

Document No	S-BRA-001-00	HEALTH, SAFETY, ENVIRONMENTAL & QUALITY MANAGEMENT	
Revision	01		
Appointment date	10-Sep-26		
Baseline Risk Assessment AS PER CONSTRUCTION REGULATION 5(1)(a), 2014 OCCUPATIONAL HEALTH AND SAFETY ACT, NO. 85 OF 1993 (Latest Edition)			

ANNEXURE B

**APPOINTMENT OF CONTRACTOR TO EXECUTE AND
COMPLETE THE REMAINING DEFECT WORKS AT MALANGABI,
MANGUZI, MASULUMANE, NYAMANE, SITHEMBINHLANHLA
AND STAR OF THE SEA ABLUTION FACILITIES IN KWAZULU
NATAL ON BEHALF OF DEPARTMENT OF BASIC EDUCATION –
KWAZULU NATAL**

(DETAILS)

This document is prepared in terms of
Construction Regulation 5(1)(a). The Baseline Risk Assessment is conducted to obtain a
benchmark of type and size of potential hazards pertaining to the project.
The aim is to identify all major and significant risks.

**SUPERVISION BY THE CLIENT
DBSA – DEVELOPMENT BANK OF SOUTHERN AFRICA**

**SUPERVISION BY THE PRINCIPAL CONTRACTOR
(TBA)**

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1. OBJECTIVE

The objective of this baseline risk assessment is to identify and categorize the significant health, safety, environmental and quality hazards and risks associated with the construction activities of the project.

This Baseline Risk Assessment is developed in accordance with the requirements of Construction Regulation 5(1)(a) of the Construction Regulations, 2014 issued under the Occupational Health and Safety Act 85 of 1993.

The evaluation of results will assist management to eliminate, minimize or control risks to workers associated with the tasks performed or exposure to the working environment.

The assessment further aims to identify hazards that may arise throughout the lifecycle of the project, including the design, construction, operation, maintenance and decommissioning phases of the infrastructure.

This risk assessment was also conducted to assist management in identifying training needs in order to concentrate efforts where they are mostly needed.

The Baseline Risk Assessment will provide input into the preparation of the project Health and Safety Specification and will inform the Principal Contractor of the significant risks associated with the project.

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2. SCOPE

This Baseline Risk Assessment considers the construction, commissioning and project close-out phases.

The purpose of this assessment is to identify and evaluate potential health, safety, environmental and operational risks that may arise during the construction of the infrastructure project.

The Baseline Risk Assessment is prepared in accordance with the requirements of Construction Regulation 5(1)(a) of the Construction Regulations, 2014 promulgated under the Occupational Health and Safety Act 85 of 1993.

The Baseline Risk Assessment shall assist in:

- Identifying hazards associated with the project.
- Evaluating the potential risks to workers, the public, property and the environment.
- Determining appropriate control measures to eliminate or reduce risks to an acceptable level.

The findings of this Baseline Risk Assessment will inform the preparation of the project Health and Safety Specification and must be communicated to the Principal Contractor to ensure that the identified risks are addressed throughout the project lifecycle.

2.1. PROJECT SPECIFIC SCOPE OF WORKS

This Baseline Risk Assessment is pertaining to the **appointment of contractor to execute and complete the remaining defect works at Malangabi, Manguzi, Masulumane, Nyamane, Sithembinhlanhla and Star of the sea ablution facilities in KwaZulu Natal on behalf of Department of Basic Education. (Project details)**

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The Scope of works will include the following.

The employer aims to complete the all the snags identified in Malangabi, Manguzi, Masulumane, Nyamane Sithembinhlanhla and Star of the Sea. (Refer to the proto type drawings for detailed specifications of work to be done):

1. Malangabi:

Teachers Ablutions

Replace wash hand basin tap x 1

Treat exposed timber with carbolinium or similar

Take down and remove existing roof sheeting and dispose at approved dumping site

Remove and replace roof sheeting, faciaboard and bargeboard (including the accessories)

Existing purlin to be braced. To be done as per the engineer's instruction

Existing Male and Female Ablution

Remove and replace roof sheeting, faciaboard and bargeboard (including the accessories)

Existing purlin to be braced. To be done as per the engineer's instruction

Install new door frames, doors and galvanised burglar doors complete with frames in accordance to specifications, including new ironmongery, door stops, etc.

Treat exposed timber with carbolinium or similar

Install 2 wash hand basins including taps and other plumbing accessories

Grade R Ablutions

Supply and install 100m Clear-Vu fencing and mild steel pedestrian gates.

Treat exposed timber with carbolinium or similar

Install new door frames, doors and galvanised burglar doors complete with frames in accordance to specifications, including new ironmongery, door stops, etc.

6.4mm Gypsum plasterboard with branderings and the necessary accessories and cornices (Total area the needs ceiling ls 4m x 4m)

Take down and remove existing roof sheeting and dispose at approved dumping site

Remove and replace roof sheeting timber purlins, faciaboard and bargeboard (including the accessories)

Install new galvanised steel rainwater goods (gutters , downpipes, etc.) and rainwater tanks

Construction of 100m walkway linking the Existing buildings. To be reinforced 150mm concrete slab. All to be done as per the engineer's specifications

External Works

Demolish the existing ablutions and make good including clearing the pits, compaction and filling of the pits.

Existing buildings: 3m x 4m x 2.5m (one existing buildings)

Demolish the existing ablutions and make good including clearing the pits, compaction and filling of the pits.

Existing buildings: 5m x 3m x 2.5m (one existing buildings)

Demolishing abandoned works found to be unsuitable, removing rubble from site, earthfilling of pits and trenches with suitable material, compacting, and covering area with vegetable soil

2. Manguzi

Grade R

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Supply and connect upvc waste pipe to the pit or the soakaway
 Take out existing floor coverings and screeds internally, replace with new screed
 Install new door frames, doors and galvanised burglar doors complete with frames in accordance to specifications, including new ironmongery, door stops, etc.
 Servicing window hinges, pegstays, stays, catches, etc., fixing and replacing as appropriate, and installation of new window frames and windowpanes
 Install new galvanised steel rainwater goods (gutters, downpipes, etc.) to the tank

Male Ablutions

Remove and re install complete the urinal at the correct height
 Install new galvanised steel rainwater goods (gutters, downpipes, etc.) and rainwater tanks
 Install new galvanised steel rainwater goods (gutters, downpipes, etc.) and rainwater tanks

External Works

Demolish the existing ablutions and make good including clearing the pits, compaction and filling of the pits.
 Existing buildings: 4m x 6m x 3m (Four existing buildings)
 Removal of the existing asbestos on the existing building. Including the asbestos specialist fees
 Demolishing abandoned works found to be unsuitable, removing rubble from site, earth filling of pits and trenches with suitable material, compacting, and covering area with vegetable soil
 Supply and install 70m Clear-Vu fencing and mild steel double swing vehicular gates and pedestrian gates.

Female Block

Take down and remove existing roof sheeting and dispose at approved dumping site
 Remove and replace roof sheeting, faciaboard and bargeboard (including the accessories)
 Instal tank tiers to secure the existing water tank
 Install new galvanised steel rainwater goods (gutters , downpipes, etc.) and rainwater tanks
 instal precast lockable manhole covers (A total 5 covers)
 Install new door frames, doors and galvanised burglar doors complete with frames in accordance to specifications, including new ironmongery, door stops, etc.
 Servicing window hinges, pegstays, stays, catches, etc., fixing and replacing as appropriate, and installation of new window frames and window panes.

Teachers Block

Instal tank riers to secure the existing water tank
 6.4mm Gypsum plasterboard with branderings and the necessary accessories and cornices (Total area the needs ceiling ls 4m x 4m)
 Install new galvanised steel rainwater goods (gutters , downpipes, etc.) and rainwater tanks

Male Ablutions

Install 5 urinals with the necessary assecories
 Install 6 wash hand basins including taps and other plumbing accessories
 Install new door frames, doors and galvanised burglar doors complete with frames in accordance to specifications, including new ironmongery, door stops, etc.
 Servicing windown hinges, pegstays, stays, catches, etc., fixing and replacing as appropriate, and installation of new window frames and window panes

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6.4mm Gypsum plasterboard with branderings and the necessary accessories and cornices (Total area the needs ceiling is 4m x 4m)

Grade R

Take down and remove existing roof sheeting and dispose at approved dumping site
Remove and replace roof sheeting timber purlins, faciaboard and bargeboard (including the accessories)
Install new door frames, doors and galvanised burglar doors complete with frames in accordance to specifications, including new ironmongery, door stops, etc.
Servicing window hinges, pegstays, stays, catches, etc., fixing and replacing as appropriate, and installation of new window frames and window panes
Repair the existing plumbing including the 50mm upvc pipes and the necessary joints
Install tank tiers to secure the existing water tank
Install new galvanised steel rainwater goods (gutters , downpipes, etc.) and rainwater tanks
install precast lockable manhole covers (A total 5 covers)
Supply and install 90m Clear-Vu fencing and mild steel pedestrian gates.

External Works

Demolishing abandoned works found to be unsuitable, removing rubble from site, earthfilling of pits and trenches with suitable material, compacting, and covering area with vegetable soil

3. Nyamane

Female Ablutions

Base steel plate to be bolted to wall with the necessary accessories
Exposed timber beam to be treated with carbolinium
Install new door frames, doors and galvanised burglar doors complete with frames in accordance to specifications, including new ironmongery, door stops, etc.
Take down and remove existing roof sheeting and dispose at approved dumping site
Remove and replace roof sheeting timber purlins, faciaboard and bargeboard (including the accessories)
install precast lockable manhole covers (A total 9 covers)

Teachers and Disabled Ablutions

Exposed timber beam to be treated with carbolinium
Base steel plate to be bolted to wall with the necessary accessories
install precast lockable manhole covers (A total 9 covers)
External and Internal, primer coat as appropriate, first and final painting of walls including filling and repairing cracks to walls, painting of doors windows, exposed trusses and barge & fascia boards
Install 2 wash hand basins including taps and other plumbing accessories
Install new galvanised steel rainwater goods (gutters , downpipes, etc.) and rainwater tanks

Female Ablutions

Install new galvanised steel rainwater goods (gutters , downpipes, etc.) and rainwater tanks
External and Internal, primer coat as appropriate, first and final painting of walls including filling and repairing cracks to walls, painting of doors windows, exposed trusses and barge & fascia boards
Steel plate to be bolted to wall with the necessary accessories

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External Works

Demolish the existing ablutions and make good including clearing the pits, compaction and filling of the pits.
Existing buildings: 4m x 9m x 2.5m (one existing building)
Demolish the existing ablutions and make good including clearing the pits, compaction and filling of the pits.
Existing buildings: 20m x 3.5m x 2.5m (one existing building)

4. Masulumane

Female Block

Take down and remove existing roof sheeting and dispose at approved dumping site
Remove and replace roof sheeting, faciaboard and bargeboard (including the accessories)
Install tank tiers to secure the existing water tank
Install new galvanised steel rainwater goods (gutters , downpipes, etc.) and rainwater tanks
instal precast lockable manhole covers (A total 5 covers)
Install new door frames, doors and galvanised burglar doors complete with frames in accordance to specifications, including new ironmongery, door stops, etc.
Servicing window hinges, pegstays, stays, catches, etc., fixing and replacing as appropriate, and installation of new window frames and window panes.

Teachers Block

Instal tank riers to secure the existing water tank
6.4mm Gypsum plasterboard with branderings and the necessary accessories and cornices (Total area the needs ceiling ls 4m x 4m)
Install new galvanised steel rainwater goods (gutters , downpipes, etc.) and rainwater tanks

Male Ablutions

Install 5 urinals with the necessary assecories
Install 6 wash hand basins including taps and other plumbing accessories
Install new door frames, doors and galvanised burglar doors complete with frames in accordance to specifications, including new ironmongery, door stops, etc.
Servicing windown hinges, pegstays, stays, catches, etc., fixing and replacing as appropriate, and installation of new window frames and window panes
6.4mm Gypsum plasterboard with branderings and the necessary accessories and cornices (Total area the needs ceiling ls 4m x 4m)

Grade R

Take down and remove existing roof sheeting and dispose at approved dumping site
Remove and replace roof sheeting timber purlins, faciaboard and bargeboard (including the accessories)
Install new door frames, doors and galvanised burglar doors complete with frames in accordance to specifications, including new ironmongery, door stops, etc.
Servicing window hinges, pegstays, stays, catches, etc., fixing and replacing as appropriate, and installation of new window frames and window panes
Repair the existing plumbing including the 50mm upvc pipes and the necessary joints
Instal tank tiers to secure the existing water tank
Install new galvanised steel rainwater goods (gutters , downpipes, etc.) and rainwater tanks

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instal precast lockable manhole covers (A total 5 covers)
Supply and install 90m Clear-Vu fencing and mild steel pedestrian gates.

