

SITE SAFETY HEALTH & SAFETY SPECIFICATIONS	
(SSHSS)	
PROJECT NAME: THABOTONA FARM PRIMARY SCHOOL.	
PROJECT REFERENCE NUMBER:	
CLIENT OHS AGENT	CLIENT
GONANG CONSULTING SERVICES	DEVELOPMENT BANK SOUTHERN AFRICA
 Gonang Consulting Services Yes We Can	 DBSA DEVELOPMENT BANK OF SOUTHERN AFRICA

APPROVAL	PREPARED BY	PREPARED FOR
INSTITUTION:	GONANG CONSULTING SERVICES	DEVELOPMENT BANK SOUTHERN AFRICA
POSITION:	OHS AGENT	CPM
DATE:	2023/05/14	

Minimum requirements and framework for a safety, health and environmental specification:
The following sections contain minimum requirements that should be contained in all SHE specifications that are being developed. Depending on the scope of work tendered for, the site and/or the project, if there are any section/s or requirement/s that are not applicable in a specific project, then those sections or specific requirements should be deleted. If there are additional sections and/or requirements that are required, then they should be added to the site and project specific SHE specification.

NOTE TO PRINCIPAL CONTRACTORS AND THEIR SUB-CONTRACTORS

The SHE specifications are DEVELOPMENT BANK SOUTHERN Africa's minimum requirements. The contractor is expected to develop a SHE plan which meets these requirements contained herein, as well as all the relevant applicable legislation and methods to be used in the execution of the works.

DEVELOPMENT BANK SOUTHERN AFRICA. in no way assumes the Contractors legal responsibilities. The Contractor is and remains accountable for the quality and the execution of his Safety, Health and Environmental programme, and that of any Contractors and Suppliers. This SHE specification reflects minimum requirements and should not be construed as all-encompassing or fixed in terms of this or other amendments made during the project.

TABLE OF CONTENTS

LIST OF ABBREVIATIONS	6
i. OMISSIONS FROM THIS SHE SPECIFICATION	7
PART A – SITE SPECIFIC SHE REQUIREMENTS.....	7
1. PROJECT AND SCOPE OF WORK DETAILS	7
1.1 Project Title as per Tender Document:.....	7
1.2 Project description/detailed scope of work:	7
1.3 Programme details:.....	8
1.4 Site Details:.....	9
2. PROJECT DOCUMENTATION	9
2.1 Project Lifecycle SHE Document Requirements.....	9
2.2 Tender preparation support by CAN CHSAs / CHSOs	10
2.3 Format of the Project Specific SHE Plan (PSSHEP)	11
2.4 SHE File Contents	11
2.5 Required SHE File Contents.....	12
2.6 Project and Site Requirements	15
2.7 General Aspects	16
2.8 SHEQ POLICY	17
2.9 SHE FILE submission at the end of the project	17
3. ROLES AND RESPONSIBILITIES	18
3.1 Client	18
3.2 Contractor Responsibilities:	22
3.2.1 Appointments and Competencies	23
3.2.2 Principal Contractors / <i>Joint Ventures</i>	27
4. HOURS OF WORK	28
5. RISK MANAGEMENT	28
6. PROJECT SPECIFIC RISKS IDENTIFIED.....	30
6.1 Site Establishment.....	31
6.2 Excavations and Foundations.....	31
6.3 Geotechnical Report	32
6.4 Construction of Site Facilities.....	32
6.5 Hazardous Chemical Substances.....	32
6.6 Ergonomics and Occupational Health.....	33
6.7 General Items.....	33
7. MANAGEMENT OF ALCOHOL AND SUBSTANCE ABUSE.....	34
8. COMPLIANCE	34
8.1 Legal Compliance	35
8.2 Non Conformances / Work Stoppage	36
8.3 Penalties	37
9. TRAINING	40

9.1	General Training	41
9.2	Ongoing, Pre-Task Training	41
9.3	Client Site Induction	41
9.4	Other Training	42
9.5	Visitors to Site	42
10.	SITE FACILITIES	42
	10.1 Temporary Facility Layout Plan	43
11.	ACCESS CONTROL TO THE CONSTRUCTION SITE	43
12.	COMPENSATION ISSUES	45
13.	OCCUPATIONAL HYGIENE MONITORING	47
14.	MEDICAL SURVEILLANCE PROGRAMME	47
15.	EMERGENCY PREPAREDNESS AND RESPONSE	48
16.	ENVIRONMENTAL MANAGEMENT	48
17.	FORUMS FOR SHE COMMUNICATION	49
18.	SHE AUDITS AND INSPECTIONS	49
19.	SHE INCIDENT MANAGEMENT (PC AND CONTRACTORS)	50
20.	STATISTICAL AND GENERAL REPORTING	51
21.	OPERATIONAL CONTROL REQUIREMENTS	51
22.	PSSHEP APPROVAL PROCESS AND SUBMISSIONS	54
23.	COST OF HEALTH AND SAFETY	55
24.	COST OF ENVIRONMENT	59
	ANNEXURE A: BILL OF QUANTITIES FOR HEALTH AND SAFETY	60
	ANNEXURE B: BILL OF QUANTITIES FOR ENVIRONMENT	62
	PART B – GENERAL CLIENT REQUIREMENTS	63
1.	PRINCIPAL CONTRACTORS RESPONSIBILITIES	63
2.	APPOINTMENTS AND COMPETENCIES	68
3.	TRAINING	72
4.	RISK ASSESSMENT (ADDITIONAL GUIDELINES)	75
5.	SAFE WORK PROCEDURES AND PRACTICES	76
6.	EMERGENCY PREPAREDNESS AND RESPONSE	76
7.	ENVIRONMENTAL MANAGEMENT	78
8.	FORUMS FOR SHEQ COMMUNICATION	84
9.	SHEQ INCIDENT MANAGEMENT (PRINCIPAL CONTRACTOR AND SUB- CONTRACTORS)	
	86	
10.	OPERATIONAL CONTROL REQUIREMENTS	92
	a. Notices & Signs	92
	b. Fire Safety	93
	c. Construction Vehicles and Mobile Plant	94
	d. Personal Protective Equipment	96
	e. Housekeeping	97

f.	Permit to Work	98
g.	Hazardous Materials/Chemicals Management	98
h.	Radiography, Ultrasonic, Non-Destructive Testing (NDT)	100
i.	Falling Risk Positions	101
j.	Excavations, Trenches and Floor Openings	102
k.	Barricading (Guarding of Excavations, Trenches and Floor Openings)	104
l.	Blasting	104
m.	Working near Public Roads	105
n.	Machinery, Tools and Equipment	105
o.	Machine Guarding	106
p.	Hand Tools and Pneumatic Tools/Explosive Actuated fastening Tools	107
q.	Explosive Actuated fastening Tools	108
r.	Lifting Machines and Lifting Tackle	108
s.	Pipe Jacking	Error! Bookmark not defined.
t.	Asbestos Control Management	111
u.	Boilers, Pressurised Systems and Vessels under Pressure	Error! Bookmark not defined.

LIST OF ABBREVIATIONS

AIA	Approved Inspection Authority
BOQ	Bill of Quantities
BRA	Baseline Risk Assessment
CC	Compensation Commissioner
CHS	Construction Health and Safety
CHSA	Construction H&S Agent
CAN CHSA	Candidate Construction Health and Health Agent.
CHSO	Construction Health Safety Officer
CM	Construction Manager
CPM	Construction Project Manager (DEVELOPMENT BANK SOUTHERN AFRICA.)
CR	Construction Regulations (Gazette 10113 of 7/02/2014)
CWP	Construction Work Permit
DMR	Driven Machinery Regulations
DoL	Department of Labour
DRA	Design Risk Assessment
ECSA	Engineering Council of South Africa
ER	Engineer's Representative
FEMA	Federated Employers Mutual Association
GAR	General Administration Regulations
GSR	General Safety Regulations
HIRA	Hazard Identification Risk Assessment
SHE	Safety, Health and Environment
OH	Occupational Health
OHSA	Occupational Health and Safety Act No. 85 of 1993 (as amended)
OHSS	Occupational Health and Safety Specification
PSSHEP	Project Specific Safety, Health and Environment Plan
PSSHES	Project Specific Safety, Health and Environment Specification
PC	Principal Contractor
PM	Programme Manager
Pr.CHSA	Professional Health Safety Agent
Pr. Eng	Professional Engineer
PPE	Personal Protective Equipment
RHCS	Regulations for Hazardous Chemical Substances
RE	Resident Engineer
CI	DEVELOPMENT BANK SOUTHERN AFRICA.
SABS	South African Bureau of Standards (Authority)
SACPCMP Professions	South African Council for the Construction and Project Management Professions
SANS	South African National Standards (Authority)
SMME	Small, Micro, Medium Enterprise
SWP	Safe Work Procedure

i. OMISSIONS FROM THIS SHE SPECIFICATION

*By Complying this S.H.E specification **DEVELOPMENT BANK SOUTHERN AFRICA**. Has endeavoured to address the most critical aspects relating to SHE issues in order to assist the contractor in adequately providing for the health and safety of employees on site.*

*Should **DEVELOPMENT BANK SOUTHERN AFRICA**. not have addressed all SHE aspects pertaining to the work that is tendered for, the contractor needs to include it in the SHE plan and inform **DEVELOPMENT BANK SOUTHERN AFRICA**. of such issues when submitting the tender.*

PART A – SITE SPECIFIC SHE REQUIREMENTS

1. PROJECT AND SCOPE OF WORK DETAILS

1.1 Project Title as per Tender Document:

THABOTONA FARM PRIMARY SCHOOL.

1.2 Project description/detailed scope of work:

The project area is situated at Gauteng, Nigel-Klipriver Road Phase 6, Tsietsi EXT 9 Palmridge. 22° 15' 18.74" S 27° 53' 49.50" E. The work will involve constructing and Construction of School, Excavating, Roof works, Brick works Paving, Excavating, and Manholes Glazing, Glazing & Tilling. The building will be designed in a manner that is a replica to the existing building surroundings, installing electrical power in the building and reinstating of the site.

The Contractor shall at all times observe proper and adequate safety precautions on the Site. Where adequate safety precautions are not being observed, the Engineer may order the Contractor to comply with minimum safety requirements at the Contractor's expense, and compliance with such an order will not absolve the Contractor from any of his responsibilities and obligations under the contract.

1.3 Programme details:

Clarification Meeting	To be advised by procurement
Time allowed for preparation of SHE plan/file after tender award	Specify duration i.e. 1 week
Approval date of SHE Plan	Within 3 days after submission but subject to content as per this requirements
Induction dates	To be advised after Approvals of SHE Plan/file
Estimated Commencement date of work on site	To be advised by Technical
Estimated Project completion date or project duration	18 Months

1.4 Site Details:

Locality of the works: The Project site is situated in Nigel-Klipriver Road Phase 6, Tsietsi EXT 9 Palmridge. 22° 15' 18.74" S 27° 53' 49.50" E.

2. PROJECT DOCUMENTATION

2.1 Project Lifecycle SHE Document Requirements

Documents Required at					
Evaluation stages		Awarding	Site establishment	Construction	Project Closeout
Commercial (Part A)	Functional (Part B)				
<ul style="list-style-type: none"> • Complete pricing schedule for Health & Safety • Letter of Good standing – COID Act 	<ul style="list-style-type: none"> • Letter of Good standing – COID Act • Health & Safety System- OHSAS 18001 certification or in-house SHE Management system • Site Specific Health and Safety Plan • SHEQ Policy • DIFR Status • Appointment of Construction health 	<ul style="list-style-type: none"> • Baseline Risk Assessment • Site specific health & safety plan • Comprehensive SHE File • Appointments of key role players • Method Statements • Written agreements between CI & contractor (Section 37.2) including (CR 5k) appointment • Applicable permits and licences e.g. Notifications to DOL, completion of CWP etc. 	<ul style="list-style-type: none"> • Medicals (CoF) – Annexure 3 • Operational Legal • Appointments with certificate of competencies. This also is dependent on Works to be undertaken i.e. submission s to Client before start date of activity on site. • Safe Working Procedures 	<ul style="list-style-type: none"> • Maintained detailed SHE File • Operational Legal Appointments with certificate of competencies. This also is dependent on Works to be undertaken i.e. submission s to Client before start date of activity on site • Method Statements/Activity based HIRA • Contractor weekly and monthly reports 	<p>Detailed SHE File (hard and electronic copies)</p>

	<p>and Safety Officer</p> <ul style="list-style-type: none"> • Base line Risk Assessment • Preliminary SHE File 		<p>as per Risk Assessment</p> <ul style="list-style-type: none"> • Inductions • Activity based HIRA. • Staff list with ID Copies(4 copies for each employee) / Valid Passports with work permits • Medicals/ Induction for investigator s 		
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2.2 Tender preparation support by CAN CHSAs / CHSOs

The Pr. CHSA / Can CHSA/ CAN CHSA is to be involved with tender preparations or quotations and adjudication for their Contractors and Suppliers relative to CHS requirements (Stage 4), adapt the Base line risk assessment and project specific SHE specification for inclusion with such documents as and when necessary. No Contractor or Supplier may commence work unless the CM and PM/ Engineer have evidence of the approval of the PSHS plan.

The Pr. CHSA / Can CHSA/ CAN CHSA are to ensure that Contractors PSSHEPs have at least a seven (7) day clearance period before they can commence on site. The audit process will measure the completeness of the documentation.

The Pr.CHSA/ Can CHSA will be responsible for auditing/inspections and ensuring compliance to legal and other requirements at least monthly, or as deemed necessary relative to risk or CHS management. Any instructions given by the Pr. CHSA/CAN CHSA are to be followed by the PCs and Contractors.

Failure to comply will be noted as a serious offence.

2.3 Format of the Project Specific SHE Plan (PSSHEP)

The format of the PSSHEP is to follow the same Index as Part A of this SHE Specification. Each aspect is to be responded to in terms of the way the PC will manage the scenario, and is requested **not** to insert the supporting documentation within the plan. Each section is to cross reference where the information can be found in the supporting documentation provided that is contained within the SHE System of the PC. The submission of 'generic' documentation is not acceptable. The appointed PC will receive a full report on the appropriateness of the plan, and further requirements if any. The Plan is to consider the project and the operational requirements, including matching to the construction programme. It is preferable that a similar approach is followed in managing Contractors.

Part B of this specification is to be referred to for additional client information.

2.4 SHE File Contents

The Contractor must have a SHE file in which records of this specification and the SHE plan are kept as per **Section 7(2) (b)**. All information required in the specification and plan, for the duration of the Principal Contractor and sub-contractors contract, is to be recorded in the file.

The SHE file that will be maintained will be for the construction site.

