person appointed in writing to inspect Ladders. Ladders inspected at arrival on site and weekly thereafter. Inspections register kept.

6.19. Structures and Temporary Works

The Principal Contractor must ensure that the provisions of CR 11 & 12 are adhered to. The Principal Contractor must ensure that the provisions of CR 12 are adhered to.

A competent Temporal Works Designer must design temporary works as per CR 12.1 requirements.

Ground conditions where temporary works structure is to be erected must be tested by a competent person and recommendations implemented.

Temporary works structure must be erected under supervision of a trained and competent Temporal Works Supervisor as per CR 12 (3) (a) who shall ensure that the structure is stable on the ground and support vertical and lateral loads exerted on them without collapse.

Concrete shall only be casted once the Temporal Works Supervisor has authorized in writing.

Temporary works structure must be inspected by the Temporal Works Supervisor after casting concrete and thereafter daily during curing period.

Temporal works shall only be removed once the Temporal Works Supervisor has authorized in writing that the concrete has acquired sufficient strength to support its own weight and imposed loads.

All certificates and inspection records must be kept in the safety file.

6.20. Concrete works

The Principal Contractor shall ensure that safety measures are implemented as per risk assessment during concrete placement. Pouring of concrete should be done under supervision of a competent person and all employees involved in the activity should take reasonable care of their health and safety.

6.21. Lifting Machines and Tackle

The Principal Contractor and Sub-Contractors must ensure that lifting and tackling is conducted in a manner approved by the Engineer. Risk assessment, method statements and safe working procedures must be provided and approved for all lifting and tackling tasks.

The Principal Contractor and Sub-Contractors must ensure that all Tower Cranes operations are in compliance with CR 22 in addition to compliance with Driven Machinery Regulations, 2008.

The lifting equipment must be operated by a competent person who also has the medical fitness certificate.

Annual load testing certificate of the equipment must be provided.

Maximum permissible loads that can be carried by the equipment must be clearly displayed. Test Certificate of all hoisting and shackling equipment not older than three (3) months shall be submitted.

The equipment must be inspected daily for safety.

All certificates and inspection records must be kept on the file.

6.22. General Machinery

The Principal Contractor must ensure compliance with the Driven Machinery Regulations as published in Government Notice No. R. 298 dated 26 February 1988 and amendments thereto, which include inspecting machinery regularly, allowing for and appointing a “Competent Person” to inspect and ensure maintenance, allow for supplying and issuing PPE and allowing for training those who use machinery.

6.22.1. Power tools

Power tools must only be operated by a trained and competent person.

Employees operating power tools must wear suitable PPE i.e boots, ear muffs, goggles and gloves

Employees working in the vicinity of power tools must also be protected from hazards arising from its use i.e. noise hazard.

Daily inspections on the equipment must be conducted on the equipment before use.

6.22.2. Pneumatic Tools

Pneumatic tools must only be operated by a trained and competent person as per manufacturer’s instructions.

Employees operating pneumatic tools must wear suitable PPE i.e boots, ear muffs, goggles and gloves

Daily inspections on the equipment must be conducted on the equipment before use, paying particular attention to ensuring that the air pressure and flow is still as per manufactures specifications

6.23. Portable Electrical Tools and Explosive Powered Tools

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

The Principal Contractor must ensure that all electrical tools, electrical distribution boards, extension leads, and plugs are kept in a safe working order.

The Principal Contractor must allow for and ensure the following:

- That a Competent Person undertakes routine inspections and records are kept on site;
- That only authorized trained persons use the tools;
- That safe working procedures apply;
- That awareness training is carried out and compliance is enforced at all times;
- That PPE is provided and used;

- That a register recording the issue and return of all explosive rounds is implemented and maintained; and
- That signs are erected in the areas where explosive powered tools are being used.

6.24. Hand Tools

Hands tools must be free from cracks and splinters. Their handles must fit securely. Working ends must be sharp and true.

Hands tools must be inspected by a competent person before use.

6.25. Housekeeping

Housekeeping must be implemented on site as per CR 27.

All items of scrap, unsuitable of cuts and rubble are removed from working areas on regular basis.

All hand tools and working material are properly store in designated areas.

The contractor must allow time/ personnel for continuously maintaining good housekeeping. An area designated for temporal storage of rubble should be demarcated.

Large quantities of waste must not be allowed to accumulate on site. Waste must be disposed of in an approved land fill site.

6.26. Waste Management

A waste management plan must be developed.

Waste must be stored on site in a manner that will not create safety hazards.

Separate bins for general and hazardous waste must be provided on site. 120-liter wheelie bins to be used.

Skips must be provided to asbestos temporal storage; they should remain covered. Spill kits must be provided on site.

Drip trays must be provided for keeping under stationery plant.

Waste should be disposed of properly in approved landfill site as per hazard it contains.

7. OCCUPATIONAL HEALTH AND ENVIRONMENTAL MANAGEMENT

7.1. Occupational Hygiene

Occupational exposure is a major problem and all Contractors must ensure that proper health and hygiene measures are put in place to prevent exposure to these hazards.

All Contractors must prevent inhalation, ingestion and absorption of any harmful chemical or biological agents. Control measures for these hazards must be implemented as stipulated in the risk assessment.

Water to be utilized for drinking purposes may only be drawn from taps designated for drinking water purposes. Fire hydrants and fire hose reels may not be utilized for drinking water purposes.

7.2. Environmental Management

The Principal Contractor and Sub-Contractors must take all precautionary steps to prevent any pollution on site. The principal contractor must prepare an environmental management plan to be implemented during execution of his work and include it on the health and safety file.