External Works

Demolishing abandoned works found to be unsuitable, removing rubble from site, earthfilling of pits and trenches with suitable material, compacting, and covering area with vegetable soil

5. Sithembinhlanhla

Male Ablutions

Take down and remove existing roof sheeting and dispose at approved dumping site
Remove and replace roof sheeting timber purlins, faciaboard and bargeboard (including the accessories)
Install new internal door frames, doors complete with frames in accordance to specifications, including new ironmongery, door stops, etc. x 4
install precast lockable manhole covers (A total 9 covers)

Teachers and Disabled Ablutions

Take down and remove existing roof sheeting and dispose at approved dumping site
Remove and replace roof sheeting timber purlins, faciaboard and bargeboard (including the accessories)
install precast lockable manhole covers (A total 4 covers)

External Works

Demolish the existing ablutions and make good including clearing the pits, compaction and filling of the pits.
Existing buildings: 5m x 4m x 2.5m (one existing buildings)
Demolishing abandoned works found to be unsuitable, removing rubble from site, earthfilling of pits and trenches with suitable material, compacting, and covering area with vegetable soil

6. Star of the Sea

Female Ablution

Intall stainless steel window 900 x 1200mm and make good around the window
Install tank stand and 2500l Jojo tank and install stays to support the tank
Install UPVC Vent pipes to over lap by 500mm above the roof sheeting
Remove and replace roof sheeting, faciaboard and bargeboard (including the accessories)

Male Ablution

Install the downpipe to the water tank for water storage
Remove and replace roof sheeting, faciaboard and bargeboard (including the accessories)

Teachers and Disabled Ablution

Supply and install the stainless steel disabled rail around the cistern
Construct the 900mm Concrete apron around the building with the sufficiet fall away from the building

Grade R Ablutions

Supply and install pvc disabled signage

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Supply and install the downpipe to connect to the existing tank for water disposal
6.4mm Gypsum plasterboard with the necessary accessories
Connect the water to the main municipal main water line

Removal and repositioning the Electrical Line

Removal and repositioning the Electrical Line above the Ablution and relocation of the timber pole
Application for Repositioning Electrical Line

The Baseline Risk Assessment will be reviewed and updated should significant changes occur in the project scope, design or construction methodology

3. ABBREVIATIONS & DEFINITIONS

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
AIA	- means an Inspection Authority approved by the chief inspector: Provided that an inspection authority approved by the chief inspector with respect to any particular service shall be an Approved Inspection Authority with respect to that service only
Asbestos	- means the following fibrous silicates: ➤ Asbestos actinolite ➤ Asbestos grunerite (amosite) ➤ Asbestos anthophyllite ➤ Chrysotile ➤ Crocidolite ➤ Asbestos tremolite ➤ Any mixture containing these fibrous silicates
Asbestos-containing material	- means asbestos as well as any material that contains asbestos and includes asbestos cement products, asbestos coating, asbestos insulation board, asbestos insulation, asbestos textured decorative coatings, asbestos contaminated soil and other asbestos-containing material

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Asbestos Demolition Work	- means demolition, alteration, stripping, removing, repair, gleaning of any spilt asbestos, or high-pressure water jetting of any structure containing asbestos lagging or insulation, but does not include work performed on asbestos cement sheeting and related products and asbestos cement products that form part of the structure of a workplace, building, plant or premises.
Asbestos dust	- means airborne or settled dust, which contains or is likely to contain regulated asbestos fibers
Asbestos Waste	- means an undesirable or superfluous asbestos-containing by-product, emission or residue of any process or activity that has been – ➤ discarded by any person ➤ accumulated and stored by any person with the purpose of eventually discarding it with or without prior treatment connected with the discarding thereof; or ➤ stored by any person with the purpose of recycling, re-using or extracting a usable product from such matter
Asbestos Work	- means work that exposes or is likely to expose any person to asbestos dust.
Client	- means any person for whom construction work is performed
Competent Person	- means any person having the knowledge, training, experience and qualifications specific to the work or task being 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 - ➤ the construction, erection, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure; or ➤ 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

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Designer	- means ➤ a competent person who- ○ prepares a design. ○ checks and approves a design. ○ 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 ○ designs temporary work, including its components. ➤ an architect or engineer contributing to, or having overall responsibility for a design ➤ a building services engineer designing details for fixed plant ➤ a surveyor specifying articles or drawing up specifications ➤ a contractor carrying out design work as part of a design and building project; or an interior designer, shopfitter or landscape architect.
DBSA	- Development Bank of Southern Africa
DSTI	- Daily Safety Task Instruction
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 ➤ all risks relating to working from a fall risk position, considering the nature of work undertaken ➤ the procedures and methods to be applied in order to eliminate the risk of falling; and ➤ a rescue plan and procedures.
Fall arrest equipment	- means equipment used to arrest a person in a fall, including personal equipment, a body harness, lanyards, deceleration device, lifelines or similar equipment
Fall prevention equipment	- means equipment used to prevent persons from falling from a fall risk position, including personal equipment, a body harness, lanyards, lifelines, or physical equipment such as guardrails, screens, barricades, anchorages or similar equipment
Fall risk	- means any potential exposure to falling either from, off or into
Health and Safety File	- means a file, or other record containing the information in writing required by 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

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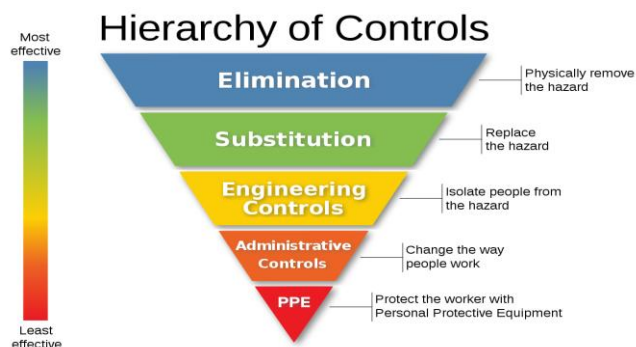
Health and Safety Specification	- means a site, activity or project specific document prepared by the client pertaining to all health and safety requirements related to construction work
HCS	- Hazardous Chemical Substances
HBA	- Hazardous Biological Agents
HIRA	- Hazard Identification Risk Assessment
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
MSDS/SDS	- means material safety data sheet / safety data sheet for hazardous chemicals
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
PSP	- Professional Service Provider
PPE	- Personal Protective Equipment
PTO	- Planned Task Observation
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.
Shoring	- means a system used to support the sides of an excavation and which is intended to prevent the cave-in or the collapse of the sides of an excavation or trench
Structure	- means ➤ any building, steel or reinforced concrete structure (not being a building), railway line or siding, bridge, waterworks, reservoir, pipe or pipeline, cable, sewer, sewage works, fixed vessels, road, drainage works, earthworks, dam, wall, mast, tower, tower crane, bulk mixing plant, pylon, surface and underground tanks, earth retaining structure or any structure designed to preserve or alter any natural feature, and any other similar structure ➤ any falsework, scaffold or other structure designed or used to provide support or means of access during construction work; or

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	➤ 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
Service Provider	- means an employer appointed by the client to perform construction work
SACPCMP	- means the South African Council for the Project and Construction Management Professions
SOP / SWP	- Standard Operating Procedure / Safe Working Procedure
Temporary works	means any falsework, formwork, support work, scaffold, shoring or other temporary structure designed to provide support or means of access during construction work
Definitions to understand under Control Measures	
Elimination	The Most satisfactory method of dealing with hazards is to remove it in complete (get rid of it). Once a hazard is eliminated the potential for harm is removed
Substitution	This involves substituting a dangerous process or substance with one that is not as dangerous
Isolation	Separate or Isolate the Hazards from making contact with people
Engineering	Implement Engineering controls to eliminate or reduce the risk
Administrative	Administrative control usually involves modification of the likelihood of an accident happening. This is done by reducing the number of people exposed to the hazard and ensuring those that remain exposed to a hazard understand the hazard and the best way to manage the hazard. Administrative controls include – Procedures, Signages, Permits etc.
PPE	Provision of Personal Protective Equipment should only be considered if all the other control measures are impractical.



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4. RISK METHODOLOGY

This risk assessment methodology is used to systematically identify hazards, evaluate associated risks and determine appropriate control measures to eliminate or reduce the risks to an acceptable level.

The methodology follows the principles of hazard identification and risk assessment in accordance with the Occupational Health and Safety Act 85 of 1993 and the Construction Regulations, 2014.

The purpose of this methodology is to:

- Identify hazards associated with project activities
- Determine the potential consequences of these hazards
- Evaluate the likelihood of the risk occurring
- Determine the risk rating
- Implement appropriate control measures

The risk assessment process also supports the application of the hierarchy of controls to eliminate or reduce hazards at source where reasonably practicable.

4. RISK METHODOLOGY

ASSESSMENT				RISK MATRIX						RISK CALCULATION	PRIORITY OF ACTION		
I	INJURY SEVERITY	C	FINANCIAL IMPLICATIONS	26	27	28	29	30	SUM OF: INCIDENT / FINANCIAL / DAMAGE / ENVIRONMENTAL / FREQUENCY / PROBABILITY = RISK VALUE	RISK VALUE		25 - 30	Immediate
1	No injury	1	No [Zero] financial implications	21	22	23	24	25				24 - 21	Within 1 week
2	Minor laceration, contusion or wound (first aid case)	2	R1000 - R9999	16	17	18	19	20				20 - 17	Within 1 month
3	Injury requiring medical assistance <14 Days recover	3	R10 000 - R99 999	11	12	13	14	15				16 - 09	Within 6 months
4	Serious injuries, trauma >14 Days recovery	4	R100 000 - R499 999	6	7	8	9	10				08 - 05	Within 12 months
5	Loss of life [Fatality]	5	>R500 000	1	2	3	4	5				01 - 04	As reasonable
D	POTENTIAL DAMAGE / LOSS	E	ENVIRONMENTAL IMPACT	ACTION REQUIRED							CONSIDER		
1	No damage	1	No effect	Critical			Terminate operation / Competent Supervision / Specialist training / Method Statement / Risk assessments / Safe work procedures / Permits				Intolerable: Change method / Terminate Risk		
2	Minor damage	2	Minor effect										
3	Med. damage/loss, short stoppage (repaired on site)	3	Serious effect (Short Term)	High			Competent Supervision Training / Certification Method Statement / Risk assessments / Safe work procedures Planned task observations / Toolbox talks				Change method Transfer Risk Mitigate		
4	More serious damage/loss & delay	4	Very serious effect (Long Term)										
5	Severe damage/loss & long-term delay	5	Catastrophic effect										
P	PROBABILITY	F	FREQUENCY OF OCCURRENCE	Medium			Competent Supervision / Training / Certification / Method Statement / Risk assessments / Safe work procedures / Planned task observations / Toolbox / Safety talks				Change method Mitigate		
1	Event has never occurred probability of <1%	1	No occurrence										
2	Events have probability of between 1% and <25%	2	Occurs very seldom [5 Years]										
3	Event has probability of between 25% and <50%	3	Occurs occasionally [1 Year]	Low			Supervision / Training / Certification / Method Statement / Risk assessments / Safe work procedures / Training / Toolbox / Safety talks				Written Instructions		
4	Event has probability of between 50% and <90%	4	Occurs often [Monthly]										
5	Event occurs frequently & >90% of re-occurring	5	Could / Has Happened [Weekly/Daily]										

```
graph TD; A[The risk assessment process focuses on the identification of hazards and the evaluation of associated risks related to the project activities. Hazard identification is a critical step, as hazards not identified at this stage may not be addressed in subsequent phases, potentially resulting in harm to persons, property, the environment, or project performance..] --> B[Determine: Hazards/Aspects - directly responsible for the event occurring including design, process, environmental, human and organisational factors]; A --> C[Determine: Consequences - follows from the occurrence of an event and results in a loss or gain occurring.]; B -- AND --> C; B --> D[List existing Preventative controls  
Controls that will prevent risks from occurring and are attached to the risk and its hazards and reduce the likelihood of the risk occurring.  
Consider:  
• Design controls  
• Safety devices  
• Signs & signals  
• Admin controls  
• Human behaviour]; C --> E[List existing - Corrective controls  
Controls that will assist in recovering from an adverse incident and are attached to the consequence - they assist in reducing the impact of a risk.  
Consider:  
• Design controls  
• Safety devices  
• Signs & signals  
• Admin controls  
• Human behaviour]; D --> F{Manageable Risk level}; E --> F; F -- Yes --> G[ ]; F -- No --> H[ ];
```

The risk assessment process focuses on the identification of hazards and the evaluation of associated risks related to the project activities. Hazard identification is a critical step, as hazards not identified at this stage may not be addressed in subsequent phases, potentially resulting in harm to persons, property, the environment, or project performance..

Determine:
Hazards/Aspects - directly responsible for the event occurring including design, process, environmental, human and organisational factors

Determine:
Consequences - follows from the occurrence of an event and results in a loss or gain occurring.