The Principal Contractor must also record on the file:

- Information about removal or dismantling of installed plant and equipment
- Hands on information about equipment needing cleaning and maintenance, for future purposes
- Nature, location and markings of services
- As-built drawings

The file must be kept on site and must be available on request for audit and inspection purposes.

The completed SHE file (i.e. hard and soft copy) shall be handed over to the Client/Agent at the end of the Principal Contractor's contract

2.5 Required SHE File Contents

Description	Evaluation Stage - Preliminary SHE File	After Award - Comprehensive SHE File
Company Profile	x	
Project Organogram	x	
SHEQ Policy	x	
Contact List including Emergency Numbers	x	
DEVELOPMENT BANK SOUTHERN AFRICA. Project Scope		x (DBSA to
DEVELOPMENT BANK SOUTHERN AFRICA. SHE		x (DBSA to
SHE Plan Approval Memorandum		x (DBSA to
Workman Compensation COID: Letter of Good Standing	x	
Legal Permits: Notification to Department of Labour/ or		X
37.2: Contractors Written Agreement		x (DBSA to
Site Entry/ Access Certificate		x (DBSA to
List of Sub-Contractors	X	
Section 7(1)(c)(v): Agreements between Principal Contractor and Subcontractors		X
Environmental Authorizations where applicable		x (DBSA to
Environment Management Plan	X	
Traffic Management Plan	X	X
Certificates of Competencies	x(key staff)	x(Operational)
Pre and Exit Certificates of Medical Fitness (Annexure 3)		x
Annual Medical Records		X
Staff List with Copies of valid certified ID/Passport Documents	X	
Client Induction Registers (SHEQ/Risk Control and or EMS)		x (CI to issue)
Contractors Tools and Equipment Inventory	X	
SHE Plans: SHE Management System aligned to the CI SHE Spec to be implemented on site. Refer to DOL website for sample of a SHE Plan. Include specific operational requirements as stated below. Emergency Plan, Traffic Plan, Fall Protection Plan and Environmental Management Plans to be submitted as separate documents.	x	
<i>Fall Protection</i>	x	
<i>Temporary Works</i>	x	
<i>Excavation Work</i>	x	
<i>Scaffolding</i>	x	
<i>Bulk mixing Plants</i>		X
<i>Confined Space</i>	x	
<i>Construction Vehicles and Mobile Plant</i>	x	
<i>Electrical Installations</i>	x	
<i>Flammable Liquids</i>	x	

OCCUPATIONAL HEALTH & SAFETY SPECIFICATION
 (Reference: Occupational Health and Safety Act, 85 of 1993 & Regulations 5 (1) (b)

<i>Water Environments</i>			X
<i>Housekeeping</i>		X	
<i>Stacking and Storage</i>		X	
<i>Fire Precautions</i>		X	
<i>Construction Welfare Facilities</i>		X	
<p>Legal Appointments: As required by the OHS ACT & Other Regulation <i>(Dependant on Works to be undertaken i.e. submissions to Client before start date of activity on site)</i></p>			
Reg.	Appointment		
Section 16(1)	Top Management i.e. MD or CEO	X	
Section 16(2)	Assistant to Chief Executive Officer	X	
Section 17	Health and Safety Representative	X	
Section 19	Health and Safety Committee Member(s) and Co-opted Members		X
GSR 3	First Aider	X	
GSR (2) ER9(1)	Fire Fighter	X	
GAR 9 (2)	Incident/Accident Investigator	X	
DMR18 (11)	Lifting Machinery Operator(Appointment or Permit)		X
DMR18 (5)	Lifting Machinery Inspector	X	
DMR 18 (10) (e)	Lifting Tackle Inspector	X	
EMR 9	Portable Electrical Equipment Inspector	X	
VUP 10	Portable Gas Container Inspector		X
HCS 3 (3)	Hazardous Chemical Substances Co-coordinator	X	
<p>Legal Appointments- Required as per Construction Regulations <i>(Dependant on Works to be undertaken i.e. submissions to Client before start date of activity on site)</i></p>			
Reg.	Appointment		
5(1)(k)	Principal contractor	X	
7(1)(c)(v)	Contractor	X	
8(1)	Construction Manager	X	
8(2)	Assistant Construction Manager	X	
8(7)	Construction supervisor	X	
8(8)	Construction supervisor sub-ordinates	X	
8(5)	Construction Health and Safety Officer	X	
9(1)	Person to carry out risk assessment	X	
10(1)(a)	Fall protection planner	X	
12 (1)	Temporary works supervisor	X	

OCCUPATIONAL HEALTH & SAFETY SPECIFICATION)
(Reference: Occupational Health and Safety Act, 85 of 1993 & Regulations 5 (1) (b)

13(1)(a)	Excavation supervisor	X	
16(1)	Scaffold supervisor	X	
20(1)	Bulk Mixing plant supervisor		X
23(1)(d)(i)/(k)	Constr. vehicle and mobile plant operator/Inspector.	X	
24(c)(d)	Temporary electrical installations inspector	X	
28 (a)	Stacking and storage supervisor	X	
27 (h)	Fire equipment inspector	X	
Risk Assessments – Baseline and activity based HIRA		X (Baseline)	x(Activity based)
Safe Work Procedures and Method Statements		x	
Calibration Certificates			X
Load Test & Inspection Test Certificates(e.g. Lifting equipment and Tackle)			X
Mandatory Registers Required for All Contracts:			
	Incident recording Register	X	
	Principal Contractor SHE Induction Register	X	
	First Aid Box Inspection Register	X	
	PPE Issue Register	X	
	Risk Assessment Communications Register	X	
Contract Specific Registers/Checklists:			
	Fall Protection Inspection Register	X	
	Temporary Work Inspection register	X	
	Excavation Inspection Register	X	
	Scaffolding Inspection Register	X	
	Bulk mixing Plants Inspection Register		X
	Cranes Inspection Register	X	
	Temporary Electrical Installations Inspection Register	X	
	Flammable Liquids Inspection register	X	
	Water Environments Inspection register	X	
	Hazardous Chemicals Inspection register	X	
	Ladder Inspection Register	X	
	Compressor register	X	
	Electrical Machinery Inspection register	X	
	Construction Vehicles and Mobile Plant Inspection Register	X	
	Plant		
	Gas Equipment Register		X
	Stacking and Storage Register	X	

Fire Precaution Register	X	
General Housekeeping Register	X	
Incident Management	X	
Emergency Response and evacuation Procedures	X	
Emergency Drill Schedule		X (during construction)
Minutes of SHE meeting		x (during construction)
SHE Toolbox Talks/DSTI's	X	
Job Observations	X	
Material Safety Data Sheets	X	
Training Records	X	
SHE Rep Monthly Inspection Reports	X	
Monthly Inspection /Audit Reports		x(during construction)
Non-conformance Reports (Work Stoppages & Penalties /Spot fines)		x(during construction)
Client SHEQ/ EMS Audit and Inspection Reports		x(during construction)
Contractor SHEQ Reports i.e. Contractor weekly report, Monthly Statistics		x(during construction)
Site Clearance Certificate		x (LDPWRI to issue)
Temporary Site Closure Checklist		x(during long breaks)
Copy of the OSHACT	X	

2.6 Project and Site Requirements

In addition to the requirements stated in 2.5, work taking place within a National Key Point will have the following additional requirements:

Item	Requirement:
1. Site Risk Control Documentation Requirements (Where Applicable)	<p>List the required Site Risk Control documentation to be completed by the Contractor:</p> <ol style="list-style-type: none"> 1. Excavation Permits (when applicable) 2. Site Access/Entry Permits 3. Tools/Equipment Inventory 4. Work Permit

2.7 General Aspects

In summary, the statement made early in the PSHS that the PSSHEP is to follow the same outline as this document. The PSSHEP requires demonstrating management's commitment to S.H.E and shall, as include the following elements as support documentation and references to where the information can be found for verification:

- The SHE Policy.
- Competent supervision on site (CV's, training certificates and appointments);
- Section 37.2 appointments and appointments of Contractors;
- Duties and safety responsibilities of all appointed persons on the project;
- Method Statements, Induction training, Toolbox talks, and on-going SHE training arrangements for employees;
- Occupational Health and Safety communications and meeting arrangements, including daily safe task instructions and project safety meetings;
- Safety awareness promotions;
- Nomination of personnel to carry out SHE audit and inspections. The task may be shared with other duties;
- Contractor Senior Management involvement with Company's staff in consultative processes and daily management SHE walkabouts;
- Occupational Health and Safety Workplace Environment, including provision for monitoring employee exposures to noise, dust, etc.;
- Rules and regulations including safe work procedures the Contractor has in place for recurring work activities;
- Fall protection plan.
- Control of dangerous and hazardous substances;
- System of hazard identification and risk control, such as Risk assessments, Daily Safe Task Instructions and communication;
- Design control and design interaction arrangements;
- Inspection of plant, tools and equipment prior to introduction to site and regularly thereafter;
- Accident incident reporting, recording, investigation and analysis, which ensure that corrective and preventative actions are taken;
- Medical and first aid arrangements;
- Evacuation and emergency planning;
- Substance abuse programme;
- Record keeping, including details of what is to be kept and for how long;
- Detailed financial allocation for SHE;
- Personal Protective equipment rules and arrangements;
- Selection, procurement and management of other Contractors;
- Maintenance arrangements of machinery and equipment;
- Designer interaction arrangements;
- Workers welfare facilities, and

- Letters of good standing with a compensation insurer.

The PC shall amend the PSSHEP as required by the Client/ Pr. CHSA, where amendments and updates are provided.

2.8 SHEQ POLICY

The PC shall have a SHEQ Policy authorised by their OHSA Section 16(1) appointee that clearly states overall SHEQ objectives and commitment to improving Safety, Health, Environment and Quality performance in the Project specific SHE plan. A copy shall be in the site office and included in induction programmes.

DEVELOPMENT BANK SOUTHERN AFRICA. has a SHEQ Policy attached to this document that clearly states the guiding principles by which **DEVELOPMENT BANK SOUTHERN AFRICA.** operates and the commitment to SHEQ excellence and is authorised by the Chief Executive.

A zero tolerance approach will be taken to any non-conformances or non-compliance throughout the project. This is to ensure that **every person** who works on or visits CI work site **returns home safely to their families.**

2.9 SHE FILE submission at the end of the project

The SHE file will commence once the PC is on site and be maintained. The SHE file must be kept on site and must be available on request for audit and inspection purposes. Regular scanning of documents and records is required as a form of archiving for inclusion in the consolidated SHE file at the end of the project.

A list of critical information to be included in the SHE file on completion of the project will be provided. On completion of the project, all records including the project information should include:

- Information about removal or dismantling of installed plant and equipment;
- SHE information about equipment needing cleaning and maintenance, for O&M management;
- As-built drawings, including nature, location and markings of services.

The SHE file (i.e. hard and soft copy) is to be handed over to the CI PM, and include the entire close out SHE files for Contractors. Further requirements regarding the content of the consolidated SHE files will be provided to PCs during the project.

3. ROLES AND RESPONSIBILITIES

If there are any specific appointment/responsibility below that are not applicable, then that appointment/responsibility should be removed (as long as it is not a legally required appointment/responsibility).

There might be instances where one person maybe fulfilling the responsibility of more than one role.

3.1 Client

The Client for this project is DBSA.

The Client Organogram will be provided by the CI PM and updated from time to time. The project and site records will be kept up to date and referenced in correspondence between parties.

DEVELOPMENT BANK SOUTHERN AFRICA. Responsibilities:

Client/ CI Programme Manager/The Engineer	<p>The CI PM is the accountable person for the overall management of the project, on and off-site. The PM is the delegated responsible person appointed in terms of the OHSA, Section 16(2), and FIDIC by the Engineer.</p> <p>The CI PM is responsible for ensuring that the SHE specification and any amendments are provided to the PCs and designers throughout the project. The CI PM will liaise with the CI SHEQ/ Pr. CHSA / Can CHSA representative to communicate any changes to designs or information relating to project SHE risk and the mitigation thereof.</p> <p>The CI PM shall ensure that the Construction Work Permit (CWP) is available from the Pr. CHSA/Can CHSA prior to any PCs commencing any form of construction work on site where applicable. The CI PM will provide a copy of the CWP to keep in the SHE file.</p>
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		<p>All CHS aspects as they relate to the overall requirements will be managed through the CI PM.</p> <p>The PM will ensure that all the statutory requirements, CI requirements are adhered to by the PCs and their Contractors at all times.</p> <p>Engineers and Resident Engineers with support staff will manage parts of the programme as they apply to the size and complexity of the project.</p>
Implementing Agent	Development Bank of Southern Africa	
Project Manager/ PA. /Assistant Engineering Représentative	Gonang Consulting Services	<p>The Project Manager is the delegated responsible person appointed in terms of the OHS Act/or FIDIC by the Engineer/Section 16(2) delegated responsible person. He/she is responsible for providing this specification to the Designer and managing the contract with the Principal Contractor. The Project Manager ensures that the SHE specifications are developed and issued with tender enquiries and that the Principal Contractor's SHE plan is approved prior to commencement of work. He must ensure that all the statutory requirements, DEVELOPMENT BANK SOUTHERN AFRICA. And SHE specification and SHE plan requirements are always adhered to by Principal Contractor and (if applicable) their sub-contractors. Where applicable the will provide (1) to provide a copy of the construction work permit with its site specific number to Contractor to keep in file and (2) ensure Contractor conspicuously displays site specific number at the main entrance to the site.</p>