7.3. Welfare Facilities

The Principal Contractor must allow for and supply:

- Sufficient chemical ablution facilities on site. Separate facilities must be provided for males and females;
- Ablutions must be serviced weekly and slips for servicing must be kept on the file;
- Safe drinking waters must be available for employees;
- Safe, clean storage areas for workers to store personal belongings and personal protective equipment; and
- Employees must not be exposed to hazardous materials/substances while eating and must be provided with sheltered eating areas.

7.4. Alcohol and other Drugs

No alcohol and other drugs will be allowed on site

No person may be under the influence of alcohol or any other drugs while on the construction site.

Any person on the construction site who is on prescription drugs must inform the safety officer or the safety representative accordingly

Any person on the construction site who is suffering from any illness/condition that may have a negative effect on his/her safety performance must report this to the safety officer or safety representative.

Any person on the construction site who is suspected of being under the influence of alcohol or other drugs must be sent home immediately and the instructed to report back the next day for a preliminary inquiry. A full disciplinary procedure must be followed by the Contractor concerned and a copy of the disciplinary action must be forwarded to the Principal Contractor for his records.

8. CLOSE OUT REQUIREMENTS

Upon completion of the project, the Principal Contractor and Sub – Contractors shall submit a well-documented consolidated Health and Safety file (to be in electronic form) to the appointed Health and Safety Agent, confirming the Health and Safety history of the project. The following summary of information is required, to be filed in a disc format, but not limited to:

- Monthly Health and Safety Audits by the Health and Safety Agent;
- Monthly Sub – Contractors Audits by the Principal Contractor;
- Minutes of the Health and Safety meetings;
- Monthly site Health and Safety Reports;
- Incidents, Accidents & Injuries on Duty;
- Workman's Compensation Claims;
- Environmental rehabilitation status; and
- Principal Contractor's/Sub Contractors project Health and Safety File.

Handover of the consolidated health and safety file can only commence once all personnel have been demobilized and nil man-hours are recorded. Electronic submission must be provided to the Health and Safety Agent

The Health and Safety 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.

9. CONCLUSION

This specification outlines the legislative prerequisites and the Client requires that all Contractors comply with the requirements of this document and all other relevant legislative requirements not covered by this document.

The Client or its duly appointed representative reserves the right to stop any Contractor or Sub-Contractor from working whenever Safety, Health or Environmental requirements are being violated. Any resultant costs of such work stoppages will be for the relevant Contractor's account.

The requirements as specified by the Client in this document must not be deemed to be exhaustive and the Client reserves the right to make changes as and if the Client deems fit.

The Client will not entertain any claim of any nature whatsoever which arises as result of costs incurred or delays being experienced due to the Contractor not complying with the requirements of this document and/or any other applicable legislative requirements imposed on the Contractor.

10. HEALTH AND SAFETY DECLARATION

In terms of CR 7(1) (a), a Contractor may only be appointed to perform construction work if the Client is satisfied that the Contractor has the necessary competencies and resources to carry out the work safely in accordance with The Act and CR requirements. In line with this requirement all bidders must sign and return the Health and Safety Declaration in ANNEXURE C with the tender returnable documents.

11. RISK ASSESSMENT METHODOLOGY

To ensure that all work carried out is completed in a safe manner a risk assessment will need to be carried out by the contractor according to the Occupational Health and Safety Act (Act 85 of 1993): Construction Regulations, 2014. Prior to this CIVPRO has carried out a risk assessment to identify the major risks prior to selection or evaluation of the Contractor to ensure that all stakeholders are aware of the risks that prevail.

ANNEXURE A – CONTRACTORS DECLARATION

CONTRACTORS HEALTH AND SAFETY DECLARATION

Project Name: _____

Client: **Development Bank of Southern Africa**

Introduction

In terms of Construction Regulation 7(1) (a) of the Construction Regulations of February 2014, a Contractor may only be appointed to perform construction work if the Client is satisfied that the Contractor has the necessary competencies and resources to carry out the work safely in accordance with the Occupational Health and Safety Act, Act 85 of 1993 and the Construction Regulations of February 2014. In line with this requirement the Contractor is required to read this document carefully, sign it and submit it with his/her Tender.

Declaration

1. I the undersigned hereby declare and confirm that I am fully conversant with the Occupational Health and Safety Act, Act 85 of 1993, the Construction Regulations of February 2014 and the Construction OHSE Specification attached in the tender document.
2. I hereby declare that my company and its employees has the necessary competency and resources to safely carry out the construction work under this contract in compliance with the Occupational Health and Safety Act, Act 85 of 1993, the Construction Regulations of February 2014 and the Construction OHSE Specification.
3. I hereby confirm that adequate provisions have been made in my tender to cover the cost of all Safety, Health and Environmental duties and responsibilities imposed on me by the Occupational Health and Safety Act, Act 85 of 1993, the Construction Regulations of February 2014 and the Construction OHSE specification.
4. I confirm that I may not commence with any part of construction work under the contract until my Construction Safety, Health and Environmental Plan has been approved in writing by the Client.
5. I hereby confirm that copies of the following documentation will be kept on site for viewing and inspection purposes for the duration of the construction work:

- a) Construction OHSE specification;
- b) Approved Construction Health and Safety Plan and File;
- c) Occupational Health and Safety Act, Act 85 of 1993 Late;
and
- d) Construction Regulations of February 2014.

6. I agree that my failure to complete and execute this declaration to the satisfaction of the Client will mean that I am unable to comply with the requirements of the Occupational Health and Safety Act, Act 85 of 1993 and Construction Regulations 2014, and accept that my tender will be rejected.

Duly Signed at Durban on the 09 day of October 2023

Full Name of Signatory

Name of Enterprise

Capacity of Signatory
Bidder

Signature of authorised representative of

Moosa Mahomed



CHSA / 113 / 2021

Signature of CHSA