AND

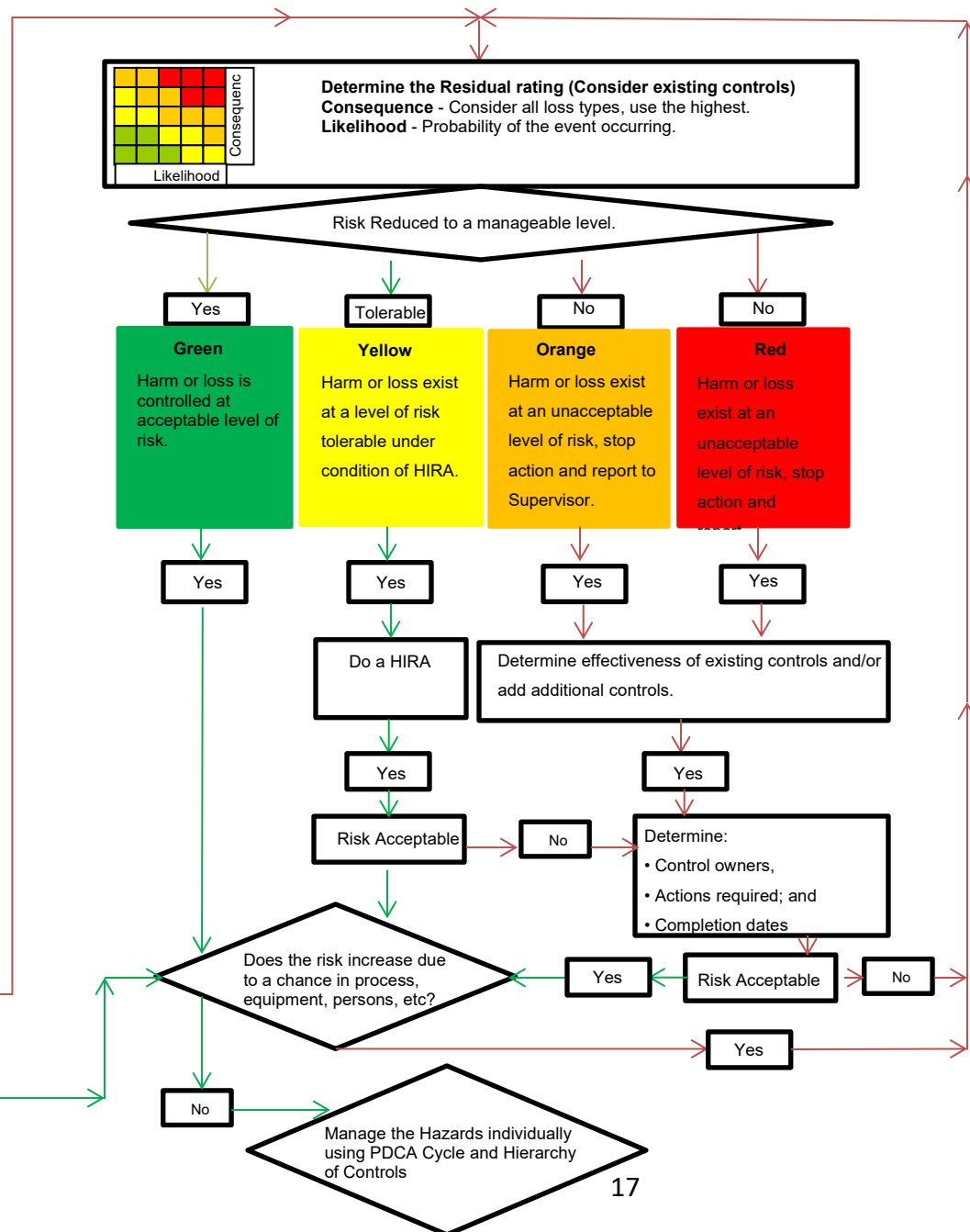
List existing Preventative controls
Controls that will prevent risks from occurring and are attached to the risk and its hazards and reduce the likelihood of the risk occurring.
Consider:
• Design controls
• Safety devices
• Signs & signals
• Admin controls
• Human behaviour

List existing - Corrective controls
Controls that will assist in recovering from an adverse incident and are attached to the consequence - they assist in reducing the impact of a risk.
Consider:
• Design controls
• Safety devices
• Signs & signals
• Admin controls
• Human behaviour

Manageable Risk level

Yes

No



6. BASELINE RISK ASSESSMENT

ACTIVITY (Work to be performed)		POTENTIAL HAZARD (Injury / Damage / Loss)	POSSIBLE RISK (Type injury/damage/loss)	RISK EVALUATION							PREVENTATIVE MEASURES	CONTROLS (Registers, Policies, Procedure)	RESIDUAL RISK							
				I	C	D	E	P	F	R			I	C	D	E	P	F	RR	
Stage 5 – Construction Documentation and Management																				
S5-01	File Approval as per OHS Requirements and Client Specification	Work commencing prior to file being available and approved. No valid registration with COIDA. Expired Documentation (e.g. competencies, equipment load test, medicals, work permits) Documentation not available or approved as per required Client Spec and OHS act.	Non-Conformances issued or Default letters issued could result in termination of non-compliant contractors that would result in project delays or cancelation Contractors with no valid COID could cause injured employees not to be covered by the compensation fund, this will lead to direct and indirect cost to the company	1	4	3	2	4	4	18	No Work may commence until the Health and Safety Plan has been approved in accordance with client requirements. Client Health and Safety Specification provided to each Principal Contractor or Contractor. Baseline Risk Assessment provided to each Principal Contractor or Contractor Principal Contractor with valid LOGS (COID) shall be allowed to commence with Site Establishment. LOGS must be presented at tender stage to prohibit a contractor to be awarded with a tender if LOGS is not available. Principal Contractor to provide updated list of employees, with competencies, ID's, Medicals and work permits if required	- Health and Safety Plan / file approval letter - Copy of Health and Safety Plan - Copy of LOGS - Valid Competencies, appointments, medicals, work permits etc. - Site Establishment plan / layout	1	3	2	2	2	2	12	
S5-03	Notifying Department of Employment and Labour of Construction works	Principal Contractor commencing with works without Notifying Department of Employment and Labour	Contravention of the OHS Act and its Regulations could result in fines and work stoppages	1	3	3	3	3	4	17	NOC to be submitted by Principal Contractor at least 7 days before commencement of works to the DoEL for all 6 schools under this RFP.	- Annexure 2 - Proof of submission to DoEL	1	3	2	2	2	3	13	
S5-04	Risk Identification	Risk assessments not conducted, not site-specific, or performed by an incompetent person	Failure to conduct suitable and sufficient risk assessments may result in hazards not being identified, leading to serious injuries, fatalities, inadequate control measures and unsafe working conditions	4	4	4	4	3	3	22	Issue based Risk Assessment must be developed by a competent risk assessment team that includes the risk assessor, construction manager and supervisor, SHE Rep and relevant skilled employees. All risk assessments, method statements and safe working procedures must be communicated to the required employees conducting those activities. Record of communication / training must be kept in Safety file. No Activity to commence if risk assessment	- Client Health and Safety Specification - Baseline Risk Assessment - Method Statement of Tasks - Risk Assessor competency - Issue based risk assessments - Training / communication records - SOP/SWP - Risk Assessment	4	4	3	3	2	2	18	

ACTIVITY (Work to be performed)		POTENTIAL HAZARD (Injury / Damage / Loss)	POSSIBLE RISK (Type injury/damage/loss)	RISK EVALUATION							PREVENTATIVE MEASURES	CONTROLS (Registers, Policies, Procedure)	RESIDUAL RISK						
				I	C	D	E	P	F	R			I	C	D	E	P	F	RR
											and method statement has not been approved by the relevant person.	training							
											All risk assessments and method statements must be reviewed if any changes occur, such as change of management, changes to conditions, changes to scope, incidents etc.								
											Competent Risk Assessor to use hierarchy of controls when identifying controls to be implemented								
											No work may commence unless a suitable and sufficient risk assessment and method statement has been developed, approved and communicated to all affected person								
S5-05	Site Establishment - Setting up Camp & Storage Facilities & Project Mobilization of Plant and Equipment	Abnormal loading of trucks	Unsafe or abnormal loading could cause accidents that could lead to multiple fatalities.								Trucks must be loaded within their safe load capacity in accordance with the manufacturer specifications.	• Safe Workload Certificate or Certificate of Compliance for Lifting equipment • Traffic Management Plan • Lifting Plan • Appointment letters • Competencies – Operators, truck driver, flagperson, riggers • Pre-lift checklists • Safe Working Procedures • Issue based risk assessment • Approved method statement • DSTI • Emergency contact numbers							
		Traffic congestion / unwanted(unauthorized) members of the public walking in risk zone	Loaded truck uncontrolled movement on site can cause an accident resulting in serious injuries to operators and members of the public and damages to surrounding property.								Appointed spotter (flag person) to be in position wearing reflective vest and whistle to assist Truck driver or Plant operator with movement on site.								
		Containers placed on uneven surfaces.									Traffic Management Plan must be communicated to all relevant parties to ensure controls are implemented.								
		Using defective / incorrect equipment to offload containers.									Clear all bystanders away from operations – Barricade area and post warning signage – Only Authorized workers/persons to enter construction area.								
		Fatigued operators	Containers falling over or off from stands/bricks could cause property damages.	5	5	4	3	3	4	24	Appointed competent Banksman (Rigger) to oversee all lifting operations.								
		Unsafe / uncontrolled Truck Crane Operations	Load / construction materials falling during lift could cause property damage or serious injuries or even fatalities.								Pre-lift checks to be done on lifting material, and recorded on a Checklist, any deviations must be recorded and reported to Construction manager.								
		Unsafe and poor manual offloading practices from delivery vehicles / plant									Slings and chain blocks to be checked prior								
		Operators under the influence of Alcohol or other substances while transporting machinery and equipment to site	Fatigued operators could																

ACTIVITY (Work to be performed)	POTENTIAL HAZARD (Injury / Damage / Loss)	POSSIBLE RISK (Type injury/damage/loss)	RISK EVALUATION							PREVENTATIVE MEASURES	CONTROLS (Registers, Policies, Procedure)	RESIDUAL RISK						
			I	C	D	E	P	F	R			I	C	D	E	P	F	RR
	establishment area.	lead to accidents resulting in damage to plant or vehicles and serious injuries or fatalities.								lifting operations and have valid load test certificate. Lifting truck to also be in possession of a load test certificate and driver to be appointed in writing with valid competency.								
	Theft of material, equipment, and machinery	Unsafe / uncontrolled lifting could result in load falling that could lead to property damage and serious injuries.								Social facilitators to ensure community are aware of Construction work before Site establishment.								
	Community unrest	Materials / Load falling could result in property damage.								Only Competent appointed Contractors or Service Providers will be authorized to work on the site.								
		Materials / Load falling on employees could lead to serious injuries and even fatalities.								Dust Control measures to be implemented continuously at the site laydown area, watering the areas and roads on site.								
		Project Interruption and even delays with cost implications								All operators must be appointed to operate and inspect the specific plant he is competent in operating, medical fitness and competencies for operators must be valid and available on site.								
										Site Establishment Risk Assessment and Safe working Procedure / Method Statement to be communicated to all workers								
										If it is a live site, provide a separate gate or access to the site.								
										Construction Manager and Supervisors must ensure continuous monitoring and enforcement of all control measures on site								
S5-06	Site Establishment -	Dust from plant used to clean and level areas.								Water Truck to be used to spray working areas in order to suppress dust.	• Operators' Competency • Roadworthy Certificates • Driver's License • PDP							
	Site clearing / Grubbing	Poor Visibility	4	4	3	3	3	3	20	Speed limit to be adhered to at all times while clearing the site.	• Appointment letters • SOP/SWP • Issue based Risk Assessment	4	4	2	2	2	2	16
		Collisions																
		Incompetent operator / not																

ACTIVITY (Work to be performed)	POTENTIAL HAZARD (Injury / Damage / Loss)	POSSIBLE RISK (Type injury/damage/loss)	RISK EVALUATION							PREVENTATIVE MEASURES	CONTROLS (Registers, Policies, Procedure)	RESIDUAL RISK						
			I	C	D	E	P	F	R			I	C	D	E	P	F	RR
S5-08	Excavation Works - Excavating by hand	medically fit Unsafe / broken or mobile plant not roadworthy								Continuous Supervision must be maintained with appointed flag persons assisting the operators while moving on site. Workers to stand clear from moving machinery when clearing and grubbing takes place. Only competent operators with valid competency to be appointed with a valid Occupational Health Medical (Annexure 3) will be allowed to operate mobile plant. Pre-start inspections to be conducted, records to be kept in safety file. All operators must be trained in the safe working/operating procedures and the issue-based Risk Assessment Only construction vehicles and mobile plant that are roadworthy (records must be available) may be used for construction activities and for transporting materials etc. Construction Manager and Supervisors must ensure continuous monitoring and enforcement of all control measures on site	- Medical Certificate of Fitness - Checklist - DSTI's							
		Accidents causing property damage and Accidents causing serious Injuries or even fatalities. Poor Visibility could cause the operators to collide with surrounding property. Operator not competent or medically fit operating plant could cause serious accidents leading to property damage and even fatalities. Operating plant that is unsafe or not roadworthy could cause accidents that may result in serious disabling injuries or even fatalities Colliding with property or other plant or vehicles will result in financial losses and delays in production																
S5-08	Excavation Works - Excavating by hand	Damages to underground services Poor ergonomics used. Unsafe damaged hand tools used. Exposure to Heat and Sun								Approved Drawings must be utilized to identify existing services. All Excavation work must be supervised by a competent person appointed. Employees must be trained in the ergonomics safe working procedure and Risk Assessment. Employees must take regular breaks to prevent strain on their backs.	- Checklists - Issue Based Risk Assessment - SOP/SWP - Method Statement - Toolbox talks - DSTI's - PTO - Underground services drawings							
		Employees manually excavating and making contact with underground services could cause disruptions in services in surrounding areas. Damage to Property Employees manually excavating and making	4	4	3	3	3	4	21			3	4	2	2	3	3	17