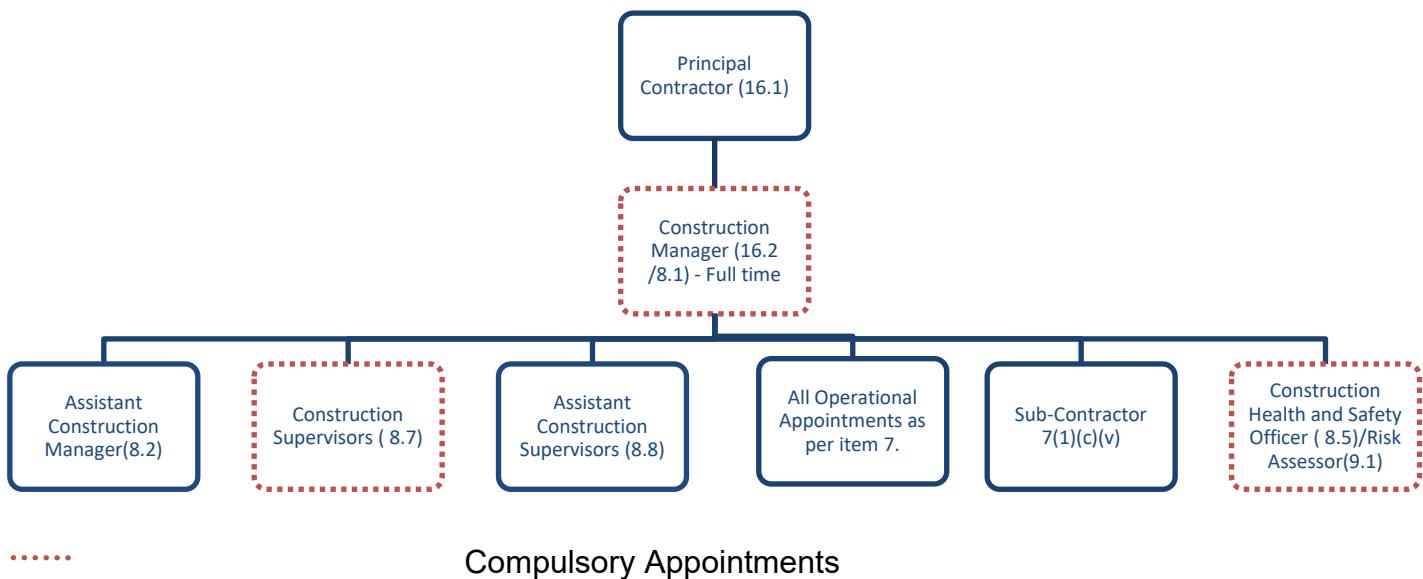
Project Execution Engineer:	Gonang Consulting Services	He is responsible for the overall management of the project on-site and is accountable to the DEVELOPMENT BANK SOUTHERN AFRICA . Project Manager. Among his responsibilities is to ensure Contactor SHE Plans meet the specifications.
Designer:	Gonang Consulting Services	The Designer is the person responsible for the overall management of the project design as well as ensuring the management of the compliance of the completed works to the design during and after construction on site with reference to Section 6 and 12 of Construction Regulation 2014
Project/Resident Engineer:	Gonang Consulting Services	The Project Engineer is the person responsible for ensuring that the designer fulfils his professional and legal obligations with respect to the implementation of the design.
Pr. CHSA/Can CHSA	Gonang Consulting Services	<p>The Pr. CHSA / Can CHSA/Can CHSA is the responsible person appointed to act on behalf of the client regarding CHS aspects. Duties are as per the outputs and deliverables outlined by the SACPCMP, statutory requirements and those set by the Department of Labour as concerns the CWP. All parties will ensure the Pr. CHSA / Can CHSA is informed of any design aspects, changes to design and will participate in mitigating project risk and liability.</p> <p>The Pr. CHSA / Can CHSA will audit all PCs and ensure that the CHS requirements as they relate to the dynamics of the project are adhered to. PCs and their Contractors will be expected to anticipate and plan for appropriate CHS requirements to limit risk. The Pr. CHSA / Can CHSA will communicate any non-conformances to the client via the Engineer, or as the</p>

		<p>communication routes are discussed. The Pr. CHSA / Can CHSA may increase the frequency of visits and audits depending on the risk and construction activities.</p> <p>Managing day-to-day risks remains the responsibility of all on site. Work or activities shall be stopped or halted by any party where workers of any level are at risk, and appropriate corrective action taken. Records of such actions are to be noted, and penalties applied where deemed necessary as set down in the PSSHES.</p> <p>CI reserves the right to place a full or part-time CI SHEQ Officer to assist the Pr. CHSA / Can CHSA with the monitoring of CHS. The CI SHEQ / SHEQ may assist in information and is able to visit and audit the site at any time. However, all findings are to be reported to the Pr. CHSA / Can CHSA and discussed in terms of the appropriate outcome. The CI PM and PC staff will then be notified.</p>
Environmental Control Officer(ECO):		The Environmental Control Officer is to provide assurance, advice, assist and support to the CI PM and Engineer /Agent in the management of the environmental issues on the project which includes ensuring compliance to the Environmental Authorizations and the Environmental Management Plan (EMP). For more detail refer to the ECO protocol. While a number of SHE issues may have an impact on environmental issues, the Pr. CHSA / Can CHSA are to ensure they communicate such aspects to the ECO. Any identified aspects noted in the Pr. CHSA/ SHERQ audits or inspections will be communicated to the ECO.

3.2 Contractor Responsibilities:

The Principal Contractor carries primarily accountability and responsibility for ensuring full compliance to the provisions of the OHS Act as contemplated by Section 37(2) written agreements and Construction Regulation (7).

Contractor Project Organogram:



3.2.1 Appointments and Competencies

The PCs shall appoint adequate, resourced, competent persons in all the areas of work that are experienced in such areas and are aware of their CHS accountabilities and responsibilities. All appointment letters and competency certificates, CVs etc. are to be approved by the Engineer or jointly with CI SHEQ/Risk Control and/or Pr. CHSA/ Can CHSA in terms of technical and CHS competence prior to commencement of work. Where persons are replaced or added to the project, the aforementioned is required prior to appointment. The project Organogram is to be updated accordingly.

Note: If there are any appointments that are not applicable, then a brief explanation as to why they are not applicable should be made. The Pr. CHSA / Can CHSA shall review all appointments prior to submission to ensure compliance and competence.

- Construction Management and Supervision**

Competent construction managers who are appointed to manage part or all of the works must have had training and/or experience in their area of responsibility. All site supervisors must show evidence of basic training in OHS, and an understanding or training in areas of responsibility (i.e. risk assessments, method statements etc.).

Multiple, competent Assistant Construction Managers may be appointed where justified by the scope and complexity of the works. Curriculum Vitae (CVs) are to be submitted for approval by the Client Representative. Each supervisor will be held responsible for the safety of working teams and subordinates, housekeeping and stacking and storage of materials in their particular area.

- Construction Health and Safety Officer/Manager**

The PC will employ at least one competent, full-time CHSO for the duration of the contract. The CHSOs CV is to be submitted for approval by the Client Representative, prior to placement on the project. The PC is to ensure adequate resources are provided in order to undertake all responsibilities (i.e. mobile phone, computer and internet access, vehicle etc.). The incumbent should fulfil the requirements for registration in 1 or other category as determined by the South African Council for Project and Construction Management Professionals (SACPCMP) as legislated. CHSOs require a minimum of 3 years' exposure to Construction in such a capacity. Failure of the aforementioned will result in the CHSO being required to be removed from site and an alternate provided who is appropriately registered.

The CHSO must have the competence to evaluate the Contractors Health and Safety plans, must hold a valid driver's license and may not hold any other position on the site staff.

The Construction Manager assisted by the CHSO will be held responsible for all OHS on the project. All staff and supervision, Contractors are to follow systems, instructions etc. given by the CHSO at all times. No new workers or Contractors may commence work without approval or following the OHS plan as submitted. Failure to do so will be considered a serious offence.

The CHSO will be held responsible for all OHS on the project.

No inductions of Contractor/ Sub-contractor staff until the OHS documentation is approved by the CHS Officer.

The CHS Officer/s may not be removed or replaced without the approval of the client representative, nor may the site be left unattended for more than 1 day without adequate, competent cover. The client representative may also give instruction for the replacement of the contractor/sub-contractor CHSO, should they fail to meet all obligations that fall within their scope of services.

A close out meeting will be held at the end of each formal audit by the client representative and findings will be issued in the form of an audit report. Relevant contractor representatives will be obliged to attend the close out meeting.

The Contractor Safety Officer where appointed **must** report all SHEQ Matters to **DEVELOPMENT BANK SOUTHERN AFRICA**. SAM SHEQ Officer on weekly basis i.e. every Mondays using the CI Contractor Weekly Report Template.

The Contractor Safety Officer must report to **DEVELOPMENT BANK SOUTHERN AFRICA**. on the template provided, on the 2nd of every month, name of principal contractor company and name of each sub-contractor company and each company's performance which includes the following as a minimum:

- Incidents: Lost time /Disabling Injuries, Medical; first aid, near misses reported;
- Staff Complement per principal contractor and Sub-Contractor Company;
- Actual man-hours worked;
- Status on incidents investigated and recommendations closed out and
- Status on audits conducted and findings closed out.

Internal audits of own and Contractors documentation are to be completed relative to the risk of the work, and irrespective of duration on site. Short term contractors and suppliers are to be audited.

The CHSO will be responsible for collating the OHS documentation (electronically) at the close out of the project. A list of the typical aspects that should be provided is available as an Annexure to this document.

- **Design Brief: Role of Designers**

The Designers for the project are responsible for the overall management of the project design. Designers are furthermore required to ensure statutory compliance, more specifically, the Construction Regulations (as amended). The Designer must take PSSHES into consideration during the design stage and address SHE with all.

Designs done 'in-house', and all those involved in the design including designers and the Pr. CHSA / Can CHSA are to be involved in the design meetings. Design method statements and activity based method statements are required by Designers.

The requirement of each design team is a 'Design for SHE' risk approach, both from the design and materials used, complexity and constructability, where possible, to limit project and life cycle risk. While this is contextualised in the CRs, a minimum level of compliance is not always optimum or will suit the project.

The hierarchy of control in identifying and mitigating risk is to be applied in each design activity. Ergonomic and health risks are to be considered. The designers shall identify risks both in terms of practical ways in which the PC is required to construct, which could increase risk the Client across the construction life cycle. Mitigation outcomes are to be included in any HIRA attached to the PC documentation that shall include assessment of products specified, with alternative approaches chosen. Designers shall include HIRA in reports to the Client design meetings. The BRAs at PC and Client levels may be amended from time to time. The Pr. CHSA / Can CHSA shall attend the Client and PC / design meetings and will ensure that feedback is provided and add value to all parties where possible. The Pr. CHSA/can CHSA may assist at all levels if and when necessary.

Updated risk assessments and related documentation need to be completed on acceptance of the designs. The Pr. CHSA / Can CHSA will provide amended BRAs and PSSHES where appropriate. The Pr. CHSA / Can CHSA shall be included in and attend Client / PC design meetings.

Failure to comply will be noted as a serious offence

- **Health and Safety Representatives and SHE Committee**

SHE Representatives shall be appointed following the start-up of the project, to be made up from both permanent and temporary employees. Representatives from local labour can be appointed as SHE Reps or Committee members to represent such labour for the duration of the contract. Local labour should not be responsible for OHS duties unless appropriate training has been provided and the CHSO deems such labour competent to do so. Development in OHS of such labour would be an advantage to the community and the PC. SHE Representatives are to be actively involved and serve on the SHE Committee.

The CHSO shall ensure there is an SHE Committee made up of appointed active key site staff and OHS Representatives, representing each work area, including all Contractors. Meetings will be held at least quarterly and more frequently if so instructed. Issues arising from the client audits are to be discussed, as well as all OHS related issues.

Minutes are to be distributed and discussed among all workers and Contractors and records kept thereof.

- **Appointment of Competent Suppliers**

Suppliers are those organisations who deliver, test, remove or supply material but do not conduct any construction work by definition, but who are required to be managed in terms of access to site, as well as being responsible for specific SHE requirements when on site. The CAN CHSA/CHSO will keep an up to date list of all Suppliers, and ensure that a list of SHE requirements that relate to the activities are available. Site rules in terms of security and induction apply to Suppliers. COIDA letters of Good Standing and appointments, registers and certificates for equipment are to accompany the Suppliers employees to site. The PC shall include specific requirements in their PSSHEP, and state how the Suppliers will be managed on a day-to-day basis.

Failure to do so will be a serious offence.

- **Appointment of Competent Contractors**

The Principal Contractor is to ensure compliance with at least the Client's minimum standards and all legislative requirements. The same OHS standards required of the PC are to be applied to all Contractors. An index of all Contractors and Suppliers is to be on file and kept updated at all times. The PC is to ensure there is sufficient funding for OHS compliance by each Contractor.

The following minimum aspects are applicable to any Contractor appointed:

- The CHSO is to ensure a Contractors appointment and approval of OHS documentation at least seven (7) working days prior to commencing work.
- No Contractor may work under the PCs Compensation registration number. If required, the PC may assist SMMEs with their registration with the Compensation Commissioner. However, such Contractors will not be able to commence work until proof of registration or Letter of Good Standing has been received.
- No work may commence without Mandatory (37.2) agreements between parties in place.

The following aspects are applicable to Suppliers or short-term works (surveying, repairs, servicing, deliveries etc). Cognisance is to be taken of the level of risk involved and the CHSO is to ensure the level of OHS documentation is appropriate:

- Mandatory agreements in place
- Letter of Good Standing
- Method statements and risk assessments
- Available information relative to:
 - Load testing and registers for cranes or lifting devices
 - Medical certificates of fitness
 - Material Safety data sheets (MSDSs)

Failure to provide written approval of OHS documentation will be considered a serious offense, and could result in aspects of, or all, the activities being stopped.

Principal Contractors /Joint Ventures

The PSSHES forms an integral part of the Contract, and each JV or PC is required to make it an integral part of their Contracts with Contractors and Suppliers. A PSSHES is to be made available for each level of Contract and each Contractor shall comply as instructed. No contractor may commence work without written approval of the PSSHEP by each PC or contractor when appointing their Contractors.

The PSSHES must be read in conjunction with the OHSA, its Regulations (as amended) and any other standards relating to work being done, and ensure a minimum of statutory compliance. The information relative to the scope of the project, the works etc. is detailed in the tender document (but not limited to), is to be taken into account when developing the project specific SHE plan (PSSHEP) and associated documentation. The BRA is to be included, as is a summary of risks identified as attached. However as much of the designs by the PCs were unknown during the amendments, the contents of this PSSHES are recorded as incomplete. Please note the items regarding how design will be managed through the design stages with the Pr. CHSA.

Continuous design will occur, and where there are design changes, or change in the scope of works, an amended PSSHES may be issued and managed by either the Pr. CHSA / Can CHSA or the CHSM / CHSO. Where amended PSSHESs are issued, the PC will be required to ensure a resubmission of an amended SHE plan for approval. Further to this, the PC must ensure that a similar system must be implemented between all their Contractors.

All activities on the site and all appropriate documentation will be monitored and reported on to the Client, Engineer and PCs. Communication between CI SHEQ / Pr. CHSA / Can CHSA and the PC will be through the Engineer or Engineer's Representative (ER) as determined at the commencement of the project.

If any person **transgresses any CHS site rules, policies or procedures**, the person shall **be removed from site and their site access revoked**. The appropriate employer must follow a process of disciplinary action which shall include re-training/inducting the employee (at the cost of the appropriate employer) and provide proof thereof to the CI PM for review prior to allowing the person to resume duties. The CI SHEQ Representative, Pr. CHSA / Can CHSA may impose penalties on any other person where such transgressions were overlooked by colleagues and supervision.

Design method statements and activity-based method statements are required throughout the project and are to be linked to risk assessments and training. The CAN CHSA's and/or CHS Officers CHSO's will be included in all operational planning to ensure optimum CHS compliance and risk mitigation.

Each PC is to ensure their own and Contractors site organograms are kept up to date throughout the project. Organograms are to reflect the statutory references.

Failure to comply will be noted as a serious offence.

4. Hours of Work

The hours of work for the site are:

- Mon- Thur (07h00-16h00)
- Friday (07h00-14h00)
- Holidays and Sunday(TBA)

All work conducted on site shall be in accordance with the Basic Conditions of Employment Act. PCs are required to timeously notify their CI PM/Agent of any work that needs to be performed after **hours**. Application forms for working after hours including breakdown/emergency projects can be acquired from the PMs. Also refer to Environmental Authorisation Conditions, as these may supersede any other document.

Failure to comply will be noted as a serious offence

5. RISK MANAGEMENT

The aim of this section is to:

- Highlight the construction site SHE risks and hazards (Reference must be made to the EIA, EMP, Environment Authorisations and the client/agent's baseline risk assessment).
- Request the Principal Contractor/s and his/her subcontractors to identify hazardous and potentially hazardous work operations. The principal contractor needs to demonstrate

that the site hazards and the contractor's activity risks and the mitigating measure have been considered in his risk assessments.

- There must be method statements and written safe work procedures for all the Contractor activities. Method statements and Risk Assessments should refer to the SWPs. S WPs are to be used in all DSTI activities. Records for all activities are to be kept that will be verified during auditing processes.
- Emerging risks and hazards must be managed during construction work.

Activity based risk assessments must be conducted by an appointed and competent person of the Principal Contractor.

Preliminary hazard identification shall be conducted by the Principal Contractor prior to work beginning on site.

A. Site Specific Health and Safety Hazards

In complying with the requirements of Regulation 5(1) (a) of the Construction Regulations of the OHS Act, the **DEVELOPMENT BANK SOUTHERN AFRICA**. Site/ Project Manager and/or Relevant Site Risk Control/SHEQ team that will outline the site specific health and safety hazards pertaining to the environment and physical conditions that the contractor will be exposed to in performing his work on site.

This section shall be reviewed by the Project Manager, the client and/or agent and design team to make it project/site specific.

The **DEVELOPMENT BANK SOUTHERN AFRICA**. Project Manager will make all reasonable efforts to ensure that the information provided is complete and correct. However, the Principal Contractor shall make his own assessment of the hazards and risks associated with the work under the Contract.

The **Baseline Project Risk Assessment is attached to this SHE specification** in order to make potential Contractors aware of the hazards:

It is however pointed out to the Principal Contractor that the list may not be totally comprehensive and it is the duty of each Principal Contractor to ensure that all the hazards are identified, before and during the project, and the necessary activity-based risk assessments are carried out. These risk assessments shall form part of the SHE Plan which will be passed on for scrutiny and approval by both the Client/Agent's representative and/or the Relevant Site Risk Control/SHEQ team.

During construction work, the Principal Contractor, his sub-contractors or the **DEVELOPMENT BANK SOUTHERN AFRICA**. Representative may identify emerging hazards and risks. For each such newly identified hazard or risk, the **DEVELOPMENT**

BANK SOUTHERN AFRICA. Project Manager/Agent shall review the baseline Project Risk Assessment and the relevant section(s) of the SHE specification. The revised SHE specification and baseline Project Risk Assessment shall be submitted to the Principal Contractor who will review his own risk assessments and relevant sections of the SHE plan, as well as those of the sub-contractors. The Principal Contractor will prepare and submit to the **DEVELOPMENT BANK SOUTHERN AFRICA.** Project Manager/Agent, both documents for approval.

The Principal Contractor and his subcontractors shall not proceed with the work/operation in hazardous areas until the Client/Agent's representative has reviewed the Risk Assessment and has approved and signed the revised SHE plan and issued a valid permit to work.

The Contractor shall on a daily basis and for every task to be performed, conduct a pre-task risk assessment with all employees involved with the task(s). The pre-task risk assessment will form the basis of the daily pre-job brief/toolbox talks prior to the start of work. Proof of communication as well as confirmation that it was received and understood by all will be noted on a standard form, which will be kept at the job site during the job execution. The completed signed pre-task risk assessment form will be filed in the Principal Contractor's SHE file.

Additionally, Principal Contractor must review relevant risk assessment when an incident has occurred as contemplated in (OHS ACT – CR 9(7)(b) and submit for approvals.

6. PROJECT SPECIFIC RISKS IDENTIFIED

Snakes, bees and wasps are expected to be found on site i.e. chambers, open pipes and confined areas. Principal contractor shall ensure that the work area is inspected thoroughly before conducting work. Any sighting of such shall be reported immediately and ensuring employees are removed from the dangerous situations. No killing of fauna will be allowed on site and rescuing will be conducted by a competent animal handler.

Internal regulations and procedures of CI and relevant legislation are to follow the principles of a **zero harm** approach to workers and the environment. These rules will be specific to the Project. Further CI Site specific rules will be highlighted during induction training.

For the purposes of this amendment to the PSSHES PCs shall take cognizance of the requirements and ensure that method statements, risk assessments and appropriate aspects of the organizational documentation are added. The additional information that may be required from time to time is to be submitted following further amendments prior to activities being able to commence. CI, and PCs Technical staff and Pr. CHSA / Can CHS Aare to work together to complete the requirements as they relate to the project.

A Permit system is required for all medium and high risk activities, and competent resourced Contractors are to be used if PCs are not doing the work themselves. The aspects included herein include the residual risks, related to the activities noted in the Bill of Quantities and the tender documentation, and project specifications. The items noted and included have been simply quantified, and are deemed, if applied, to reduce the risks identified by between 50-75% where the extra control measures are applied. The PCs are to note the extra control measures and expand upon them when considering their own activity and the appropriate risk mitigation.

6.1 Site Establishment

PCs are expected to link their facilities at their site camps to the services. Site establishment method statements and detailed risk assessments are required for each activity to be completed linking to the construction programme.

Details regarding management of Contractors and Suppliers are contained within the body of the PSSHES. Competent, resourced Contractors are to be used, with an SHE plan approval lead time of 7 days prior to Contractors being able to commence work.

It is expected that PCs and Contractors will respect each other's work spaces and operations and communicate with each other to arrange work where there are overlaps or adjacent activities.

6.2 Excavations and Foundations

Technical method statements linking to the HIRA are to be created for each activity and guide the excavation processes needed for the connections to sewage, electrical supply, cable laying, or potable water, as well as box cuts for foundations of each of the structures. Slopes of excavations are to be carefully considered and close monitoring of conditions is required.

As far as possible excavations for pipes, cables or similar should not be open for more than a day. No danger tape is allowed to be used for excavation demarcation. Excavations shall be protected using rigid fencing and/ or snow netting or plastic mesh as necessary. Competent supervision is required, with experience in the type of excavations to be done. Registers and inspections are to be completed according to organisational standards and

procedures. Appropriate signage and PPE as outlined in the HIRA are to be provided. Excavation Supervisor must be Competent.

Foundations may be required for the construction of the site offices, ablution areas and general office facilities, a Laboratory, as well as structures for the actual construction area. Method statements and HIRAs, management of ready-mix concrete Suppliers, or own vehicles will be required. PCs are to ensure traffic accommodation, separation of pedestrians and vehicles, and planning for access control.

General housekeeping is to be controlled by each site supervisor / team leader. Areas used for stacking and storage are to be noted on a plan, and appropriately maintained. Poor housekeeping will not be tolerated and a 'clean as you go' approach is to be adopted.

Dust suppression and silica monitoring, during all activities that include cutting and grinding of any cement, grouts etc., as identified by the Pr. CHSA / Can CHSA for each PC. Method statements, SWP and DSTIs are to be part of daily activities and each task planned.

6.3 Geotechnical Report

A range of soil conditions exist on the project. Dust control is imperative during all activities, and silica monitoring is required by an AIA as per the Regulations. Medical surveillance of workers is to include lung function testing.

6.4 Construction of Site Facilities

Portable General Store, ablutions and eating areas will be constructed during site establishment. Temporary works are to be managed by a competent person, all designs will be signed off by the designer and erected and maintained by competent appointed persons. The SANS 10085 is to be applied for all access scaffolding and any other Standards where appropriate.

Temporary ablution facilities are not to include formaldehyde products, and a ration of 1:10 is advised. It is preferable that a bacterial product is used.

6.5 Hazardous Chemical Substances.

The following list of substances is likely to be used, but each PC is to compile a list from the specifications provided by their Designers and Contractors and ensure the Safety Data Sheets (SDSs) are obtained and included in all HIRAs. The link to medical surveillance or health risks is to be included, and included in OREPS and the Annexure 3.

PRODUCT	POTENTIAL HEALTH OR OTHER RISKS
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Cement	Hand mixing may occur, will be used for structures, stabilizing. 50kg bags delivered on pallets, ergonomic risk from handling, dust exposure, chromates. Eye, skin and respiratory irritant.
Petrol/diesel/lubricants	Storage tanks/ bowsers on site. Fire, spillage, fumes.
Coatings	Type not specified, but will be used. Principal Contractor to ensure use of SDSs and appropriate protection measures.

6.6 Ergonomics and Occupational Health

Ergonomic factors need to be considered during all stages of construction. Lifting heavy loads, and repetitive work, while synonymous with construction, are to be considered a high risk and mechanical aids and the hierarchy of control are to be considered and applied. Heavy componentry confined working spaces and installation requirements are to be considered and mitigated where possible. Where a design issue exists, the client is to be approached to consider alternatives. Method statements, HIRA and DSTIs are to include ergonomic and health issues.

6.7 General Items

- Planning for access needs to coincide with the CI internal induction programmes and requirements for medical certification of fitness;
- Weather extremes may be experienced in winter and summer. Humidity levels are unlikely to be a concern, but the Discomfort Index (DI) is to be calculated and taken into consideration. A weather device is to be installed by the PC to indicate in a procedure how workers will be protected from such extremes; Wind speeds typical range from light to moderate breezes, and this factor must be taken into consideration during crane operation.
- Working hours are to be within the labour relations legislative confines. Procedures for working overtime are to be available, and where extended concrete pours are likely or other such activities, these must be well planned, incorporate shift changes and any other aspects that will keep workers safe;
- Project interfacing. Each PC is expected to ensure that their activities do not overly impact on other PCs. Co-ordination of activities is to be discussed with the Engineers and CI to ensure limiting the risks;
- No key staff may be removed during the decommissioning stages of work, snagging or site de-establishment. Competent supervision will be required at all times on-going Baseline and design risk assessments will be done for each PC as the work progresses.

- All reinforced concrete work shall comply with the requirements of SANS 1200G.
- All structural steel work shall comply with the requirements of SANS 1200H. (Structural Steelwork).
- The electrical work shall be carried out in accordance with DEVELOPMENT BANK SOUTHERN Africa's general Electrical specification for building lighting and small power installations.
- No housing will be provided nor will any accommodation be permitted on the site, for the contractor's employees.
- The contractor shall make his own arrangements to house his employees off the site and transport them to the works.
- No compressed air supply will be available on site.
- Working hours shall be in line with **DEVELOPMENT BANK SOUTHERN AFRICA**. Requirements, no working on weekend unless formally requested and approval granted to the contractor.
- Site access certificate issued to the contractor shall be kept on the site and presented to relevant **DEVELOPMENT BANK SOUTHERN AFRICA**. Personnel on request.

7. MANAGEMENT OF ALCOHOL AND SUBSTANCE ABUSE.

No person (employees, Contractors, consultants, visitors) shall report for duty or continue with his/her duties, if under the influence of Alcohol and Drugs. No person may consume or have in possession alcohol or drugs/controlled substances while on the project site. Employees, Contractors, consultants or visitors shall comply with any reasonable request to undergo random or specific alcohol testing. Contractor are advised to Draft a Alcohol & Drugs Policy.

8. COMPLIANCE.

All parties on site are to comply with legal and other requirements as part of the contract. Expenses which result from compliance with this legislation as well as other requirements specific to the site, will be for the PC or Contractors account. Where there are major and / or repeat SHE deviations, the Client or Agent will impose the necessary penalties as per the contract document and/ or the PSSHES as described.

Should the Principal Contractor appoint a sub-contractor, the Principal Contractor would then have the same role and responsibility in relation to the sub-contractors, in a similar way as the Client has in relation to the Principal Contractor.

The requirements within this specification should not be considered to be exhaustive and the Client/Agent reserves the right to add, delete or modify conditions where it is considered to be appropriate.

No claim will be accepted as a result of any costs or delays being incurred due to the Principal Contractor or his sub-contractors not complying with legislation, this SHE specification or their SHE plan approved by the Client/Agent.

Additionally, no claim will be accepted as a result of any costs or delays being incurred due to pending Client permit approvals from DOL or other government bodies.

8.1 Legal Compliance

The following legislation has been identified, but is not limited to, potentially having an impact on the project:

- Basic Conditions of Employment Act No. 75 of 1997 (as amended);
- Constitution of the Republic of South Africa (Act 108 of 1996);
- Conservation of Agricultural Resources Act (Act 43 of 1983);
- COID Act 130 of 1993;
- Disaster Management Act (Act 57 of 2002);
- Employment Equity Act No. 55 of 1998 (as amended);
- Environment Conservation Act (Act 73 of 1989);
- Fencing Act (Act 31 of 1963);
- Hazardous Substances Act (Act 15 of 1973);
- Health Act (Act 63 of 1977);
- Labour Relations Act No. 66 of 1995 (as amended);
- Mineral and Petroleum Resources Development Act (Act 28 of 2002);
- National Building Regulations and Building Standards Act 103 of 1977;
- National Environmental Management Act (Act 107 of 1998);
- National Environmental Management: Waste Act 59 of 2008;
- National Environmental Management: Air Quality Act 39 of 2004;
- National Environmental Management: Biodiversity Act 10 of 2004;
- National Environmental Management: Protected Areas Act 57 of 2014;
- National Forest Act (84 of 1998);
- National Road Traffic Act (Act 93 of 1996);

- National Water Act (Act 36 of 1998);
- Agricultural Pests Act 36 Of 1993;
- National Veld and forest fire Act (Act 101 of 1998);
- Occupational Health and Safety Act (Act 85 of 1993) and its Regulations;
- Water Services Act (Act 108 of 1997);
- Any other applicable South African legislation at a national, provincial and local authority level;
- Applicable South African National Standards (SANS);
- Applicable international standards;
- ISO 9001:2008 –Quality Management Systems requirements;
- ISO 14001:2015 –Environment Management Systems requirements;
- OHSAS 18001:2007 – Occupational Health and Safety Management Systems Requirements;
- National Key Points Act (Act 102 of 1980), and
- Applicable By-laws.

The PCs shall compile their own lists of all applicable legislation and standards that may have an impact on the scope of work that they are performing on the construction project. The list shall be updated on a regular basis.