ACTIVITY (Work to be performed)		POTENTIAL HAZARD (Injury / Damage / Loss)	POSSIBLE RISK (Type injury/damage/loss)	RISK EVALUATION							PREVENTATIVE MEASURES	CONTROLS (Registers, Policies, Procedure)	RESIDUAL RISK										
				I	C	D	E	P	F	R			I	C	D	E	P	F	R				
		Dust generated from picks and shovels used when excavated	contact with underground services could lead to employee being electrocuted.									All hand tools must be inspected, and the findings recorded in the safety file. Damaged tools must be removed from site.	• Medical Certificate of Fitness										
		Excavation Collapses	Employees exposed to manual excavating for long periods could lead to minor to moderate back injuries.									Employees need to take regular breaks when working in the sun to prevent sunburn. Employees need to drink enough water to stay hydrated.											
			The use of unsafe or damaged hand tools could cause head, bodily and hand injuries.									Employees manually excavating must be issued with the required PPE.											
			Employees exposed to working long periods of time in the sun could lead to long term/short term skin damage, this could include skin cancer, heat stroke and dehydration resulting in serious injuries.									All excavation walls must be shored or braced and must be approved by appointed / competent excavation supervisor. All excavated materials must be placed at least 1.5 – 2m away from any excavation edge											
			Excessive dust could result in Occupational illnesses such as hypersensitivity pneumonitis to the exposed employees excavating									Water truck to be used daily or as per issue-based risk assessment to spray all roads with water to suppress the dust											
			Excavation collapsing could result in employees excavating to be trapped by collapsed walls leading to serious injuries even fatalities																				
S5-09	Excavation Works - Excavating by Machinery / Plant	Workers standing / walking or working near mobile plant operations.	Employees working / standing or walking past operational plant /	5	5	4	3	3	3	23	Traffic control measures to be implemented to prevent collision of mobile plant as well as collision with personnel. Appointed Flag	• Issue-based Risk Assessment • Method Statement	4	4	3	2	2	3	18				

ACTIVITY (Work to be performed)	POTENTIAL HAZARD (Injury / Damage / Loss)	POSSIBLE RISK (Type injury/damage/loss)	RISK EVALUATION							PREVENTATIVE MEASURES	CONTROLS (Registers, Policies, Procedure)	RESIDUAL RISK						
			I	C	D	E	P	F	R			I	C	D	E	P	F	R
such as TLB's, Excavators, Ditch witch	Operator incompetent and not appointed.	being struck by or being driven over resulting in disabling injury or even fatality.								person to control movement of plant within areas.	• SOP/SWP • Appointment letters • Competency for operators, excavation supervisor • Underground services drawings • Checklists • Signages • DSTI's • PTO • Breathalyzer records / register • Medical Certificate of Fitness							
	Unsafe / damages Mobile Plant / machinery used to excavate.	Incompetent operators operating mobile plant / machinery could result in accidents, property damages and even serious injuries and/ or fatalities to surrounding employees.								Only competent / Appointed operators authorized to operate machinery (must have valid Competency, medical and PDP) will be allowed to operate mobile plant.								
	Mobile plant / machinery operating near unprotected edge of an open trench / excavation.	The use of unsafe damaged mobile plant / machinery used could result in property damage and delays in production.								Machinery must be inspected before use, findings to be recorded on a checklist, any deviations must be recorded and reported to a supervisor. Service / maintenance schedule / history must be available for the specific machinery.								
	Operator intoxicated.									All operators must be breathalyzed daily to test if they are intoxicated.								
	Unsuitable ground conditions for excavation									Before excavation work begins the stability of the ground must be evaluated by a competent person appointed (Excavation Supervisor).								
	Dust generation									Dust suppression methods to be used when required such as water truck spraying area								
	Excessive noise generation (especially during rock breaking)									Operators must be issued with the required PPE such as dust masks, earplugs if required.								
	Open Excavations left open or unattended.									Scanning devices to be used to identify underground services prior excavation works, in order to prevent cable damage and possible electrocution.								
	Damage to existing services during excavations									All Deep trenches or excavations must be braced or shored to prevent collapse if mobile plant or machinery operates near the trench or excavation. Bracing and Shoring must be supervised and approved by appointed excavation supervisor								
										Mobile plant and machinery shall not be								

ACTIVITY (Work to be performed)	POTENTIAL HAZARD (Injury / Damage / Loss)	POSSIBLE RISK (Type injury/damage/loss)	RISK EVALUATION							PREVENTATIVE MEASURES	CONTROLS (Registers, Policies, Procedure)	RESIDUAL RISK						
			I	C	D	E	P	F	R			I	C	D	E	P	F	RR
S5-10										operated within 5m of any open excavation or trench. Unless declared safe by appointed competent person and that the excavation or trench does not have any employees working in the open trench or excavation Construction Manager and Supervisors must ensure continuous monitoring and enforcement of all control measures on site								
	Excavation Works - Barricading of excavated areas and warning signages posted	Deep open excavations, trenches or open edges left unprotected. No warning signages posted Unauthorized entry	5	4	4	3	3	3	22	Excavations must be guarded/barricaded/lighted after dark in public areas and when there is no work conducted. All excavations are subject to daily inspections by a competent appointed person. Excavations must be kept open for the minimum required duration and must not be left open unnecessarily and unattended. Warning signages to be posted at all excavated areas to warn the other employees or members of the public of the risk.	- SOP/SWP - Issue based Risk Assessment - Toolbox talks - Checklist - DSTI's	4	4	2	2	2	2	16

ACTIVITY (Work to be performed)		POTENTIAL HAZARD (Injury / Damage / Loss)	POSSIBLE RISK (Type injury/damage/loss)	RISK EVALUATION							PREVENTATIVE MEASURES	CONTROLS (Registers, Policies, Procedure)	RESIDUAL RISK						
				I	C	D	E	P	F	R			I	C	D	E	P	F	RR
			excavation, and this could lead to them falling into excavation resulting in serious injuries or even a fatality Unauthorized entry by members of the public / children could result in members / children / visitors falling into open trenches or excavations. This could result in serious bodily injuries. During raining season this could result in members, children or visitors to drown when falling into or playing in open trenches and excavations								Open trenches or excavations must be secured / closed off with a solid barricading. No Danger tape is allowed								
S5-11	Lifting operations (Loading and offloading of materials) - Manual handling / loading and offloading (Ergonomics)	Employees lifting heavy uncontrolled materials. Employees not trained in safe manual lifting procedures. Materials / equipment falling. Walkways not clear of tripping hazards.	Employees manual handling materials / equipment exceeding 25kg per person could cause minor back strains and even long-term back injury. Employees not understanding the safe procedure to lift (Ergonomics) materials could result in injuries such as back injury or materials to fall resulting in property damages. Materials / equipment falling when loading or offloading could lead to pinch point injuries to hands, fingers, and feet.	4	3	3	1	4	5	20	Manual handling / lifting Safe work Procedure and Risk Assessment must be communicated to all workers on site. (Keep proof of communication in safety file) Workers assisting each other to lift must communicate with each other to ensure safe lifting and lowering of items. Before offloading or handling any materials, equipment or tools, ensure walkways are clear and free from tripping hazards. Workers to assist each other if intended load to be lifted exceeds 25kg (per person). Workers / Supervisors must ensure materials, equipment and tools are secured during offloading activities. When manual lifting the correct procedure must be used, workers to lift loads using their legs and not their back.	- Ergonomics Risk Assessment - SOP/SWP - Toolbox talks - DSTI's	3	2	2	1	3	4	15

ACTIVITY (Work to be performed)		POTENTIAL HAZARD (Injury / Damage / Loss)	POSSIBLE RISK (Type injury/damage/loss)	RISK EVALUATION							PREVENTATIVE MEASURES	CONTROLS (Registers, Policies, Procedure)	RESIDUAL RISK																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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S5-14			Workers tripping over hazards when moving with load could cause load to fall and employees to fall over resulting in bodily injuries								Employees manually lifting equipment, materials must be issued with the required PPE such as gloves, hardhat, safety shoes, overalls																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															</

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				I	C	D	E	P	F	R			I	C	D	E	P	F	RR						
			to fail / breakdown resulting in loss of production/time									switched off and the ignition key removed and stored safely. Operators must adhere to prescribed speed limits both on site and on public roads. All drivers must be appointed and must have a valid driver's license and PDP/Competency certificate. Vehicles or plant not to exceed the prescribed weight limit of the plant or vehicle. Construction Vehicle to be Fitted with adequate signaling devices to make movement safe including reversing; Fitted with two head and two taillights that are in good working condition whilst operating under poor visibility conditions. No loose tools, material etcetera is allowed in the driver and/or operators compartment/cabin nor in the compartment in which any other persons are transported. The construction site must be organized to facilitate the movement of construction vehicles and mobile plant in such a manner that pedestrians and other vehicles are not endangered. Traffic routes to be suitable, sufficient in number and adequately demarcated.													
	S5-15	Hot Work Activities – Grinding, Cutting, Welding, Flame Cutting, drilling and soldering (Including Gas and Electrical cutting and welding	Employees not trained to operate machinery. Unsafe/Damaged tools and equipment used – No Flashback arrestors – No Guards on machinery. Employees making contact with hot surfaces.	Untrained or incompetent employees operating machinery or conducting hot work activities could lead to serious injuries and even a fatality. Using tools and equipment that are damaged or unsafe or	5	5	4	3	4	4	25	Only competent workers with the required skills and knowledge shall be appointed to operate such machinery like grinders, welding machines, cutting torch etc. Gas cylinders must be safely stored, secured, in an upright position and kept in a cool, designated and locked in storeroom. All hot work activities must be conducted in an enclosed, controlled place away from	• Training records / competencies • SOP/SWP • Issue based Risk Assessment • Method Statements • Medicals fitness to work • Checklists • Signages • Appointment letter	4	4	3	2	3	3					19	

ACTIVITY (Work to be performed)	POTENTIAL HAZARD (Injury / Damage / Loss)	POSSIBLE RISK (Type injury/damage/loss)	RISK EVALUATION							PREVENTATIVE MEASURES	CONTROLS (Registers, Policies, Procedure)	RESIDUAL RISK							
			I	C	D	E	P	F	R			I	C	D	E	P	F	RR	
	Uncontrolled Sparks, open flames or hot metals causing fire.	does not have the required guards in place could lead to an accident when cutting or grinding resulting in injuries to bodily parts.								public and employees conducting other activities. Welding screens to be placed at welding areas and solid barricading used to close off areas.	• DSTI's								
	Incorrect storage of Gas Cylinders	Making contact with hot surfaces when or after conducting hot works can lead to serious burns.								All equipment used for Hot works must be inspected before use, all findings to be recorded on a checklist and any deviation must be recorded and reported to a supervisor, all guards must be in place and correct blades/ discs or drill bits to be used.									
	Operators not wearing the required PPE.	Uncontrolled sparks could cause a fire resulting in property damages and harm to the environment.								If conducting hot works near flammable materials or the bush, spark containment must be used, for example fire blankets, welding screens and wetting the areas with water.									
	No Fire prevention controls available.	Unsafe storage of gas cylinders could cause cylinders to fall over causing gas leaks and a possibility of explosion resulting in serious damages to property and resulting in multiple fatalities.								Fire extinguishers must be placed near areas where hot works are conducted, and a trained competent appointed fire fighter to be available onsite.									
	Hot work area not closed off / barricaded / no welding screens and no warning signages displayed within this area.	Conducting hot work without the required PPE could cause injuries to bodily part or face.								SABS approved PPE to be issued and used on site. Task specific PPE is required for Hot work activities, for example welding helmet, face shield when cutting, safety glasses, dust masks, welding apron etc.									
	Incorrect fittings / attachments or component used when operating machinery.	No fire prevention controls could cause an uncontrolled fire resulting in damages to property (including neighboring property) and serious harm to the environment.								No Overhead Hot works will be allowed, if Hot work is required at height, it should be done from an approved scaffold or MEWP. Then the area below should be barricaded to prevent workers from entering that area.									
	Overhead Hot work operations									Hot work will not be allowed in wet conditions, electrical cables must be made safe and free/away from water sources.									
	No firefighting equipment or fire fighter available									All cylinders used onsite must be fitted with the correct fittings and clamps when connecting the hoses. All gauges must be in good working condition.									
	Flammable and explosive chemicals stored near hot work area.																		