8.2 Non Conformances / Work Stoppage

The Client/Agent's representative reserves the right to stop work and issue a work stoppage non-conformance report whenever safety, health or environmental violations are observed for both Principal Contractors and/or their sub-contractors. Expenses incurred as a result of such work stoppage and standing time shall be for the Principal Contractors account. Any non-conformances/findings/observations found in these audits/inspections on sub-contractors shall be raised and discussed with the relevant Principal Contractor (with whom the sub-contractor is contracted with).

The conditions that lead to work stoppages are based on:

- Management of change – this is when there are changes to the work environment (e.g.: climatic changes) and/construction work (e.g.: modifications to the design), in any phase of the construction project, and/or amendments with regards to **DEVELOPMENT BANK SOUTHERN AFRICA** rules and regulations and/or legislative amendments;
- Unsafe acts/behaviours.
- Unsafe conditions;

The process to be followed to ensure the worksite is rendered safe:

- The relevant activity must be stopped;
- The **DEVELOPMENT BANK SOUTHERN AFRICA** site/project manager and/or Principal Contractor and his subcontractors shall immediately remove the workforce from

the work area and correct the health and safety or environmental deficiencies by allowing only the people in the area that are competent to make the area safe.

- Principal Contractor and his subcontractors shall ensure that no other work is being performed during this time. Should the estimated time from the outset to make the area safe where life threatening/imminent danger situations exist, then the area will be barricaded and a sign placed with the wording "Unsafe Area – Authorized Access Only".
- The **DEVELOPMENT BANK SOUTHERN AFRICA**. Site/Project Manager shall review the affected parts/sections of the SHE specification with the purpose of providing sufficient SHE information to the principal contractor when necessary.
- The principal contractor shall then revise the relevant sections in the SHE plan to accommodate the changes.
- The **DEVELOPMENT BANK SOUTHERN AFRICA**. Site/project manager must ensure that the revised provisions in the SHE plan are adequate and must approve it before the work activity is commenced.

Before the workforce is allowed back in the area, Principal Contractor and his subcontractors shall ensure:

- Investigation of the work stoppage and the area is to be re-inspected by Contractor Safety Officer and supervisor and corrective actions taken documented on the work stoppage form;
- Sign off of the "Work Stoppage report" issued by the **DEVELOPMENT BANK SOUTHERN AFRICA**. Site/Representative/SHEQ to declare the area/activity/person/plant/or equipment safe for work.

Refer to requirements of Construction Regulation 5(q) of the OHS Act.

8.3 Penalties

The Client, SHERQ Representative / Pr. CHSA / Can CHSA, and ECO or anyone observing an unsafe act or practice reserves the right to stop work, and issue non-conformances when SHE violations are observed, for both PCs and/or their Contractors. Expenses incurred as a result of such work stoppage will be for the PCs account.

Penalties shall be enforced on the principal contractor for SHE related non-conformances identified for both the Principal Contractor and/or his/her sub-contractor(s) and/or supplier(s) pertaining to **DEVELOPMENT BANK SOUTHERN AFRICA'S** SHE requirements.

Penalties applied will be according to the following tables and where issued, the amount indicated on the non-conformance will be deducted from the certificate of the PC. Failure or refusal on the part of the PC or their Contractors to take the necessary steps to ensure the safety of workers and the general public in accordance with these specifications or as

OCCUPATIONAL HEALTH & SAFETY SPECIFICATION
(Reference: Occupational Health and Safety Act, 85 of 1993 & Regulations 5 (1) (b)

required by statutory authorities or ordered by the engineer, shall be sufficient cause to apply penalties.

SHERQ-Contractor Management	Value of Contract (Excl. VAT.) in millions R				
	<1	≥1<5	≥5<20	≥20<50	≥50
DELAYS ON ITEMS ATTRACTING PENALTIES					
a) SHE non-conformances, corrective and preventative actions not resolved within the agreed target dates exceeding 5 days (Rands /per day delay)	1,000	5,000	10,000	10,000	10,000
b) Non-reporting of SHE incidents and statistics within the required timeframe within 24 hours (Rands/per day delay)	1,000	5,000	10,000	10,000	10,000
c) Repeat SHE non-conformances (Rands/per day delay)	2,000	10,00	20,000	20,000	20,000
d) Overtime Work without the required approvals (Rands)	2,000	10,00	20,000	20,000	20,000

Over and above the details relating to the penalties noted in the CI SHE Management System, and Tender document, spot fines will be issued as follows, according to 'minor', 'medium' or 'severe' non-conformances.

MINOR:			MEDIUM			SEVERE		
Value of Contract (Excl VAT.) in millions R			Value of Contract (Excl VAT.) in millions R			Value of Contract (Excl VAT.) in millions R		
<1	≥1<5	≥5<20	<1	≥1<5	≥5<20	<1	≥1<5	≥5<20
Penalty: R5/count			Penalty: R/count and a non-conformance			Penalty: R/count, a non-conformance and/or activity stoppage		
R 10	R 25	R 50	R 25	R 250	R 500	R 250	R 2500	R 5000
Non-use of PPE			Toilets not supplied or regularly serviced; lack of drinking water			Contractors working without Health and Safety Plan approval		
Non completion of registers for plant and equipment on site			Contractors not audited			Workers transported in contravention of the OHS plan or legal requirements		
Lack of H&S signage at work areas			Working without training or the appropriate, approved H&S method statements			Invalid Letters of Good Standing		
Tools and equipment identified in poor condition during inspections			Legal non-conformances identified during the previous audit and not addressed within the agreed time frame			Non-compliance with traffic accommodation requirements: layout or physical conditions		

MINOR:			MEDIUM			SEVERE		
Value of Contract (Excl VAT.) in millions R			Value of Contract (Excl VAT.) in millions R			Value of Contract (Excl VAT.) in millions R		
<1	≥1<5	≥5<20	<1	≥1<5	≥5<20	<1	≥1<5	≥5<20
Penalty: R5/count			Penalty: R/count and a non-conformance			Penalty: R/count, a non-conformance and/or activity stoppage		
R 10	R 25	R 50	R 25	R 250	R 500	R 250	R 2500	R 5000
			<i>No monthly OHS report at site meeting to report on</i>			<i>Any serious breach of legal requirements</i>		
			<i>No certificates of fitness for workers as required</i>					

Absence of the reference to a possible penalty for non-conformance does not mean one cannot be issued. All aspects will link to legal non-compliance or risks identified in the SHE Specification or work being done at the time. The 2 forms of penalties will be used together, with immediate penalties issued as they apply.

In addition, a time-related penalty of R500,00 per hour over and above the fixed penalty may be deducted for non-compliance to rectify any non-conformance within the allowable time after a site instruction to this effect has been given by the Designer. The site instruction shall state the agreed time, which shall be the time in hours for reinstatement of the defects. Should the Contractor fail to adhere to this instruction, the time-related penalty shall be applied from the time the instruction was given.

Failure to comply with any/all of the above will result in a penalty being issued as indicated in the table. The details of the penalty issued shall be recorded on form SAM SHE 01033 F Notice to Penalise Contractor due to S.H.E Non-Conformances by the relevant SHEQ representative, signed off by the Project Manager, SHERQ Manager, Construction Services Manager and Programme Manager, and finally approved.

9. TRAINING

Training of site personnel in SHE is to be on-going, and where formal training is deemed required, is to be provided, where possible, and by accredited training service providers. The Pr. CHSA / Can CHSA are to determine training requirements and to report on needs or completed training in their reports and audits. For appointees that are strategically required on site, but do not meet the minimum competencies, a training plan must be submitted on a monthly basis to reflect progress of meeting the minimum training requirements.

Records of all training, and acknowledgement of such training by attendees must be kept. Comprehensive records of all employees under the PCs control attending induction or any other training throughout the project shall be included. Amendments to statutes, the PSSHEP, policies, procedures, and method statements etc. Shall require that all those affected shall undergo the relevant re-training.

9.1 General Training.

All site personnel (at all levels) shall be adequately trained in the type of work/tasks to be performed. The training shall extend to, but not be limited to include relevant method statements, hazard identification and risk assessments, procedures, rules and regulations, and other related aspects. The induction should also include identification of high risk areas or rules. The Pr. CHSA / Can CHSA is expected to use discretion and apply their minds to what is appropriate.

9.2 Ongoing, Pre-Task Training.

The PCs are required to ensure that Daily Site Task instructions (DSTIs) are to be completed daily by supervisors and team leaders for each team. DSTIs could be done multiple times during the day if different tasks or activities are done. The Pr. CHSA / Can CHSA are to ensure that records are kept of each team and DSTIs completed. The DSTIs are to include relevant method statements, HIRAs, SWPs and Tool box talks as they apply to the activities or tasks.

9.3 Client Site Induction.

The PCs shall ensure that all employees, Agents and Contractors have undergone the Project SHEQ induction programme including a competency test prior to commencing work on site. On-site training will be completed by CI.

Appropriate time must be set-aside for training (induction and other) for all employees. The appropriate *Site Induction Request form* must be completed by CI PM and submitted to the relevant SHERQ/Risk Control Representative.

All employees and visitors on site shall carry the proof of induction training in form of an induction card. Client Induction is valid for a year from the date it was conducted and thereafter refresher induction shall be re-scheduled at least one month before the induction period expires.

The relevant CI site Risk Control/SHEQ Training Officer shall keep a database of all records pertaining to induction and will inform Contractors of pending expiry though the overall

responsibility of maintaining current induction cards still lies with the principal contractor. All induction cards issued must be returned on completion of the project to the Issuer.

Note:

- No work shall commence without the required inductions provided by the Client, and
- Client will rearrange for inductions for Contractor employees and re-approve SHE File where Contractor is not on site for more than 1 month.

9.4 Other Training.

All Operators, Drivers and users of construction vehicles, mobile plant and other equipment must be competent and in possession of valid proof of training and experience. All employees in jobs requiring training in terms of the OHSA and Regulations must be in possession of valid proof of training. All records to be kept in the SHE file and kept up to date.

9.5 Visitors to Site

Visitors to the site shall be required to undergo and comply with Client Site SHE induction/and the Principal Contractor construction site SHE induction requirement(s) prior to being allowed access to site.

All visitors accessing the site for duration of less than 8 hours will undergo a short induction for which they are expected to sign for and be issued with a Temporary Visitors card. All visitors accessing the site for more than one day will undergo a full SHEQ induction. The parents of children (minors) visiting the site will need to sign a consent form issued by the contractor, prior to them being granted access to the site.

Visitors are to be made of aware of any legal environmental authorisations that exist on site and any relevant aspects that relate to the nature of the visit.

All visitors must remain in the care and custody of a person (Host) who has been properly inducted. No visitors are permitted to undertake any construction work, of any nature.

10. SITE FACILITIES

All personnel are to be afforded decent, clean, hygienic facilities at all times. Respect for people irrespective of status is to be afforded to all at all times. General housekeeping, stacking and storage are to be the responsibility of each team supervisor for indicated areas, which are to be noted on a site map or the drawings for the facilities. The responsibilities are to be updated as necessary.

Fixed ablution facilities are to be in accordance with statutory or generally acceptable standards. Separate facilities (sanitary and changing) are required for each gender. All

facilities shall be kept clean, hygienic and in a good state of repair. The input of the ECO may be required or there may be stipulations regarding where such facilities are to be placed. Temporary toilets moved around site are not to use formaldehyde, and alternative bacterial products are to be used. Temporary toilets are further to be available with each team, and for each gender. The Pr. CHSA/CAN CHSA are to determine the ratio of worker to chemical toilet, however it is recommended it is on a 1:10 ratio.

Dining areas are to be made available, that are sheltered, accessible to all, be kept clean, hygienic and in a good state of repair. Where work is on site, away from the fixed site facilities, temporary facilities shall be hygienic, clean and in good repair shall be available for all to use.

No living quarters will be allowed within the site, in line with the ILO conventions. Suitable living quarters are to be found for those who are required to be accommodated. Such sites could be inspected by the Pr. CHSA / Can CHSA for hygienic assessment.

10.1 Temporary Facility Layout Plan.

A drawing indicating all facilities at the site camp and potential remote sites are to be provided with the amended PSSHEP. The ECO and the EMP will need to be cross referenced regarding waste management and particular environmental factors to be considered, and the placement of waste skips and other forms of waste.

Shower facilities for each gender are to be supplied at the discretion of the PCs. Emergency showers may be provided if the risk warrants. Such drawings are to include the following but are not limited to:

- Dining room facilities;
- Change rooms (indicating gender);
- Ablution facilities (indicating gender);
- Site Offices and Amenities;
- Lay down and Storage;
- Site Access, and
- Temporary Site Services.

Failure to comply with the requirements will be seen as a moderate offence.

11. ACCESS CONTROL TO THE CONSTRUCTION SITE.

- **DEVELOPMENT BANK SOUTHERN AFRICA. Site Access**

All Contractors are to strictly adhere and are subjected to all security requirements on the premises, as laid down by the Client/Agent. Security requirements shall be highlighted at the induction given by the Client/Agent or Site Risk Personnel.

After induction, Contractor employees are registered on the site access system and are issued with access certificates. Access certificates to be kept with the Contractor at all times within the site.

All personnel/Contractor items to be declared at entry and pass-out to be obtained for non-declared items by Site personnel are required when exiting the premises.

Upon completion of a job, firing or leaving the site, the induction cards issued where applicable to a specific site to the contractors must be returned to the Client/Agent's Representative and or the protective services office. Under no circumstances is the card allowed to be used by another person other than the person issued with the card.

All those who access site are required to strictly adhere to all security requirements on the premises, as laid down by the Client.

- **Security and Site Access.**

Security requirements shall be included at Client and PCs induction training. Following induction, all employees are registered on the site access system and are issued with access certificates. Access certificates to be kept with each PC and their Contractors at all times within the site. Under no circumstances are access cards allowed to be used by any other person other than the person issued with the card.

PCs are to provide security controls at each site camp and at determine requirements for the site access gate, CI will provide security cover at the external access at the main gate.

Outsourced security services are to be treated as Contractors.

The security guards should be fully trained and knowledgeable about the company and its assets. Security guards on site to be accredited with the Private Security Industry Regulatory Authority (PSIRA) and hold an identification card from PSIRA at all times.

The project/site security arrangements that are to be included in the PSSHEP include, but are not limited to:

- The provision of shelter, with access to ablution facilities;
- The management of the Visitor's register and Occurrence book;
- The provision and maintenance of an appropriate communication system between patrols and to contract the relevant authorities in an emergency;

- Professional uniform that is neat and clean at all times;
- Ensuring that Personal Protective Equipment is to be provided for patrolling guards, and all other CHS activities appropriate to limit their exposure.

- **Project Site Access.**

The PCs, in collaboration with the Client/Agent's representative will ensure that proper access control is in place and functional at all times on and off the construction site, by posting a notice at every entrance, prohibiting entry of unauthorised person/s.

The PC is to take all necessary steps to control the entry and movement of non-employees into or onto a construction site or any other workplace and to ensure that persons outside the workplace are not detrimentally affected by the workplace activities.

- **Traffic Access and Routes.**

The main access to site will be through the main entrance to the site is through security gates.

A traffic plan to accommodate movement of traffic and pedestrians is required, and shall be included in the PSSHEP for specific work areas in the control of the PC.

The PCs shall provide a one-way traffic plan to the satisfaction of the Engineer, and liaise with other PCs where routes or work overlap. Access to the site from the public roads needs to be co-ordinated and managed in accordance with the by-laws, traffic and traffic standards (SA Road Traffic Signs Manual (SARTSM), Chapter 13, Volume 2).

Under no circumstances may workers be transported on the rear of vehicles or with plant and materials. The Road Traffic Safety Act is to be applied, as well as the PC doing risk assessments to determine risks.

Failure to comply with the requirements will be regarded as a serious offence.

12. COMPENSATION ISSUES.

The PCs must submit proof of registration and letter of good standing (LOGS) with the compensation fund or with a licensed compensation insurer for his company and each of his Contractors'. Record of validity must be maintained. Work is to be stopped where Contractors are identified with expired LOGS).

OCCUPATIONAL HEALTH & SAFETY SPECIFICATION)
(Reference: Occupational Health and Safety Act, 85 of 1993 & Regulations 5 (1) (b)

The Letter of Good Standing must reflect the name of the Principal Contractor and/or Contractor Company and the nature of business. No one organization may carry the liability or cover for another.

Failure to comply with the requirements will be regarded as a serious offence.

13. OCCUPATIONAL HYGIENE MONITORING.

The requirement to measure and monitor levels of hazards that affect the health of workers. PCs are to identify the occupational hygiene monitoring requirements that is relative to the products and processes, and risks created by work. Monitoring is to be in line with the legal framework, and use the Approved Inspection Authority (AIA) as defined, and the Pr. CHSA / Can CHSA will be required to co-ordinate the measuring and monitoring.

Each PC shall monitor dust, noise, vibration, lighting, and any other risks caused by mobile equipment, generators and other equipment used during construction. Factors such as weather can affect the intensity to which these impacts are experienced. The use of dampening of noise and vibration produced by equipment or processes is to be applied. Other appropriate mitigation measures are to be implemented as required / agreed upon with the CI PM, ECO and Pr. CHSA.

All plant and equipment is to come to site pre monitored, irrespective of source. Evidence of the use of an AIA to have done the measuring is to be available.

Dust suppression measures must be in place to reduce the dust caused by the movement of heavy vehicles and plant. Gravel roads in use are to be watered a minimum of twice a day in the working strip.

Failure to comply with the requirements will be regarded as a serious offence.

14. MEDICAL SURVEILLANCE PROGRAMME.

The PCs shall submit details of their employee Health as part of their PSSHEP which shall include a Medical Surveillance Programme.

The PCs must ensure that all persons coming to site to work, including designers, shall be in possession of a valid medical certificate of fitness (Certificate of Fitness). The CoF is also required that is relevant to the type of work (risk based) that the employee will be conducting in the form of **Annexure 3 of Construction Regulations 2014**, based on occupational Risk Exposure Profile (OREP) for each category of work. **Periodic or Annual medicals** shall be conducted and to be related to exposure until completion of the project, unless other CI is advised by the Occupational Health Medical Practitioner (OHMP). Medical examinations shall be completed **before** commencing construction work on site and exit medicals before **employee(s)** leave record the health status of each worker. CoF will be placed in the PSSHEP and be able to at all times cross reference lists of those working on site.

An employer shall not permit an employee who has been certified unfit for work to enter the site until deemed fit by the Occupational Health Practitioner (OHP).

Note: CI will only accept medical certificates of fitness issued by an Occupational Health Practitioner (means an occupational medicine practitioner or a person who holds a qualification in occupational health recognized as such by the South African Medical and Dental Council as referred to in the Medical, Dental and Supplementary Health Service Professions Act, 1974 (Act 56 of 1974), or the South African Nursing Council as referred to in the Nursing Act, 1978 (Act 50 of 1978). An example of an approved medical certificate can be requested from SAM SHERQ or the Pr. CHSA.

Failure to comply with the requirements will be regarded as a serious offence.

15. EMERGENCY PREPAREDNESS AND RESPONSE.

CI will provide and co-ordinate an overall emergency plan. PCs will develop their own emergency response plan submit this plan in the PSSHEP as an addendum. The emergency plans will be adapted to complement the CI emergency plan once on site. PCs will ensure that employees and Contractor employees are trained on the emergency plan on a regular basis. The plan is to detail how emergencies will be managed, taking into account the risk of the works emergency cover and responses. First aiders and fire fighters need to be involved with key employees responsible on the project.

Periodic emergency drills will be undertaken by CI that will include all PCs; however, the principal contractor must initiate his own emergency drills quarterly with permission from the CI PM.

- Fire hazards and Management.**

No open fires are allowed on site. The contractor must ensure that operations are in compliance with statutory requirements at all times. The emergency plan is to ensure fire management is included. Workers are to be trained in fire fighting, and appropriate equipment is available for the work being done at the various stages of the project. The designation and organization of site personnel to carry out fire safety duties, including fire watch service if applicable.

High risk products and processes such as using gas, and activities such as cutting, grinding, or any possibility of explosions or fire are to utilise a system of hot work permits and appropriate controls.

16. ENVIRONMENTAL MANAGEMENT.

A separate Environment File will be required for the evaluation of compliance as per the conditions of the environment authorisations. This file will be reviewed and approved by the ECO.

- **Waste.**

All hazardous waste to be disposed of at a registered waste site and records kept. The contractor and Contractor working on site must ensure that oil, fuel, and chemicals are confined to specific and secure areas throughout the construction period and stored in the appropriate manner in a bunded area with adequate containment for potential spills and leaks. Contractors must ensure that sufficient waste bins / containers are made available for waste control.

FORUMS FOR SHE COMMUNICATION.

PCs are to provide a communication strategy outlining how they intend to communicate SHE issues to their staff, the mediums they will employ and how they will measure the effectiveness of their SHE communication.

SHE will be included as an agenda item at every meeting conducted on site. Attendance registers, Agendas and Minutes of all meetings shall be available. Outcomes and decisions made regarding SHE are to be followed through and evidence of same available.

Monthly progress and technical meetings must be attended by the SHERQ Representative/ Pr. CHSA / Can CHSA(either); CAN CHSA / CHSOs who will report on S.H.E during the meetings, and advice on SHE issues.

A SHE Steering Committee will be established for the duration of the project. Representatives from each of the PCs involved, the CI PM, CI SHEQ, CAN CHSA / CHSO and the Pr. CHSA / Can CHSA will attend and report on SHE issues identified and requiring attention as they relate to the project.

Other SHE meetings may be held as required by DEVELOPMENT BANK SOUTHERN AFRICAS.

17. SHE AUDITS AND INSPECTIONS.

CI, including government authorities and the Pr. CHSA / Can CHSA reserve the right to conduct unannounced audits or inspections on PCs or their Contractors. Generally, audits and inspections will be done bi-monthly, but more frequently if deemed required. Results will be available within 5 days of the audit or inspection, but critical issues will be recorded immediately and non-conformances issued.

- **Approval of PSSHEPs.**

The PC PSSHEP will be audited against the PSSHES, construction activities and programme; to verify compliance to the requirements in the PSSHES before approval will be provided. The PSSHEP will be approved by the Pr. CHSA / Can CHSA.

- **Contractor SHE Performance Evaluation.**

CI shall evaluate their Contractor h7 performance on an on-going basis against the legislative and project standards as appropriate to the activities and level of risk.

- **Contractor Internal Audits.**

PCs are required to conduct internal audits and do audits on their Contractors on at least a monthly basis, or more frequently if high risk activities, or when the scope of work changes. An executive summary of the findings that includes the proposed corrective actions shall be submitted to the CI PM within 5 days of completion. Regular site inspections are required, and at least daily site visits to ensure compliance, including unannounced 'spot checks' on activities are to be done. A diary and evidence of such are to be kept indicating dates and type of audits/inspections completed.

- **Third Party Legal Compliance Verification Audits.**

Where third party legal compliance verification audits are conducted on PCs or Contractors, a copy of the summary of the findings and corrective actions shall be submitted to CI PM. The written report shall be submitted within 5 days of completion of the audit.

18. SHE INCIDENT MANAGEMENT (PC AND CONTRACTORS).

A procedure for reporting, investigation and record keeping of incidents and accidents is to be provided. The PC shall report all incidents/accidents including near miss incidents, fatalities, shall be reviewed by the H&S committee and the members of the Project Progress meeting notified of corrective actions taken.

All corrective action is closed out within 3 months. If this is not practicable within the time frame, then it is to be submitted at a later date agreed to by the CI PM.

Note: Providing the accident/incident investigation report does not exempt the PC from providing accident reports required by Statutory Authorities, in particular, the PCs responsibility for reporting accidents in accordance with the requirements of the OHSA and COID Act. The Client and Pr. CHSA / Can CHSA shall participate in any accident/incident investigation if the accident/incident is directly linked to any activity within the scope of the

construction project. CI further reserves the right to conduct an independent investigation in any incident and a CI SHEQ should be included on the team.

19. STATISTICAL AND GENERAL REPORTING.

PCs are to be submit a weekly report each Monday morning on the previous week's activities, and a monthly report on a CI template, or similar by the 2nd of each month. The focus of the reports is on leading indicators. A summary of the reports submitted are to be reported, recorded and discussed on at SHE Committee meetings, site progress meetings and the CI SHE Steering Committee.

20. OPERATIONAL CONTROL REQUIREMENTS.

The PCS are to ensure that all operational aspects are controlled according to policies and procedures, CI standards where required. All records, registers, appointments and other applicable aspects are to be kept up to date in the SHE file. Filing is to be kept current.

- Notices and Signage.**

All symbolic safety signage is to conform to the requirements of SANS 1186, and be appropriate to the risks and activities on site and at the site camp. Equipment is to include the measured noise levels that are completed by an AIA.

- Plant and Equipment.**

All plant and equipment on site is shall include specific markers that identifies the PCs organisation. Appropriate forms of plant and equipment shall be used, with appropriate registers and maintenance programmes. Registers of all plant and equipment on site are to be kept. Stores and storage shall be properly controlled, with competent supervision and in good repair. Maintenance to be completed by the appropriately competent person and operated by trained workers.

Identification is required on all of site vehicles entering the site. The speed limit within the bounds of the construction site is 20 km/h, and is weather dependent. No drivers or operator may talk on cell phones or two way radios whilst driving, unless a hands free kit is used, and carry no passengers unless so designed.

All Driver must always fasten Safety Belt.

CI reserves the right to search any vehicle on the premises or when entering or leaving the premises.

Each PC shall be solely responsible for the safety and security of any of his vehicles (including private vehicles) on the premises.

- **Housekeeping, Stacking and Storage.**

The PCs shall maintain a high standard of housekeeping within the site. Lay down areas agreed upon and on plan are to be maintained. Excessive material, plant and equipment is discouraged. Materials/objects shall not be left unsecured in elevated areas and shall be managed by site supervision at all times. A 'Clean as you go' approach is required, and will be monitored daily by the Pr.CHSA / CAN CHSAs / CHSOs.

- **Fall Protection.**

A fall protection plan is required and shall be kept up to date where appropriate. Fall protection equipment to be implemented where fall prevention is not possible and shall comply with SANS Standards, SANS 503&508, and 10085 Series or other recognised international standards are to be strictly implemented.

- **Lifting Devices and Cranes.**

All lifting/crane machine operators shall be competent to operate such machines with valid permits and training certificates. Load testing certificates for lifting devices, slings and chains in line with the statutory requirements are to be kept on record.

No person shall walk or work under suspended loads, including excavators, and between a load and a solid object where they might be crushed if the load should swing or fall. Guide ropes and banks men shall be used to prevent loads from swinging.

Rigger requirements shall conform to the statutory and industry standards.

- **Excavations and Barricading.**

No candy tape may be used to demarcate excavations. Where it is impracticable to provide fixed guard railing, effective removable barriers to withstand an impact of at least 100 kg and adequately maintained.

No material shall be within 1,5m of the excavation edges. No work shall commence in an excavation unless the excavation has been declared safe by the competent person. Whilst work is being performed in an excavation, there shall be a supervisor in attendance. All excavations must be on register and inspected daily before work commences and after inclement weather by the contractor's appointed competent person, declared safe and his

findings noted in the register. Access ladders are needed with each team within the excavation to ensure egress and easy access.

If an excavation or trench endangers the stability of buildings or walls, shoring, bracing, or underpinning shall be appropriately designed and be provided. Excavations and trenches that are adjacent to backfilled excavations or trenches, or which are subject to vibrations from traffic, or the operation of machinery (e.g., shovels, cranes, trucks), must be secured by a support system, such as shoring, or bracing.

Warning signs and flashing warning lights at night shall be displayed in suitable positions to warn any persons approaching the area of the location and extent of any excavation, if needed.

Barricades shall be provided at all unguarded openings in guard railing or floors, and shall be maintained in position at all times until the hazard no longer applies.