ACTIVITY (Work to be performed)		POTENTIAL HAZARD (Injury / Damage / Loss)	POSSIBLE RISK (Type injury/damage/loss)	RISK EVALUATION							PREVENTATIVE MEASURES	CONTROLS (Registers, Policies, Procedure)	RESIDUAL RISK																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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S5-16			Hot work area not controlled / closed off or no welding screens could cause injuries to unauthorized employees or members of the public. Operating machinery without the required fittings / attachments or components could cause the machinery to break, resulting in injuries to the operator. Overhead hot work activities could cause harm / injuries to employees below or cause a fire resulting in property damage No fire fighter or firefighting equipment on site could cause an uncontrolled fire resulting in damage to property and harm to the environment Sparks from hot work activities could cause fire or even explosions at flammable storage area resulting in serious property damage and even fatalities									All new vessels must be checked for leaks, leaking vessels should NOT be used. Equipment must be identified/numbered and entered into a register. (Soap Test to be done) All workers conducting Hot work activities must be trained on the safe working procedures and issue-based risk assessments																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								

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			I	C	D	E	P	F	R			I	C	D	E	P	F	RR
	Employees not trained on erecting and dismantling of scaffold.	on employees below resulting in serious head or bodily injuries.								Scaffold must be inspected by a competent person (valid Competency) whom has been appointed every time before use.	• SOP/SWP • Checklists • Appointment letter – Scaffold Erectors, Scaffold Inspectors, Scaffold Supervisor							
	Erecting scaffold on uneven or unstable ground	Scaffold collapse could also cause scaffold erectors to fall from height resulting in serious injuries or even a fatality.								Scaffold must be inspected before use, findings must be recorded on a checklist	• Competencies • Work at Height training certificate • Medical fitness to work at height							
	Scaffold materials falling while erecting or dismantling.									Scaffold must be fully erected according to SANS 10085 Standards, if scaffold is not fully erected or components missing, it must be dismantled or declared unsafe to use.	• SWL / CoC for fall protection equipment • Fall Protection Plan • DSTI's							
	Unsafe stacking and storage of scaffold materials	Incompetent scaffold erectors could cause scaffold to be erected								No Scaffold works allowed in inclement weather or near overhead powerlines.								
	Construction materials or tools falling from scaffold.	unsafe resulting in collapse, scaffold materials falling and scaffold erectors falling from height resulting in serious injuries or even fatalities.								Weather conditions must be monitored by Health and Safety resource and Construction Manager								
	No Safe access to platform									All employees working from Scaffold must be provided with the correct Safety Harnesses, they must be fully hooked at all times when working from scaffold								
	Scaffold erected near overhead powerlines.									Ground must be inspected for stability before scaffold can be erected. If ground is stable scaffold can be erected, base jacks must be used to level the scaffold.								
	Working in inclement weather such as strong winds, rain and thunderstorms	Erecting scaffold on uneven surfaces could cause scaffold to fall over, resulting in property damage.								All safety harnesses must be inspected before use, all findings must be recorded on a checklist, any deviations must be recorded and reported to supervisor. COC for harness must be available in safety file.								
	No Signages available to indicate scaffold is safe or unsafe to use.	Unsafe stacking of scaffold components could cause pinch point injuries when stacked materials fall over.								All scaffold materials must be stacked neatly in a safe manner in a demarcated storage area								
	Employees falling from scaffold.									Employees must be trained on the Issue Based Risk Assessment, Safe Work Procedure and the Fall Protection Plan								
	Scaffold collapsing	Tools, equipment or materials falling from height could fall on employees below the scaffold resulting in serious head or bodily injuries.																
	Fall Protection Equipment not available or damaged.																	
	Employees working at height not medically fit to work at heights	Scaffold making contact with overhead																

ACTIVITY (Work to be performed)		POTENTIAL HAZARD (Injury / Damage / Loss)	POSSIBLE RISK (Type injury/damage/loss)	RISK EVALUATION								PREVENTATIVE MEASURES	CONTROLS (Registers, Policies, Procedure)	RESIDUAL RISK							
				I	C	D	E	P	F	R				I	C	D	E	P	F	RR	
			powerlines could cause employees to be electrocuted / shocked that could result in serious disabling injuries or even fatalities. Working on scaffold during inclement weather could cause employees to slip and fall due to slippery surfaces resulting in serious injuries or even fatalities. Working at height during thunderstorm could result in employees been struck by lightning. No warning signages or safe or unsafe signages posted at scaffold could cause employees to access a scaffold that is unsafe and could result in employees falling from scaffold. Employees not medically fit to work at height could cause employee to experience blood pressure issues that could result in the employee fainting/collapsing. Use of unsafe or damaged fall protection equipment could cause employees to fall resulting in serious									Workers must be trained on the usage of safety harnesses and working at height. (Proof of competency must be available) All workers working on scaffold must be medically fit (proof of valid medical must be available in the form of annexure 3. Medical must include fit for work at height.									

ACTIVITY (Work to be performed)		POTENTIAL HAZARD (Injury / Damage / Loss)	POSSIBLE RISK (Type injury/damage/loss)	RISK EVALUATION							PREVENTATIVE MEASURES	CONTROLS (Registers, Policies, Procedure)	RESIDUAL RISK																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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S5-17	Work at Height activities – Working on edge of building or near openings		disabling injuries or even a fatality																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							</

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ACTIVITY (Work to be performed)		POTENTIAL HAZARD (Injury / Damage / Loss)	POSSIBLE RISK (Type injury/damage/loss)	RISK EVALUATION							PREVENTATIVE MEASURES	CONTROLS (Registers, Policies, Procedure)	RESIDUAL RISK							
				I	C	D	E	P	F	R			I	C	D	E	P	F	RR	
			resulting in financial costs. Employee working from unstable / unsecured ladder could cause ladder to fall over Employee falling from ladder could result in serious injuries and even disabling injuries																	
S5-20	Work at Height activities – General Work at heights (Any fall risk position)	Employees not trained to work at height. Employees not medically fit to work at height. Work at Height activities in inclement weather such as strong winds, rain and thunderstorms Unsafe or damaged fall protection equipment used. Unsafe Fall Prevention equipment used	Employee not competent to work at height could result in the employee being unable to identify hazards associated with WAH activities, actions to be taken to prevent incidents. Employees not medically fit could cause drowsiness, dizziness or even blurred vision that could result in the employee collapsing. Working at height in inclement weather could cause employees to slip and fall due to slippery surfaces or losing balance due to strong winds resulting in employees falling from height. Use of unsafe or damaged fall protection or fall prevention equipment could cause it to break resulting in	5	5	3	2	4	4	23	All employees working at Height must be competent, they must be trained on working at height, identifying risk, the correct use of Fall Protection Equipment etc. All employees working at height must be declared medically fit to conduct work at height. Records in the form of Annexure 3 must be kept on site. No work at height activities may commence during inclement weather. Works must be stopped until declared safe. All Fall prevention / fall protection equipment must be inspected before use; all findings must be recorded on a checklist. All damaged equipment must be removed from site. CoC certificates must be available for all Fall prevention / fall protection equipment.	- Fall Protection Plan - Work at Height Rescue Plan - SOP/SWP - Work at Height Competency certificate - Medical fitness to work - Issue-based Risk Assessment - DSTI's - Checklist - Signages - SWL/COC for fall protection equipment	4	4	3	2	3	3	19	

ACTIVITY (Work to be performed)		POTENTIAL HAZARD (Injury / Damage / Loss)	POSSIBLE RISK (Type injury/damage/loss)	RISK EVALUATION							PREVENTATIVE MEASURES	CONTROLS (Registers , Policies, Procedure)	RESIDUAL RISK														
				I	C	D	E	P	F	R			I	C	D	E	P	F	RR								
S5-21			employee falling from heights Employee falling from height could result in serious disabling injuries or even fatality																								
	Hazardous Chemical Agents – Handling and storage of HCA and flammable materials		Unsafe stacking, handling or transporting of chemicals could cause stack to fall over resulting in spillages.																								
		Improper storage of chemicals, transportation, and handling	Spilled Chemicals could result in soil contamination and loss of product that result in financial costs.																								
		Spilled chemical substances.																									
		Ingesting, inhaling or Eye / skin contact with HCS.	Ingesting, inhaling or eye / skin contact could cause nausea, dizziness, skin irritation or even short-term vision impairment.																								
		Employees not trained to work with or handle HCA.																									
		Employees not issued with specific PPE to work with and handle HCA.	Employees not trained on HCA could result in serious injuries or harm to health.	3	4	4	4	3	3	21																	
		Fire or Explosion caused by a source of ignition.																									
		Lack of warning signages at HCA store	Employees not issued with the correct PPE could cause employees being exposed to skin contact, fume inhalation resulting in harm to health.																								
		Unlabeled Containers																									
		Fire / spark or any source of ignition near HCA could cause a fire and even an explosion																									

ACTIVITY (Work to be performed)		POTENTIAL HAZARD (Injury / Damage / Loss)	POSSIBLE RISK (Type injury/damage/loss)	RISK EVALUATION							PREVENTATIVE MEASURES	CONTROLS (Registers, Policies, Procedure)	RESIDUAL RISK																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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S5-22	Working near overhead powerline – Conducting construction activities near overhead powerlines		resulting in serious injuries, even fatalities and damages to property. P No Warning signages posted could cause employees to be unaware of HCA in certain areas that might lead to Injuries, Fire or even explosions. Unlabeled containers could cause employees to be unaware of HCA resulting in fires, explosion or even consumption of chemicals that could have sever health problems								Warning Signages to be posted at HCA storage areas with the required demarcation Firefighting equipment must be made available near HCS storage areas All vehicle used to transport HCS must comply with legislative requirements, it must clearly be marked to certify the vehicle is allowed to transport HCS. The driver must hold a PrDP “D” certificate to transport HCS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																

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			I	C	D	E	P	F	R			I	C	D	E	P	F	RR
S5-23										No Construction vehicles to be operated within 10m of overhead powerlines, unless declared safe by Competent Authority								
										Safe working Procedure and Risk Assessment must be communicated to those employees exposed to working near overhead powerlines								
S5-23										Trained and Competent Spotters / Flag person must be present at ALL times when plant is operational near overhead powerlines.								
										Portable electrical tools and equipment must be inspected regularly but at least on a weekly basis and maintained to the same standards as portable electrical tools and appliances.								
S5-23										The use, inspection and maintenance of portable electrical tools and equipment must be governed by the following:								
										- Regular inspections by a competent person appointed in writing.	• Checklists							
S5-23										- Inspection results must be recorded in a register.	• Issue-based Risk Assessment							
										- Only competent authorized persons are allowed to use portable electrical tools and equipment; and	• SOP/SWP							
S5-23										- The correct protective equipment is worn/used whilst operating portable electrical tools and equipment.	• Competency	3	2	2	2	3	3	15
										These equipment –	• Appointment letter							
S5-23										- Must be maintained in good condition at all times	• Medical fitness to work							
										- The main source should incorporate an earth leakage protection device or receive power through a double wound transformer or be double insulated and clearly marked as such; and	• DSTI's							
S5-23											• Signages							

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				I	C	D	E	P	F	R			I	C	D	E	P	F	RR					
											- All equipment must be fitted with a switch to allow for safe and easy start and stopping. The following requirements to be applied with when portable lights are utilized - Must be fitted with a robust non-hygroscopic non-conducting handle. - Metal parts which may become live must be protected against contact. - The lamp must be protected by a strong guard. - The cable lead-in must withstand rough handling. - A register be kept for each piece of equipment with findings of regular inspections undertaken to evaluate the condition of these lights. - Inspections must be undertaken that concentrate on at least the plug, cord, switch, guard and any obvious faults; and - When used in wet/damp/metal container conditions, it must be protected. Risk Assessment and Safe working Procedure for the operation of task specific Portable electrical tools must be communicated to those operating and exposed to hazards when using portable electrical tools													
	S5-24	Illumination during construction activities at night	Poor illumination at night / Poor Visibility Unauthorized Work at Night Poor Quality work	Conducting work activities at night could result in serious bodily injuries due to being unable to see hazards associated with the work activities. Poor visibility could cause Construction Plant and equipment accidents	5	5	3	3	3	3	21	If any Work requires to be conducted at night sufficient lighting should be supplied. All activities to be conducted at night must be internally approved by Construction Manager with guidance from competent Safety Professional. Night work must be approved by the Client Project Manager. Supervision must be available for all activities taking place after hours / at night	• Approval Letter • Issue-based Risk Assessment • SOP/SWP • Appointment letter • Working at night procedure / Method Statement • Medical fitness to work • Checklist	4	3	2	2	2	2	15				

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			I	C	D	E	P	F	R			I	C	D	E	P	F	RR
S5-25										Issue-based Risk Assessment must be communicated to all employees conducting work after hours or at night shift								
S5-25	Lack of communication between various parties involved.	Instructions not adequately followed through								A Structured communication system must be implemented and maintained between various relevant parties involved.	- Minutes of meetings - Communication protocol/policy/procedure - Site attendance registers							
		Information not transmitted as supposed to	1	2	2	2	4	4	15	Site meetings must be conducted on set intervals including integration between various parties to ensure coordination. Minutes of meeting to be kept for record of discussions		1	2	2	2	2	2	11
S5-27	Steel Work – Steelfixing	Schedule slippage due to rework																
S5-27	Steel Work – Steelfixing	Manual handling and lifting of rebar at ground level and to elevated level.								Employees to be provided with proper walkways during steel erection and never to walk on erected rebar	- SOP/SWP - Issue-based Risk Assessment - Checklist - PPE issue register - Ergonomics training - Toolbox talks - DSTI's							
		Transportation of rebar on trailers								Workers to be supplied with the required PPE for Steel fixing and cutting of steel rebar.								
S5-27	Steel Work – Steelfixing	Sharp & pointed objects								Truck drivers to ensure loads are sufficiently secured before transporting materials to site	- SOP/SWP - Issue-based Risk Assessment - Checklist - PPE issue register - Ergonomics training - Toolbox talks - DSTI's							
		Cutting of Rebar - causing sparks and fire	3	2	2	2	3	3	15	Workers to ensure to use correct lifting procedure when lifting steel rebar. SWP for manual handling / ergonomics to be communicated to workers.		2	2	2	1	2	3	12
S5-27	Steel Work – Steelfixing	Use of unsafe or damaged pliers								Cutting of Steel rebar to be conducted in a designated safe hot work area.	- SOP/SWP - Issue-based Risk Assessment - Checklist - PPE issue register - Ergonomics training - Toolbox talks - DSTI's							
		Handling of steel rods or reinforcing without the required hand protection								All tools and equipment to be used must be inspected and registered on a checklist, deviations must be recorded and reported to appointed supervisor.								
S5-27	Steel Work – Steelfixing	Handling of steel rods or reinforcing without the required hand protection																

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			I	C	D	E	P	F	R			I	C	D	E	P	F	RR
S5-28	Limited resources to conduct all task																	
		Cutting of steel rods with a grinder could cause heat exposure leading to burns to hands Cutting of steel with grinder could cause debris to cause damage to eyes of the operator or surroundings employees																
S5-28	Limited resources to conduct all task	Contractual non-compliance																
		Schedule and cost over run on project	4	3	3	2	2	2	16	Client to ensure that contractor is well aware of current scope definition as well as the requirements stipulated in the tender specifications. Contractor to ensure compliance on set specifications from client Contractor to ensure workers comply to working hours guided by the Basic Conditions of Employment Act	- Approved Programme of works - Issue-based Risk Assessment - Basic Conditions of Employment Act	3	2	2	1	2	2	12
S5-29	Stacking and storage of material & Housekeeping	Unstable stacking of goods / materials / Unsafe Stacking Procedures								Sufficient space for stacking of material to be provided, housekeeping to be maintained and cleaning of areas to be maintained.								
		Stacking & Storage area not identified and demarcated								Stacking and storage areas to be barricaded to prevent unauthorized entry. Signages must be placed at designated area	- Checklists - Issue-Based Risk Assessment - DSTI's - Toolbox talks - Stacking Procedure - Appointment letter - Signages							
S5-29	Stacking and storage of material & Housekeeping	Pinch Points																
		Environmental contamination from spillages	4	3	3	3	3	3	19	All contaminated ground must be removed and disposed of at a registered waste facility. Waste Disposal must be available		3	2	2	2	2	3	14
S5-29	Stacking and storage of material & Housekeeping	Snakes								Workers to be aware of snakes, toolbox talks to be done for the awareness of snakes in surrounding area, if snakes are found on site, a snake handler must be contacted to remove snakes safely.								
		No clear walkways at stacking and storage areas																
S5-29	Stacking and storage of material & Housekeeping	Unauthorized entry																
		HCS not sealed and not stored in a bunded area could cause spillages																

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				I	C	D	E	P	F	R			I	C	D	E	P	F	RR		
S5-30		Poor waste removal	resulting in environmental contaminations. This leads to financial losses due to the rehabilitation of the environment costs and fines by authorities								All walkways at stacking and storage area must be kept clean and free from tripping hazards										
		Unstable Aggregate or Sand	leads to financial losses due to the rehabilitation of the environment costs and fines by authorities								Waste must be removed on a regular basis to a registered waste facility, proof must be kept in the safety file on site.										
			Poor Housekeeping standards when stacking of materials could cause snakes to find shelter resulting in snake bites that could cause serious injuries, disability or even a fatality								Housekeeping on site must be done on a daily basis, all rubble must be removed and placed at the designated waste area.										
			No clear walkways at stacking area could cause employees to trip and fall over materials resulting in bodily injuries								Aggregate or soil should be stacked at a reasonable height and not close to any machinery or equipment.										
											The principal contractor to ensure that: - A competent person is appointed in writing to supervise all stacking and storage on a construction site. - The height of any stack does not exceed 3 times the base unless stepped back at least half the depth of a single container at least every fifth tier or the approval of an inspector of the Department of Labour has been obtained to build the stacks higher with the aid of a machine. (The operator of the machine must be protected against items falling from overhead or off the stack and no items may overhang);										
	Emergency Preparedness (Fire Prevention, First aid)	Inadequate emergency planning	Emergency services unable to respond to emergencies could cause serious injuries to lead to disabling injuries or even fatalities								Emergency Preparedness The principal contractor to appoint a competent person to act as emergency controller and/or coordinator.	- Emergency Plan / Preparedness Plan - Emergency Evacuation Procedure - Checklists - Competencies / training records - Appointment letters - Emergency Contact details - Inductions - Communication records									
		Inadequate first aid.	No first aid equipment could cause infections to lead to disabling injuries or even fatalities																		
		Inadequate fire prevention and protection measures	No first aid equipment could cause infections to lead to disabling injuries or even fatalities	5	5	3	2	3	3	21											
		Incompetent First Aider or Fire fighters appointed	No first aid equipment could cause infections to lead to disabling injuries or even fatalities								The principal contractor to conduct an emergency identification exercise and establish what emergencies (such as health, safety, environmental, third party or community related actions etcetera) could possibly develop. Contractor must then develop detailed contingency plans and emergency procedures, considering any										

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			I	C	D	E	P	F	R			I	C	D	E	P	F	RR	
		any injury								emergency plan that the project/site may have in place.	• Toolbox talks • Issue-based Risk Assessment								
		Incompetent First aider could cause injured employees' severity of an injury to increase when applying incorrect treatment								The principal contractor and the other contractors must hold regular practice drills of contingency plans and emergency procedures to test them and familiarize employees with them. Emergency evacuation points must be available, and signage displayed									
		Incompetent Fire Fighter could cause fires on site to become uncontrolled resulting in serious injuries, or even multiple fatalities. This will also have an impact on property damaged.								First - Aid The principal contractor to provide first-aid equipment and has qualified first-aider(s) on site as required by General Safety Regulation 3 of the OHSACT.									
		No firefighting equipment available on site could cause a fire to become uncontrolled resulting in serious injuries, property damage or even multiple fatalities								The contingency plan of the principal contractor to include arrangements for the speedy and timeous transportation of injured and/or ill person(s) to a medical facility or getting emergency medical support to person(s) who may require it. The principal contractor to have firm arrangements with his contractors in place regarding the responsibility of these contractor's first-aid arrangements as well as treatment of injured and/or ill employees. Fire Prevention and Protection The principal contractor to ensure that a) Sufficient and suitable storage of flammables is provided. b) employees are trained in the use of the firefighting equipment and know how to attempt to extinguish a fire; (these employees must be appointed and proof of competency to be available on site. c) A sufficient number of employees are appointed and trained to act as an									

ACTIVITY (Work to be performed)		POTENTIAL HAZARD (Injury / Damage / Loss)	POSSIBLE RISK (Type injury/damage/loss)	RISK EVALUATION							PREVENTATIVE MEASURES	CONTROLS (Registers, Policies, Procedure)	RESIDUAL RISK											
				I	C	D	E	P	F	R			I	C	D	E	P	F	RR					
S5-31											emergency team to deal with fires and other emergencies. d) Employees are informed regarding emergency evacuation procedures and escape routes this must be included in the induction of all workers and visitors. e) Emergency escape routes are always kept clear and clearly marked. f) Roll call is held after evacuation to account for all employees and to ensure that no-one including visitors and disabled persons have been left behind. g) A clear audible siren or alarm is fitted and regularly tested. If this is not practicable to the site, other method of warning employees must be used, for example whistles. All emergency procedures / plans must be communicated to all employees onsite													
	Site security and public protection	Public gaining access to the construction site.	Unauthorized members or children entering the construction site could result in serious injuries and even fatality if children are unattended.									Principal contractor to ensure the project is always secure. Access control to be maintained and no unauthorized entry to be permitted to the project.												
		Theft Vandalism	Unsecured Construction site could cause materials, equipment and machinery to be stolen or damaged during strikes resulting in time delays and financial losses	4 3 4 2 3 3 19								When there are no activities on site and no personnel conducting works. The Project must be left in a safe manner so that the public can't gain access and that all hazards are attended to prior vacating the site. Security should be available due to valuable materials and equipment that might be stored on site. Security will also be responsible to monitor site access by unauthorized people / children Warning Signages must be posted to inform the community of hazards and risks	• Site Rules posted • Signages	3 2 3 2 2 3 15										
S5-32	Ablution and welfare facilities	Inadequate provision of toilet facilities for each sex No hand washing stations available	Insufficient toilet facilities result in overuse of existing facilities leading to unhygienic conditions that could cause disease	3 3 3 2 3 3 18							Principal Contractor to provide toilets for each sex as required in terms of the National Building Regulations and Construction Regulation 30.	• Checklists • Waste Disposal Certificates • Issue-based Risk Assessment	2 2 2 2 2 3 13											

ACTIVITY (Work to be performed)	POTENTIAL HAZARD (Injury / Damage / Loss)	POSSIBLE RISK (Type injury/damage/loss)	RISK EVALUATION							PREVENTATIVE MEASURES	CONTROLS (Registers, Policies, Procedure)	RESIDUAL RISK						
			I	C	D	E	P	F	R			I	C	D	E	P	F	RR
	No secured area for each sex to change clothing (Changing area)	transmission to all employees on site.								Chemical toilets are allowed only if they are cleaned on a regular basis by registered contracted company. Toilets must be provided at a ratio of at least 1 toilet per 30 employees. Disposal waste certificate to be obtained to ensure waste has been removed and dumped at a registered facility	• Signages							
	No sheltered eating area with tables and chairs provided	Not providing toilet facilities for each sex is a legal offence and could result in DoEL to issue sanctions, fines or even site closure								Toilets must be provided for each sex. Toilets must be enclosed, lockable to provide adequate privacy. Signages must be posted to indicate the sex for each of the toilets.								
	Poor Hygiene standards	Poor designed or provided ergonomically toilet facilities could cause injuries to employees such as trip and falls resulting in bodily injuries								Daily inspections to be done to ensure toilets are cleaned on a daily								
	Poor ergonomically designed facilities	Drinking of unsafe water could lead to various health problems, including diarrheal diseases, bacterial infections, and even long-term health issues like cancer								Handwashing stations must be provided near toilet facilities with soap, clean water (running water) and drying materials such as towels.								
	No safe to drink water available									Drinking water must be made available to all employees, water must be regularly tested and monitored for any contaminations. Signages must be posted at areas where drinking water is available. All drinking water bottles must be labelled "drink water"								
S5-33	Concrete spillages	Concrete spillages could cause environmental pollution, contaminating the environment and surrounding area.								Concrete mixers to be regularly serviced in order to prevent breakdown leading to oil spillages. Spot checks to be done prior each shift.	• Concrete truck service history presented							
	Use of hand tool	Polluting the environment could result in poor water quality from underground water resources								All hand tools to be inspected by a competent person.	• SOP/SWP							
	Oil spillages		4	4	4	4	3	3	22	When concrete is being poured, concrete spillages are to be prevented and plastic sheet to be placed on the ground when spillages cannot be prevented.	• Issue-based Risk Assessments	3	3	3	3	2	3	17
	Cement dust generation (Silica)										• Method Statement							
	Incompetent concrete mixer operators	Inhaling of cement dust									• Competencies							
	Concrete mixer operated										• Appointment letters							
											• Toolbox talks							
											• Checklists							
											• Medical fitness to work							

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ACTIVITY (Work to be performed)		POTENTIAL HAZARD (Injury / Damage / Loss)	POSSIBLE RISK (Type injury/damage/loss)	RISK EVALUATION							PREVENTATIVE MEASURES	CONTROLS (Registers, Policies, Procedure)	RESIDUAL RISK								
				I	C	D	E	P	F	R			I	C	D	E	P	F	RR		
S5-34	Electrical Installations – New Infrastructure, replacing or installing of temporary electrical supply		supervisor and concrete trucks could cause accidents on site resulting in property damages Poor planning for concrete trucks not to dump concrete in time could result in delays of production and financial losses if concrete could not be used due to hardening								All plant or equipment used for concrete works must be inspected before use and findings recorded on a checklist, deviations must be reported to Construction Manager/ Supervisor. All guards must be in place before operations										
		Illegal connections	Unsafe electrical installations, open wires could result in employees and other persons being electrocuted with subsequent injuries or even fatalities as well as asset damage due to fire									The principal contractor to ensure that: - Existing services are to be located and clearly marked before construction commences and during the progress thereof. - Electrical installations and -machinery are sufficiently robust to withstand normal working conditions on site. - Temporary electrical installations must be inspected at least once per week by a competent person and a record of the inspections kept on the occupational health and safety file.	• Issue-based Risk Assessment • SOP/SWP • Method Statement • Wireman's License • Competencies • Appointment letter • Medical Fitness to work • DSTI's • Checklists • LOTO procedures								
		Substandard equipment	subsequent injuries or even fatalities as well as asset damage due to fire																		
		Poor cable management	Improper grounding could cause electrical current to take unintended paths																		
		Incompetent Installer	through metal objects, if contact is made with this metal the person will be shocked and can even be electrocuted	5	5	4	3	3	4	24											
		Unauthorized Access to DB's																			
		Fires and Explosions																			
		Improper grounding																			
		Contact with live open wires	Poor cable management could result in tripping and falling resulting in bodily injuries									Electrician with a Wireman's License must install, commission and inspect all electrical installations. Employee to be authorized, competent and appointed. COC must be available for electrical connections done.									
		Overloads and short circuits																			
			Unprotected or open wires could cause sparks leading to electrical fire. This could result in major									All DB's to be locked. Key register to be established and proof of keys be evident.									