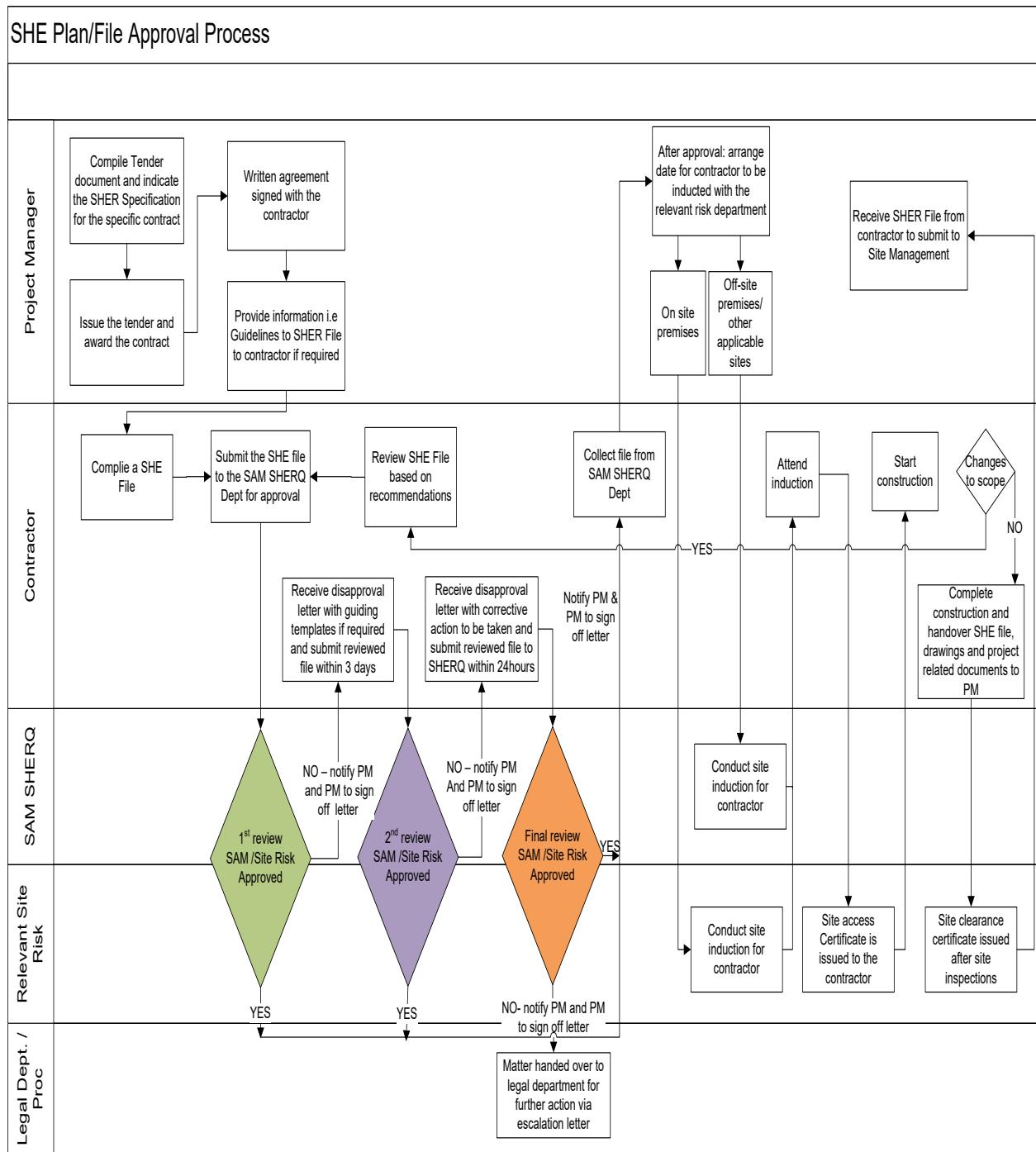
- **Electrical Supply and Equipment.**

All electrical equipment shall be kept in a good and safe condition and checked daily prior to use. All electrical apparatus, other than electrical hand tools, shall have a physical “lock out” system which will prevent any operation other than that authorized by a supervisor. A “lock out” sign shall be displayed when the apparatus is not in use. A lock out system is required when systems are installed to protect workers doing maintenance operations.

Method statements and safe work procedures shall be required for all work involving electrical apparatus including competent operators, supervision; registers are to be in place.

Certificates of Compliance (CoCs) by the appropriate Electrical AIA are to be available for temporary and permanent installations, including the appropriate inspections.

21. PSSHEP APPROVAL PROCESS AND SUBMISSIONS.



Pr. CHSA / Can CHSA will provide a letter and report after the file has been assessed, with amendments to be made if needed prior to approval.

PROCESS	SHE SPECIFICATION PART OF TENDER DOCUMENTS	<u>NO SHE SPECIFICATION INCLUDED AS PART OF TENDER DOCUMENTS</u>
1. Time allowed for preparation of SHE plan/file by the Contractor	1 week	2 weeks
2. Submission of SHE Plan	On the 8 th day	On the 15 th day
3. *SHEQ Officer to review the SHE Plan/file	2 days – Notify PM & Contractor immediately of outstanding issues	3 days– Notify PM & Contractor immediately of outstanding issues
4. **Time allowed for submitting outstanding documents to Client i.e. to SHERQ or PM	3 days	1 week
5. Time allowed for re-submitting revised documents to Client	1 day	3 days
6. ***Final Submission and Approval	1 day	1 day
<u>Duration of Process</u>	7 days	4 weeks

PSSHEP Submissions:

Required Timeframes to Avoid Project Delays.

The following guidelines are to be followed to limit delays. However, the Pr. CHSA / Can CHSA could provide other timelines that will be agreed upon between parties.

22. COST OF HEALTH AND SAFETY (Unpriced)

The payment items for Occupational Health & Safety are contained in the Commercial Part of the Tender Document i.e. Bill of Quantities. A pro-forma BOQ is attached to this SHE Specification as a guide to the items the Contractor should allow for in his pricing.

Item	Description	Unit
Preparation of Contractor's Site Specific Health and Safety Plan	The rate for this item must cover all expenses incurred in preparing the Contractor's project specific Health and Safety Plan as required by the Client's Site specific Health and Safety Specification in this document	Lump Sum
Principal Contractor's initial obligations in respect of the Occupational Health and Safety Act and Construction Regulations	<p>The full amount will be paid in one instalment only when the Client's Agent has verified and approved the following</p> <p class="list-item-l1">(a) The Principal Contractor has notified the Provincial Director of the Department of Labour in writing of the project, Annexure A to the Regulations.</p> <p class="list-item-l1">(b) The Principal Contractor has made the required initial Appointments of Employees and Contractors.</p> <p class="list-item-l1">(c) The Client has approved the Principal Contractor's project Health and Safety Plan.</p> <p class="list-item-l1">(d) The Principal Contractor has set up his Health and Safety File.</p>	Lump Sum
Principal Contractor's time related obligations in respect of the Occupational Health and Safety Act and Construction Regulations	The amount shall represent full compensation for that part of the Principal Contractor's general obligations in terms of the Occupational Health and Safety Act and Regulations which are mainly a function of time. Payment will be made when the Client's Agent has verified the Principle Contractor's compliance as part of the audit. This will include the updating and administration of the Health and Safety file	Month
Provision of Personal Protective Equipment (PPE)	<p>The rates for these items shall include for the procurement, delivery, storage, distribution and all other actions required for the supply of PPE to the employees of the Principle Contractor, full or part time, requiring them. Contractors are responsible for their on costs in this regard. Any items of PPE not included on the list will be paid for only after the Engineer has agreed to their acquisition.</p> <p>Items listed will include, among others which may be noted, are: hard hats, reflective vests, reflective bibs, high visibility overalls, protective foot wear, fall</p>	Lump Sum

	<p>arrestor harness and tethers, gloves, ear muffs, earplugs and dust masks of appropriate type. Normal items such as standard overalls, waterproof clothing, gum boots and standard workshop safety equipment such as welding masks and goggles will not be paid for.</p> <p>Payment will be based on the issues register for PPE as kept by the Construction Health and Safety Officer, backed up by paid invoices if requested.</p>	
Provision of full time Construction Health and Safety Officer and Manager	<p>The Tender sum shall include for the cost of a Construction Health and Safety Officer on a full time basis, his overheads, transport and all others items necessary for the proper carrying out of his duties, which include the induction and training of all persons on site. If a part time safety officer is appointed, by agreement with the Employer, then the amount Tendered will be prorated according to the amount of time spent on the project.</p>	Lump Sum
Costs of Medical Surveillance	<p>This item shall covers all costs involved in the obtaining of baseline, periodic (at least annually) and exit medical certification and conducting medical surveillance for all workers and especially operators of Construction vehicles and mobile plant as contemplated in CR 21(d) (ii); Workers at Heights, Regulation 8 (2) (b) of the Construction Regulations and Workers exposed to hazardous chemicals including bituminous fumes under Regulation 7 of the HCSR; for temporary workers and workers exposed to noises at or above the limits given in the Noise-induced Hearing Loss regulations, as stipulated above.</p> <p>Workers in the permanent employ of the Contractor will only be paid for if their certificates require updating. Chest x-rays will be required in the case of workers who may be exposed to high concentrations of dust (silica).</p> <p>C.06 a)Initial (baseline) medical examinations, including audiometric and lung function testing.</p> <p>C.06 b) Periodic examinations</p> <p>C.06 c) Exit examinations</p>	Lump Sum

OCCUPATIONAL HEALTH & SAFETY SPECIFICATION)
(Reference: Occupational Health and Safety Act, 85 of 1993 & Regulations 5 (1) (b)

Induction Training	This item shall cover all costs incurred for the health and safety inductions as set out on Regulation 7 of the Construction regulations and the proof of induction required. Payment will be made on the figures contained in the induction section of the Health and Safety File.	Unit
Provision of First Aid Boxes including emergency safety equipment such as fire extinguishers	The rate for this item shall cover all costs incurred in the provision and maintaining of first aid boxes as well as other emergency safety equipment which includes, but will not be limited to the provision of fire extinguishers.	Unit
Transportation of Workers	The Lump sum tendered under this Item shall cover all costs involved in the safe transportation of workers as outlined above. Payment will be made in equal amounts for the duration of the contract.	Lump Sum
Welfare Facilities	Adequate toilets and hand washing facilities, clean, safe drinking water, sheltered eating facilities, showering and changing facilities for each sex.	Lump Sum
Occupational Hygiene Surveys	The lump sum tendered for this item shall cover the costs of the anticipation, recognition, evaluation, control and prevention of hazards from work that may result in injury, illness, or affect the wellbeing of workers. These hazards or stressors are typically divided into the categories biological, chemical, physical, ergonomic and psychosocial.	Lump Sum
<i>Training</i>	The Lump sum tendered under this Item shall cover all costs involved in Occupational Health and Safety Training Requirements: (as required by the Construction Regulations and as indicated by the SHE Specification Document & the Risk Assessment/s and recommendations by the Health and Safety Committee.	Lump Sum
<i>Security requirements</i>	The Lump sum tendered under this Item shall cover all costs involved in providing a Security Guardhouse for security guards on-site with ablution facilities where appropriate, a Visitor's register and Occurrence. Two way radio or cell phone to report emergencies to the relevant authorities, site safeguarding and full security uniform worn at all times.	Lump Sum
Employee Wellness Programs	This item shall cover costs of programs implemented to improve the health of the labour force, mentally, physically and socially.	Lump Sum

<i>Submission of the Health and Safety File (hard and soft copies)</i>	<p>Expenditure under this item shall be made in accordance with the general conditions of contract.</p> <p>This amount will be paid only once the Principal Contractor has met all his obligations in respect of the Occupational Health and Safety Act and the Construction Regulations and has submitted his Health and Safety File complete as envisaged on this specification to the Client's satisfaction.</p>	<i>Lump Sum</i>
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23. COST OF ENVIRONMENT

The payment items for Environmental issues are contained in the Commercial Part of the Tender Document i.e. Bill of Quantities. A pro-forma BOQ is attached to this SHE Specification (Annexure B) as a guide to the items the Contractor should allow for in their pricing.

Item	Description	Unit
Signage	<p>The rate for this item must cover all expenses incurred in preparing signage at the entrance of the site offices indicating the following information</p> <ul style="list-style-type: none"> • The contractor's contact numbers • Authorisations details • ECO details • Emergency numbers and provision for: – snake removal, bee removal, fire, large hydrocarbon spillages, sewerage spillages <p>Signage measuring 30mmx30mm must also be made available for no go areas.</p>	<i>Lump Sum</i>
Pollution prevention	<p>The rate for this item shall include costs for Identification and reduction or elimination of activities, areas, or processes which create excessive waste products or pollutants. It shall include but not be limited to the provision of adequately serviced ablution facilities, screening for unsightly works and water cart/s for adequately watering down the site.</p>	<i>Lump Sum</i>
Erosion control and silt management	<p>The amount shall represent the costs associated with the practice of preventing or controlling wind or water erosion during construction. The erosion control measures</p>	<i>Lump Sum</i>

	must effectively prevent water pollution, soil loss, wildlife habitat loss and human property loss. The rate shall also include the costs of silt control where devices shall be designed to keep eroded soil on a construction site, so that it does not wash off and cause water pollution to a nearby stream, river, lake, or dam.	
Work in sensitive areas	The Tender sum shall include for the cost associated with the protection of areas where the natural environment can easily be harmed. Control measures will be as indicated in the EMPr.	Lump Sum
Waste disposal provision	The Tender sum shall include for the cost for proper disposition of discarded or discharged material where it be hazardous or non-hazardous waste, in accordance with local environmental guidelines or laws.	Lump Sum
Administration and documentation	The rate for this item must cover all expenses incurred in the preparing and maintenance of an environmental file which includes but will not be limited to permits and licenses, EMPr, Environmental audit reports, Complaints register, Agreements with landowners, Noncompliance notifications, Waste disposal documentation, Safety data sheets for all chemicals	Lump Sum

Annexure A: BILL OF QUANTITIES FOR HEALTH AND SAFETY

This is an example, the bill and **rates must appear in the Main Bill of Quantities**

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	TOTAL
C.01	Preparation of the Contractor's site specific Health and Safety Plan	lump sum	1		
C.02	Principal Contractor's initial obligations in respect of the Occupational Health and Safety Act and Construction Regulations	lump sum	1		

OCCUPATIONAL HEALTH & SAFETY SPECIFICATION)
(Reference: Occupational Health and Safety Act, 85 of 1993 & Regulations 5 (1) (b)

C.03	Principal Contractor's time related obligations in respect of the Occupational Health and Safety Act and Construction Regulations	month			
C.04	Provision of Personal Protective Equipment (PPE)				
C.05	Provision of a full time Registered Construction Health and Safety Officer	month			
C.06	Cost of medical certificates and medical surveillance				
	(a) Initial (baseline) medical examinations		prime cost (PC) sum		
	(b) Periodic and exit examinations		prime cost (PC) sum		
	(c) Contractor's charges to allow for handling costs and profit in respect of sub items 13/X.06 (a) and (b)	%			
C.07	Induction training	lump sum			
C.08	Provision of First Aid Boxes to GSR requirements and other emergency safety equipment such as fire extinguishers.	lump sum			
C.09	Transportation of Workers	lump sum			
C.10	Welfare Facilities	lump sum			
C.11	Occupational Hygiene Surveys	lump sum			
C.12	Training	lump sum			
C.13	Security requirements	lump sum			

C.14	Employee wellness programs	lump sum			
C.13	Submission of the Health and Safety File (hard and soft copies)	lump sum			

Annexure B: BILL OF QUANTITIES FOR ENVIRONMENT

This is an example, the bill and **rates must appear in the Main Bill of Quantities**

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	TOTAL
E.01	Signage	lump sum			
E.02	Pollution prevention	lump sum			
E.03	Erosion control and silt management	lump sum			
E.04	Work in sensitive areas	lump sum			
E.05	Waste disposal provision	lump sum			
E.06	Administration and documentation	lump sum			