ACTIVITY (Work to be performed)		POTENTIAL HAZARD (Injury / Damage / Loss)	POSSIBLE RISK (Type injury/damage/loss)	RISK EVALUATION							PREVENTATIVE MEASURES	CONTROLS (Registers, Policies, Procedure)	RESIDUAL RISK																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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				I	C	D	E	P	F	R			I	C	D	E	P	F	RR		
		Excessive Vibrations	HCS, used for trades if spilled could cause environmental pollution, contaminating the environment and surrounding area.								Scaffold, Ladders and MEWP must be inspected before use. Scaffold erector, Scaffold Inspector, Ladder Inspector and MEWP operator must be appointed with valid competencies										
		Excessive Noise	Polluting the environment could result in poor water quality from underground water resources								Workers must be supplied with the CORRECT minimum required PPE for each specific task.										
		Use of unsafe hand tools and portable electrical tools	Operators exposed to continue vibrations from operating small plant or machinery could cause Hand-Arm Vibration Syndrome (HAVS), also known as Vibration White Finger (VWF), this could also result in musculoskeletal disorders or herniated discs								Workers exposed to long periods of excessive vibrations and Noise must take regular breaks or workers to be changed regularly.										
		Tools, equipment or materials falling from heights	Use of unsafe handtools and portable electrical tools could result in hand and arm injuries and being shocked if unsafe electrical tools are used								All trades specific Risk Assessments and Safe working procedures must be communicated to the relevant exposed workers. Proof of communication must be kept.										
		Incompetent operators	Operators of tools, plant or machinery not being competent could cause serious injuries if employees do not understand the hazards and risks								Supervisor / Construction Manager to ensure NO overhead activities from different trades or simultaneous operations from different contractor overhead.										
S5-36	Demolition work – Demolishing of existing structures (Infrastructure)	No Competent person appointed to supervise all demolition of building works	Supervision by incompetent person could cause team and supervisor to be unable	5	5	5	4	3	3	25	All Demolition work to be carried out under the supervision of a competent person who has been appointed in writing.	- SOP/SWP - Issue-based Risk Assessment - Method Statement	4	4	3	3	2	2	18		

ACTIVITY (Work to be performed)	POTENTIAL HAZARD (Injury / Damage / Loss)	POSSIBLE RISK (Type injury/damage/loss)	RISK EVALUATION							PREVENTATIVE MEASURES	CONTROLS (Registers, Policies, Procedure)	RESIDUAL RISK						
			I	C	D	E	P	F	R			I	C	D	E	P	F	RR
	Unsafe removal / demolition of walls / structures	to identify hazard and risks associated with demolition, this could result in serious injuries and even fatalities								A detailed structural engineering survey of the structure to be demolished to be carried out and a method statement on the procedure to be followed in demolishing the structure to be developed by a competent person, before any demolition to be commenced.	• DSTI's • Checklists • Competencies • Appointment letter • Signages • Toolbox talks • Medical fitness to work • Inductions • Structural engineer to approval/survey to demolish							
	Dust									As demolishing progresses the structural integrity of the structure to be checked at intervals as determined in the method statement by the appointed competent person to prevent any premature or uncontrolled collapse								
	Falling debris / bricks / walls	Unsafe removal or breaking of walls or supporting walls could cause building to collapse unplanned, this could result in serious damages to mobile plant, surrounding building and serious injuries to operators or surrounding employees. If employees are crushed or trapped when a wall falls over this could result in fatalities								Steps to be taken to ensure that where a structure is being demolished: - precautions are taken to prevent the collapse of the structure when any frame, support or reinforcement is cut or removed. - no employee is required or allowed to work under unsupported overhanging material; and - the stability of an adjacent building, must not be compromised. - Demolition area to be barricaded with warning signages posted to warn and prevent the public and the employees to enter the work area - All employees, operators working inside the demarcated demolition area must wear the required PPE - The location and nature of any existing services such as water, electricity, gas etcetera to be established before any demolition is commenced with and any service that may be affected by the demolition must be protected and made safe for employees and other persons.								
	Public entering demolition work area	Excessive exposure to dust can lead to various health problems, including respiratory illnesses like asthma, COPD, and silicosis, as well as skin irritation and, in severe cases, cancer								Demolished structure / debris to be removed from site								
	Incompetent TLB or excavator operator	Falling of debris or bricks could cause serious injuries if surrounding employees are struck by it. This could result in head and bodily injuries																
	TLB or excavator used to demolish structure not in good condition	Unauthorized visitors or children entering demolition area could cause them not to understand the hazards																
	Structural integrity compromised of other existing buildings																	
	Excessive Noise																	

ACTIVITY (Work to be performed)		POTENTIAL HAZARD (Injury / Damage / Loss)	POSSIBLE RISK (Type injury/damage/loss)	RISK EVALUATION							PREVENTATIVE MEASURES	CONTROLS (Registers, Policies, Procedure)	RESIDUAL RISK													
				I	C	D	E	P	F	R			I	C	D	E	P	F	RR							
S5-38			and risks and could result in serious injuries, even fatalities Incompetent operators, operating excavators or TLB's could cause unsafe movement and breaking / demolishing of other structures. This could result in serious injuries and have a financial implication if incorrect building/walls are demolished. Demolishing or changing the structural integrity of other walls or buildings not to be demolished could cause them to fall over resulting in property damages, financial costs and serious injuries, even fatalities Excessive exposure to continues noise could cause short- and long-term hearing loss								All tools, equipment or plant used to demolish a structure must be inspected before use and findings recorded on a checklist. Method Statement and Issue based Risk Assessment must be communicated to all relevant parties Employees, operators or surrounding workers exposed to excessive noise and vibration should take regular breaks and drink enough water Only competent operators appointed to operate plant or machinery to demolish structures. Operators must have a valid medical fitness to work Dust suppression should take place through water trucks spraying all dusty areas. Issue-based Risk assessment must be done by competent risk assessor, this risk assessment, method statement and SOP/SWP must be communicated to the demolition team. All employees must be medically fit to work, with a valid medical certificate and annexure 3. Exit medicals must be done once the trade team are done with their scope to ensure employees did not obtain any health issues from working on this project															
	Exposure to poisonous / Venomous or other dangerous animals, reptiles or insects And exposure to animals, insects, birds, reptiles, amphibians in	Snake bites Spider bites Scorpion Sting Bee sting Wasp sting Uncontrolled removal of Fauna and Flora in an area. Habitat destruction / habitat loss and fragmentation	Venomous snake bites could cause person to hyperventilate, vomit and even paralysis. If not treated in time could result in disabling injuries or even a fatality Non-venomous snake	4	2	2	3	4	4	19	The principal contractor to ensure that the following are duly adhered to: - the emergency procedure to be expanded to provide for the effective treatment of employees or other persons visiting exposed to bites or stings from poisonous animals and insects, i.e. the contact details of the nearest medical unit that could treat employees exposed to bites or stings be	• Inductions • Medical fitness to work • Toolbox talks • Posters and Signages	3	2	1	2	2	2							12	

ACTIVITY (Work to be performed)	POTENTIAL HAZARD (Injury / Damage / Loss)	POSSIBLE RISK (Type injury/damage/loss)	RISK EVALUATION							PREVENTATIVE MEASURES	CONTROLS (Registers, Policies, Procedure)	RESIDUAL RISK								
			I	C	D	E	P	F	R			I	C	D	E	P	F	RR		
		bite could cause injury to body, tissue damage, swelling and severe pain									obtained and arrangements be made with this service provider on the procedures to be followed to ensure swift response when required.									
		Scorpion Sting could cause difficult breathing, muscle twitching, sweating and vomiting.									- confirmation to be obtained or made available from the nearest medical unit that they have anti venom reserved to treat employees or other persons visiting that may be exposed to snake bites or scorpion stings.									
		Uncontrolled removal of Fauna and Flora could result in the loss or destruction of native plants and animals from a specific area. This can have an impact on biodiversity, ecosystem stability and the well-being of humans									- competent / appointed first aiders to be available to facilitate the treatment of employees or other persons visiting exposed to stings or bites.									
											- the potential exposure posed by poisonous or venomous animals or insects and awareness thereof to be discussed with all employees as part of the toolbox talks and general awareness training and other persons visiting as part of the pre-site visit induction process									
													If Snakes are located on site, contact nearest snake handler to assist with removal of the snake. Do not attempt to remove snake if not trained.							
											Emergency contacts to be freely available on site and in safety file.									
											Environmental impact assessment to be conducted to ensure the project does not have an impact on the Fauna and Flora to the specific location of the project									
											All bee hives should not be disturbed in their natural environment, if distrusting of construction works, a beekeeper must be contacted to remove the hive in a safe manner to relocate the beehive. Do not hit or remove the hives yourself.									
											All visitors and employees on site must be									

ACTIVITY (Work to be performed)		POTENTIAL HAZARD (Injury / Damage / Loss)	POSSIBLE RISK (Type injury/damage/loss)	RISK EVALUATION							PREVENTATIVE MEASURES	CONTROLS (Registers, Policies, Procedure)	RESIDUAL RISK										
				I	C	D	E	P	F	R			I	C	D	E	P	F	RR				
S5-39	Working in Inclement weather										briefed in emergency, first aid procedures and health issues prior to work/visit on site.												
			Exposure to working in thunderstorms / lightning outdoors could cause the employee to be struck by the lightning resulting in cardiac arrest, respiratory arrest, loss of consciousness, and burns. Long-term effects may include neurological damage, cognitive impairments, and chronic pain. This could also result in fatality.									The principal contractor to implement an early warning system to identify inclement weather and to prevent such weather from posing negative implications for the safety of employees and other persons visiting											
		Exposed to thunderstorms / lightning	Exposure to working in very hot conditions / temperatures could cause heat exhaustion – fatigue, dizziness, nausea, headache, moist skin. Heat stroke – hot dry skin, confusion, convulsions and eventual loss of consciousness. This can result in a fatality if not detected at an early stage	5	4	3	2	3	3	20	The early warning system too, as a minimum. Provide for the following: - Construction work done during electrical storms a) The principal contractor to ensure that all employees are removed from heights and all employees are as safe as possible, in inclement weather conditions. b) No work to be allowed on the construction site during electric storms where employees cannot be protected from it. Protection involves: - eating area fitted with a lightning mast - workshops - inside buildings c) No work to be allowed in electrical storms on top of open structural steel, even when earthed. d) No work to be allowed on height where the lightning is within a 10-kilometer radius. e) After inclement weather on-site risk assessments to be reviewed to include wet conditions.	• Toolbox Talks • DSTI's • PTO • Medical fitness to work • SOP/SWP • Issue-based Risk Assessment • Wind anemometer • Lightning alarm	3	2	2	2	2	2	13				
		Strong winds	Exposure to working in very hot conditions / temperatures could cause heat exhaustion – fatigue, dizziness, nausea, headache, moist skin. Heat stroke – hot dry skin, confusion, convulsions and eventual loss of consciousness. This can result in a fatality if not detected at an early stage																				
		Rain	Exposure to working in very hot conditions / temperatures could cause heat exhaustion – fatigue, dizziness, nausea, headache, moist skin. Heat stroke – hot dry skin, confusion, convulsions and eventual loss of consciousness. This can result in a fatality if not detected at an early stage																				
		Sand / dust storms	Exposure to working in very hot conditions / temperatures could cause heat exhaustion – fatigue, dizziness, nausea, headache, moist skin. Heat stroke – hot dry skin, confusion, convulsions and eventual loss of consciousness. This can result in a fatality if not detected at an early stage																				
		Extreme hot conditions	Working in rain could cause cold stress and hypothermia if low temperatures. It could also cause slip and fall injuries on wet surfaces. If working with electrical tools equipment could cause electrical shock and damages to tools and equipment resulting									- Crane operations during inclement weather a) Crane operations to stop during lightning within a 10-kilometer radius and wind above 28 km/h, crane driver will not be allowed to leave the crane with the booms extended. b) Lifting operation to stop during rain, rigging and hand lifts. c) Booms on all cranes to be retracted. d) All rigging operations to stop and employees will be removed from site.											

ACTIVITY (Work to be performed)		POTENTIAL HAZARD (Injury / Damage / Loss)	POSSIBLE RISK (Type injury/damage/loss)	RISK EVALUATION							PREVENTATIVE MEASURES	CONTROLS (Registers, Policies, Procedure)	RESIDUAL RISK															
				I	C	D	E	P	F	R			I	C	D	E	P	F	RR									
			in financial losses. Working in dust storms could cause skin irritation and short-term eye / vision impairment. Working at heights during extreme weather condition such as rain and strong winds could cause scaffold to fall over if not secured and employees falling from heights resulting in serious injuries even fatalities								- Construction work done during rain a) During rainy conditions all work on steel structures to stop. b) No electrical tools to be used during rainy weather in open areas. c) If necessary, work only to be done in waterproof areas where there is a zero risk for electrocution. - Scaffolding activities during inclement weather conditions a) During inclement weather only limited scaffolding actions to be permitted i.e. erecting and dismantling activities. b) When necessary to allow scaffolding activities to continue during abnormal equipment and process conditions so not to impair personnel safety or pose an environmental risk. In such cases, scaffolding activities may continue with the provision that the relevant team ensures that a comprehensive risk assessment is done, whilst considering both work and weather conditions. c) All scaffold users to: - Ensure that scaffolding is inspected immediately after inclement weather conditions. - Ensure that the risks associated with working at heights during inclement weather are identified and reasonably mitigated. - Be cautious of slip/trip hazards when performing activities during inclement weather.																	
	S5-41	Public health & safety and Pedestrians access to site	Uncontrolled Access by members of public and children No site hoarding No warning signages Unprotected trenches and	Members of public or children entering a construction site could cause serious injuries, even fatality as these members would not understand hazards and risks associated with	5	5	2	2	2	2	18	The principal contractor will be responsible for ensuring that non-employees affected by the construction work are made aware of the dangers likely to arise from said construction work as well as the precautionary measures to be observed to avoid or minimize those dangers. This includes among others: - Non- employees entering the site for	• Induction Records • Site Access control register • Signages • Posters • Site Safety Rules	3	3	2	2	2	2	2	2	2	2	2	2	2	14	

ACTIVITY (Work to be performed)		POTENTIAL HAZARD (Injury / Damage / Loss)	POSSIBLE RISK (Type injury/damage/loss)	RISK EVALUATION							PREVENTATIVE MEASURES	CONTROLS (Registers, Policies, Procedure)	RESIDUAL RISK												
				I	C	D	E	P	F	R			I	C	D	E	P	F	RR						
S5-42		excavations Uncontrolled Access to heights	construction activities or being exposed to heights, confined areas, noise, dust, trip and falls, moving objects and plant etc. Unprotected trenches and excavations could result in children or members from public entering these areas that could result in falling into open trench or excavation resulting in serious injuries, if water in trench or excavation could result in drowning of members or children Uncontrolled access to heights by members of the public and children could cause individuals to fall from unprotected edges resulting in serious injuries and even fatality No warning signages posted on construction site could cause unauthorized members of public or children to enter unsafe areas that could result in serious injuries								whatever reason. - The surrounding community. - Public bystanders Appropriate signage must be posted to this extent and all employees on site must be instructed to ensure that non-employees are protected at all times. All non-employees entering the site must receive site applicable induction into the hazards and risks and the control measures for these. Only visitors who are medically fit will be allowed to enter the construction work areas. If not medically fit, he will only be allowed to enter the site offices Safe demarcated walkway to be erected / conducted or displayed for visitors Pedestrian crossings to be conducted and utilized No Construction work near public vehicles. Construction area must be barricaded (No Danger tape) or fenced to prevent Public from entering work area.														
	Installation of fence	Transportation and handling of fence. (Poor Ergonomics) - Offloading of fence poles and heavy wire rolls Use of ladders	Lifting of heavy fence poles / panels or rolls of wire with poor ergonomics could result in serious lower back injuries	3	3	2	2	3	3	16	Rolls of fence to be transported mechanically if possible. Make use of TLB if truck crane is not available to lift and move rolls of fence Proper PPE and suitable hand gloves to be provided to employees involved. Task	• SOP/SWP • Issue-based Risk Assessment • Method Statement • Toolbox talks • DSTI's	3	3	1	1	2	2						12	

ACTIVITY (Work to be performed)	POTENTIAL HAZARD (Injury / Damage / Loss)	POSSIBLE RISK (Type injury/damage/loss)	RISK EVALUATION							PREVENTATIVE MEASURES	CONTROLS (Registers, Policies, Procedure)	RESIDUAL RISK						
			I	C	D	E	P	F	R			I	C	D	E	P	F	RR
	Use of scaffolding	Using of unsecured ladder on uneven surface while installing of fence or fence poles could cause employee to slip and fall over from ladder resulting in serious bodily injuries								specific PPE required for mixing of concrete	• Checklists • Appointment letters • Competencies • Medical fitness to work							
	Contact with underground services/ electricity	Fencing collapses on employees or surrounding property								Ladders to be inspected by a competent person appointed in writing and to be well positioned and secure when in use. No wooden ladders or self-made ladders to be used.								
	Mixing and pouring of concrete	Making contact with underground electrical services when digging holes for fence poles could cause employees to be shocked and even electrocuted resulting in a fatality. This could also result in delays in certain activities and costs to repair the damaged services								Tools to be inspected daily before work start Faulty tools to be repaired or removed from site immediately								
	Use of unsafe / damaged tools	Making contact or damage underground water services could result in project delays and costs to repair the water services								Drawings / plans or Underground scans must be available for areas to be excavated to identify any underground services like electrical cables, water or sewer lines.								
		Unplanned and installation of unsecured fence panels could cause the panels to fall over on top of employees resulting in body and head injuries								All fence poles to be inserted into the ground as per drawing requirements and to be secured with Concrete.								
		Mixing of cement on ground could cause environmental pollution								If large section of fence is being installed there must be enough support to assist and to hold the fence in position while being installed								
		Use of unsafe or damaged tools could								If scaffold is used it must be fully erected as per SANS 10085 standards, safe access must be provided to a full boarded platform secured with all required rails. Scaffold must be erected by competent and appointed scaffold erectors and signed off by competent appointment scaffold inspector and supervisor								

ACTIVITY (Work to be performed)		POTENTIAL HAZARD (Injury / Damage / Loss)	POSSIBLE RISK (Type injury/damage/loss)	RISK EVALUATION							PREVENTATIVE MEASURES	CONTROLS (Registers, Policies, Procedure)	RESIDUAL RISK						
				I	C	D	E	P	F	R			I	C	D	E	P	F	RR
S5-43			cause hand and finger injuries Making use of non-compliant scaffold not erected as per SANS 10085 could cause scaffold to collapse or fall over, the risk of not fully erected scaffold could also cause employees to fall from unprotected platform resulting in serious injuries.																
	Asbestos Works (If found on site)	Inhalation of Asbestos fibers. Improper Asbestos removal and placing of Asbestos on site Incompetent person conducting removal Asbestos Contractor not registered Incorrect PPE worn when removing, making contact with asbestos Unprotected or damaged bags containing asbestos Strong Winds No records of disposal Public or community exposed to asbestos Illegal Dumping of Asbestos contained materials	Exposure to asbestos fibers leading to an Occupational illness and disease (asbestosis). This results in the lung tissue scarring Employees and public exposed to asbestos causing occupational illness and diseases Use of incompetent person or unregistered contractor to remove asbestos could cause his employees to be exposed to health risk associated with asbestos, reputational damages to client and property damages Not wearing the correct PPE required to handle asbestos could cause the employees to be exposed to the health	5	5	4	4	4	3	25	Asbestos Risk Assessment and Method statement for Handling of Asbestos to be communicated to the relevant exposed employees. Only registered Contractor will be allowed to be removed and dispose Asbestos at a registered (designated) facility - Proof of disposal must be kept on record. Registration and competencies must be verified before handling of asbestos If Asbestos is noticed on site Department of Labour must be informed. Only workers with the required task specific PPE and who have been trained will be allowed to handle and remove Asbestos Other simultaneous operations in the direct vicinity of Asbestos must be halted / stopped until Asbestos has been removed. Designated area to be identified on site to be barricaded for the temporary storage of asbestos containing materials. Warning signages must be posted. Plastic bags must be sealed and must be identified as asbestos	• SOP/SWP • Issue-based Risk Assessment • Asbestos Risk Assessment • Method Statement • Asbestos Management Plan • Medical Surveillance plan • Checklists • DSTI's • PTO's • Medical Fitness to work • Disposal certificate • Clearance Certificate • Competencies • Proof of Registration as Asbestos contractor • Appointment letter	4	4	3	3	3	2	19

ACTIVITY (Work to be performed)	POTENTIAL HAZARD (Injury / Damage / Loss)	POSSIBLE RISK (Type injury/damage/loss)	RISK EVALUATION								PREVENTATIVE MEASURES	CONTROLS (Registers, Policies, Procedure)	RESIDUAL RISK											
			I	C	D	E	P	F	R	I			C	D	E	P	F	RR						
	Unidentified Asbestos containing materials	risks of making contact or inhaling asbestos fibers									with asbestos labels													
		Unprotected or damaged bags used to contain asbestos containing materials could cause fibers to be spread to surrounding areas such as communities if strong winds occur											Compliance with asbestos abatement regulations 2020 must be enforced.											
		Illegal dumping of Asbestos could result in reputational damage, financial losses and fines. This is a major risk for communities where asbestos is illegally dumped as the members and children of that community will be exposed to health risks associated with asbestos											Clearance inspections and certificates need to be issued before handing over a section.											
		Unidentified asbestos containing materials could cause health risks to end user and other stakeholders, contractors and even visitors.											Monitor wind speeds and stop work when wind is above 30km/h blowing in a certain direction that might spread the asbestos particles.											
													All asbestos works must be supervised by competent person											
													Areas where asbestos were stored on site must be rehabilitated after asbestos has been removed from site.											
													Asbestos AIA must identify all asbestos containing materials on site and determine the type of asbestos.											
													Once asbestos has been removed a clearance certificate must be issued to the client / end user that included records of visual inspection conducted, air sampling test results and clear declaration for the purpose of the clearance certificate											
													Asbestos Management plan must be drafted specific to the project, asbestos containing materials and type of asbestos noted on site. The Asbestos management plan must clearly identify the procedures to follow to handle, remove and transport asbestos containing materials											
													Registered Asbestos contractor must provide proof of medical surveillance plan											

ACTIVITY (Work to be performed)	POTENTIAL HAZARD (Injury / Damage / Loss)	POSSIBLE RISK (Type injury/damage/loss)	RISK EVALUATION							PREVENTATIVE MEASURES	CONTROLS (Registers, Policies, Procedure)	RESIDUAL RISK						
			I	C	D	E	P	F	R			I	C	D	E	P	F	RR
S5-44	Safeguarding of existing structures	Damages to existing services and structures.								Ensure identification of all existing services and structures before commencing with construction activities. Site drawings to be reviewed to identify any services If drawings are not available, request assistance from end-user or property owner to identify potential services	- Drawings - Detailed Scope of works - Risk Assessments - Services survey - Conditional Assessments							16
Stage 6 – Project Close-out																		
S6-01	Site Demobilization	Unsafe disconnection of temporary services Improper loading of materials, equipment, offices and storage containers Improper loading of Mobile Plant on to trucks Transporting of equipment, machinery, plant, offices or storage containers with unsafe (not roadworthy) truck Incompetent person disconnecting temporary services Exposed to open excavations or trenches Exposed to open / unsafe electrical wires	Unsafe disconnection of electrical services by incompetent person could cause the person to be shocked or even electrocuted resulting in a fatality. This could also have an impact on electrical supply to existing and new structures Improper loading of items could cause the load to fall from the truck resulting in damage to property with cost implications. Falling items could also result in serious injuries to persons body, disability injuries and even fatalities Transporting of items with unsafe truck or vehicle could cause an accident to happen resulting in multiple serious injuries or							All disconnections to be made by a competent person appointed for the specific activity. Lifting operations to be conducted by Competent operator, with assistance of a competent rigger to assist with the rigging and loading of items. Risk Assessment and Method Statements must be available and communicated to team conducting the demobilization. Only roadworthy trucks or vehicles to be used for transportation of items removed from site. Driver must have a valid driver's license specific to the type of vehicle. Truck or vehicle must be inspected before leaving site for any defects, if defects are noted, it must be reported and attended to before driving All trenches and Excavation opened to disconnect services must be closed and compacted to its original state. No open wires, or piping must be left unattended.	- SOP/SWP - Issue-based Risk Assessment - Method Statement - DSTI's - Toolbox talks - Checklists - Appointment letter - Competencies / Driver's license / PDP - Medical Fitness to work - SWL/COC for lifting equipment - CoC - Registration (Electrical Contractor)							16

ACTIVITY (Work to be performed)		POTENTIAL HAZARD (Injury / Damage / Loss)	POSSIBLE RISK (Type injury/damage/loss)	RISK EVALUATION							PREVENTATIVE MEASURES	CONTROLS (Registers, Policies, Procedure)	RESIDUAL RISK						
				I	C	D	E	P	F	R			I	C	D	E	P	F	R
			fatalities Open excavations and open trenches could cause members of the public or end-user to fall into the opening resulting in leg injuries (bodily injuries) or if water (from rain is present) could cause children to drown in these openings																
S6-02	Housekeeping and Waste Management	Poor Housekeeping Tripping hazards Unauthorized dumping of waste Fire	Poor housekeeping could cause tripping hazards resulting in employees, visitors or the end-user to trip and fall leading to bodily injuries Dumping of waste or construction rubble in areas not identified as a registered facility could result in fines that will have cost implications. Long grass and bushes left at newly built areas could result in fire if ignited that could cause the building to burn down resulting in property damages with cost implication and could also result in serious injuries or fatalities if people are stuck inside the building	4	3	3	4	3	3	20	All walkways to be clear from construction material, equipment and any object that might have an impact on the flow of a walkway. All existing walkways must be reinstated as per original Inspection Checklists to be conducted by supervisors to ensure housekeeping is done daily and on close-out of project All construction rubble and waste must be removed from site before site handover to end-user. Waste must be dumped at a registered dumping site. Records must be kept as proof of dumping No Construction Materials may be left on site for end-user unless a written agreement is in place to ensure the end-user will remove the materials All bushes and grass must be cut around construction area to ensure a clean site is handed over to end-user All flammable materials must be disposed of or removed from site, may not be left unattended for the end-user	- Disposal Waste Certificates - Issue-based Risk Assessment - SOP/SWP - Medical Fitness to work - DSTI's - Toolbox talks - Agreements	3	2	2	3	2	2	14
S6-03	Construction Activities at Practical Completion, Works	No Supervision No Health and Safety	Conducting work activities without supervision can lead to	3	3	3	3	3	3	18	All construction activities must be supervised by appointed competent person.	- Inductions - SOP/SWP - Issue-based Risk	2	2	2	2	2	2	12

ACTIVITY (Work to be performed)		POTENTIAL HAZARD (Injury / Damage / Loss)	POSSIBLE RISK (Type injury/damage/loss)	RISK EVALUATION							PREVENTATIVE MEASURES	CONTROLS (Registers, Policies, Procedure)	RESIDUAL RISK																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
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S6-04	Completion and Final Completion	Resources on site	processes and procedures not followed resulting accidents and serious injuries								Health and Safety resources must be available on site until site is handed over back to the end-user	Assessment • Method Statements • Medical Fitness to work • Appointment letter • Competency • Checklists • Approved Extension of time • Approval of night work or weekend works																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
		No Health and Safety File / Documentation available									Health and Safety file must be maintained until site is handed over to end-user. Once site is closed, the consolidated file can be submitted to the DBSA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											</

I, _____, hereby confirm the following:

- I have read and understood the Baseline Risk Assessment.
- I confirm my intention to comply with all relevant legislative requirements.
- I acknowledge and accept the responsibilities and duties assigned to me and confirm my understanding thereof.

This declaration is made and agreed to at _____, on this _____ day of _____, 2026, in the presence of the undersigned witness.

Signature:

Date: _____

Witness Name: _____

Witness Signature:

Signed on behalf of (TBA) (PRINCIPAL CONTRACTOR