PART B – GENERAL CLIENT REQUIREMENTS

1. PRINCIPAL CONTRACTORS RESPONSIBILITIES

Principal Contractor: Construction Manager Supervisors and Sub-Contractor Supervisors	<p>The Principal Contractor shall ensure that the performance of all specified work is supervised, throughout the contract period, by a sufficient number of competent appointed representatives of the Principal Contractor and/or sub-contractor, who have experience in the type of work specified.</p> <p>Note: No work may commence and or continue without the presence of appointed Management and Supervision appointees during performance of the contracted work. In determining the number of appointed competent Construction Managers and Supervisors, the nature and scope of work being performed, shall be taken into consideration.</p> <ul style="list-style-type: none">a) The Principal Contractor must appoint in writing 1 full time competent person as a Construction Manager (OHS Act CR 8.1) that will be responsible to manage all construction work on a single site and ensure health and safety compliance. In the absence of the Construction Manager the Principal Contractor must appoint an alternate Construction Manager.b) Having considering the size of the project a Principal Contractor must appoint in writing one or more Assistant Construction Managers (OHS Act- CR 8.2) for different sections, the Construction Manager is however still the accountable to manage the site.c) It must also be noted that the required appointed Construction supervisor (OHS Act CR 8.7) may not leave the site unless there is a sufficient number of appointed competent sub-ordinate supervisors (OHS Act – CR 8.8) on site to assist with supervision.d) A contractor must appoint in writing a full time or part time construction health and safety officer (CHSO), (OHS Act- CR. 8.5) and make sure that the CHSO is registered with SACPMP (OHS Act-CR.8.6) and has the necessary competencies and resources.e) The Principal Contractor's Construction Manager shall provide a list of names and contact telephone numbers of all his employees as well as the sub-contractors employees on site.
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	<p>This list shall be updated as and when new sub-contractors commence on site.</p> <p>f) The Principal Contractor to keep the construction work permit in site file and ensure the site specific number is conspicuously displayed at the main entrance to the site.</p> <p>g) Where a construction work permit is NOT required, the Principal Contractor must notify DOL at least 7 days before work starts, on (CR. Annexure 2) if work includes: Excavation work, working at heights where there is a risk of falling, demolition of structure or the use of explosives.</p> <p>h) The Principal Contractor's Construction Manager shall keep a record of all employees including the sub-contractor's employees, including date of induction, valid certified identity documents/passports; work permits, relevant skills and licenses, and be able to produce this list at the request of the DEVELOPMENT BANK SOUTHERN AFRICA. Project Manager/Agent. These records shall be filed in the SHE File.</p> <p>i) The Principal Contractor shall ensure that his managers and supervisors give clear and unambiguous instructions for the work in hand to the personnel for whom they are responsible for. The instructions shall include, but not necessarily be limited to:</p> <ul style="list-style-type: none"> • description of the objective/scope of work • sequence of work/method statements • hazard identification and risk assessment (prior to commencement of work) • Precautionary/preventative measures that are to be taken. • Identification of sensitive features that may be impacted upon by the project.
<p>Principal Contractor's Accountabilities for their Sub-Contractors</p>	<p>a) In the event that the Principal Contractor needs to introduce a new sub-contractor, the Principal Contractor must first inform the Client/Agent's and obtain his approval. Such sub-contractors must, in every respect, meet the Client's/Agent's SHE requirements.</p> <p>b) After approval from Client/Agent, to appoint each sub-contractor as per (OSH Act- CR 7.1 (c)(v))</p> <p>c) Should the principal contractor appoint a subcontractor, the principal contractor would then have the same role and responsibility in relation to the subcontractors, in a similar way as the Client/Agent has in relation to the principal contractor.</p>

	<p>d) The Principal Contractor is directly accountable for the actions of his sub-contractors. The Principal Contractor will also be responsible for initiating any remedial action (recovery plan) that may be necessary to ensure that the contractor complies with all requirements.</p> <p>e) The Principal Contractor shall ensure that the sub-contractors appointed have the necessary competencies and resources to perform the work safely.</p> <p>f) The Principal Contractor shall provide any sub-contractor who is making a bid or appointed to perform construction work, with the relevant sections of the documented SHE specification, who would in turn provide the client/agent with a SHE plan for approval.</p> <p>g) The Principal Contractor shall carry out audits on the sub-contractor at least monthly to ensure that their SHE plan is being implemented and maintained.</p> <p>h) DEVELOPMENT BANK SOUTHERN AFRICA. may conduct audits on the Principal Contractor's sub-contractor/s. Any non-conformances/findings/observations found in these audits shall be raised and discussed with the relevant Principal Contractor (with whom the sub-contractor is contracted with).</p> <p>i) The Client/Agent and/or the Principal Contractor shall stop any sub-contractor from executing construction work which poses a threat to the safety and health of persons or the environment or non-compliance to the approved SHE plan.</p> <p>j) Where Sub-contractors appoint another contractor to perform construction work, the duties determined in sub regulation (1) (b)-(g) that apply to Principal Contractor apply to the Sub-contractor as if he or she were the principal contractor.</p>
Project SHE/Environmental Control/Liaison Officer	<p>Depending the size and complexity, and sensitivity of the project, the appointment of a full time SHE/EC Officer is required for the duration of the contracted work and part time appointments will not be allowed. The Contractor SHE/EC Officer(s) shall assist and support the Contractors Construction Manager to ensure that the contractors SHE responsibilities are fulfilled and compliance to the SHE specifications and SHE plan are met. In determining the number of appointed competent SHEQ Officer /s, the nature and scope of work being performed shall be taken into consideration.</p>
Employees On The Project	<p>a) The Principal Contractor is responsible for adequately informing his employees and sub-contractors of all relevant information of the DEVELOPMENT BANK SOUTHERN</p>

	<p>AFRICA. issued SHE specifications and the Principal Contractors SHE plan.</p> <p>b) Employees are responsible for their own health and safety and that of their co-workers in their area. They must be made aware of their responsibilities during induction and awareness sessions some of which are:</p> <ul style="list-style-type: none">• Familiarising themselves with their workplaces and SHEQ procedures.• Working in a manner that does not endanger them or cause harm to others.• Keeping their work area tidy.• Reporting all incidents/accidents and near misses.• Protecting fellow workers from injury.• Reporting unsafe acts and unsafe conditions.• Reporting any situation that may become dangerous.• Carrying out lawful orders and obeying SHEQ rules. <p>c) Every employee must undergo site generic induction provided by the Client/Agent before commencement of the contracted work. Only once this induction has been received, will each employee receive an induction card from Relevant Site Risk Control/ SHEQ Representative giving them site access. Thereafter, principal contractor to conduct site specific SHE induction to all employees.</p> <p>d) It must be highlighted to all employees, that anyone who becomes aware of any person disregarding a safety notice, instruction or regulation shall immediately report this to the person concerned. If the person persists, stop the person from working and report the matter to the DEVELOPMENT BANK SOUTHERN AFRICA. Project Manager/Agent and the Principal Contractor "Construction Manager" immediately.</p> <p>e) No person shall damage, alter, remove, render ineffective, or interfere with anything that has been provided for the protection of the site, or for the health and safety of persons.</p> <p>f) No person under the influence of alcohol, drugs or medication (in a state of intoxication) or any other condition that may render him incapable of controlling himself or of other persons under his charge shall be allowed to enter the site. Any person required to take medication shall notify the relevant responsible person as well as the potential side effects of the medication.</p>
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	<p>g) Employees shall not wear an ear plug intended for music or use a cell phone whilst performing work activities.</p> <p>h) All safety and warning signs must be obeyed at all times.</p> <p>i) Entering or leaving the Site may only be done via the official designated walkways, do not take short cuts. Follow designated walkways to and from your work place. Walk, do not run, and be alert for motor vehicle traffic and mobile equipment.</p> <p>j) All employees must adhere to the SHE and other site specific rules.</p> <p>k) If any of the Principal Contractor's employees or his sub-contractor employees has transgressed any of the requirements of the SHE Specification, SHE plan or site rules, then the employee will be removed from site and his/her site access revoked. The Principal Contractor must follow a process of disciplinary action which shall include re-training/inducting the employee (at the cost of the Principal Contractor) and provide proof thereof to the DEVELOPMENT BANK SOUTHERN AFRICA. site/Project Manager and upon the satisfaction of the DEVELOPMENT BANK SOUTHERN AFRICA. Site/Project Manager will the employee be allowed back on site.</p>

2. APPOINTMENTS AND COMPETENCIES

OHS ACT AND ASSOCIATED REGULATION APPOINTMENTS:

N O	REGULATIO N	APPOINTMENT/COMPETENCIES
1.	Section 16(1)	Chief Executive Officer (only the details of Chief Executive required)
2.	Section 16(2)	Assistant to Chief Executive Officer.
3.	Section 17	<p>Health and Safety Representative</p> <p><u>Requirement:</u> One trained Health and Safety Representative for every 20 employees, site location or part thereof. To be elected and appointed per work area and discipline and comply with OHS Act Section 17 and 18 and GAR Section 6.</p> <p><u>Competencies:</u> General Health and Safety Training Health and Safety Representative Training Hazard Identification, Risk Assessment Training and Incident Investigation Training</p>
4.	Section 19	<p>Health and Safety Committee Member(s) and Co-opted Members</p> <p><u>Requirement:</u> Health and Safety Committee Member (if there are 2 or more Health and Safety Representatives then there will be a Health and Safety committee)</p>
5.	Section 19	Chairperson of Health and Safety Committee
6.	GSR 3	<p>First Aider</p> <p><u>Requirement:</u> as per OHS Act or project risk profile of workers</p> <p><u>Competencies:</u></p> <p>Possession of a valid level 1 or 2 first aid certificates issued by any one of the following: The SA Red Cross Society; the St John's Ambulance; the SA First Aid League; or a person or organisation approved by the Chief Inspector for this purpose.</p>
7.	GSR(2) & ER 9(1)	<p>Fire Fighter</p> <p><u>Requirements/Competencies:</u> Relevant Training</p>
8.	GSR 5(1)	<p>Person that pronounces and certifies a confined space safe for the duration of work being conducted (applicable for only confined spaces). Competencies: Competent on the use of gas monitoring device, First Aid Certificate, Confined Space Training on emergency procedures.</p>
9.	DMR 17(2)	Goods Hoist Inspector
10.	GAR 9 (2)	Incident/Accident Investigator
11.	DMR18 (11)	<p>Lifting Machinery Operator (Appointment or Permit)</p> <p><u>Requirements/Competencies:</u> Relevant Training</p>
12.	DMR18 (5)	<p>Lifting Machinery Inspector</p> <p><u>Requirements/Competencies:</u> Relevant Training</p>
13.	DMR 18 (10) (e)	<p>Lifting Tackle Inspector</p> <p><u>Requirements/Competencies:</u> Relevant Training</p>

14.	EMR 9	Portable Electrical Equipment Inspector Requirements/Competencies: Trained Electrician
15.	VUP 10	Portable Gas Container Inspector
16.	VUP 13 (1) (b)	Pressure Vessels Inspector Requirements/Competencies: AIA Approved
17.	Lifting Regulation(6) (1)	Competent person to examine and maintain lift, escalator or passenger conveyer Requirements/Competencies: AIA Approved
18.	Asbestos Regulations 21	Person registered as an Asbestos Contractor (Asbestos AIA) by the Department of Labour Requirements/Competencies: AIA approved

Written Agreements : OHS Act Section 37(2) Agreement between Client/agent and Principal Contractor

18.	CR 8(1)	Construction Manager Requirements/Competencies: To be competent person as defined in the Construction Regulation i.e. Knowledge, training, experience and qualification in the type of project to be undertaken. Qualifications and training are registered in terms of the provisions of the National Qualification Framework Act, 2000. Courses include : General and Health and Safety course, Legal Liability course, OHS Act and Regulations course (latest version of the Act and regulations),Incident Investigation and Root Cause Analysis Training,Hazard Identification and Risk Assessment Training ,Job Observations Training and attended an accredited supervisors safety course
19.	CR 8(2)	Assistant Construction Manager Requirements/Competencies: To be competent person as defined in the Construction Regulation i.e. Knowledge, training, experience and qualification in the type of project to be undertaken. Qualifications and training are registered in terms of the provisions of the National Qualification Framework Act, 2000. Courses include : General and Health and Safety course, Legal Liability course, OHS Act and Regulations course (latest version of the Act and regulations),Incident Investigation and Root Cause Analysis Training,Hazard Identification and Risk Assessment Training ,Job Observations Training and attended an accredited supervisors safety course
18.	CR 8(7)	Construction supervisor Requirements/Competencies: To be competent person as defined in the Construction Regulation i.e. Knowledge, training, experience and qualification in the type of project to be undertaken. Qualifications and training are registered in terms of the provisions of the National Qualification Framework Act, 2000. Courses include

		: General and Health and Safety course, Legal Liability course, OHS Act and Regulations course (latest version of the Act and regulations), Incident Investigation and Root Cause Analysis Training, Hazard Identification and Risk Assessment Training, Job Observations Training and attended an accredited supervisors safety course
19.	8(8)	<p>Construction supervisor sub-ordinates i.e. assistant construction supervisors</p> <p><u>Requirements/Competencies:</u> To be competent person as defined in the Construction Regulation i.e. Knowledge, training, experience and qualification in the type of project to be undertaken.</p> <p>Qualifications and training are registered in terms of the provisions of the National Qualification Framework Act, 2000. Courses include</p> <p>: General and Health and Safety course, Legal Liability course, OHS Act and Regulations course (latest version of the Act and regulations), Incident Investigation and Root Cause Analysis Training, Hazard Identification and Risk Assessment Training, Job Observations Training and attended an accredited supervisors safety course</p>
20.	8(5)	<p>Construction Health and Safety Officer(CHSO)</p> <p><u>Requirements/Competencies:</u> CHSO is registered with SACPMP</p> <p>Diploma in Safety Management or Environmental Health, A recognised safety certification (minimum: of 2 weeks training) (e.g. SAMTRAC / Modern SHEQ Management course), OHS Act and Regulations, COID Act, Incident Investigation, Hazard Identification and Risk Assessment Training, Health, Safety and Environmental Auditing, Environmental recognised course and Emergency Preparedness co-ordination training. Training in ISO/ OHSAS and 2 years working experience in SHE will be mandatory for high risk projects.</p>
21.	9(1)	<p>Risk Assessor</p> <p><u>Requirements/Competencies:</u> Person to carry out risk assessment, Competency based on exposure and experience level but preferably with the following :HIRA, a recognised safety certification (minimum: of 2 weeks training) (e.g. SAMTRAC / Modern SHEQ Management course) and OHS Act and Regulations (latest version of the Act and regulations)</p>
22.	8(1)(a)	<p>Fall protection planner</p> <p><u>Requirements/Competencies:</u> Person that compiles the fall protection plan. Risk Assessments and Fall protection training</p>

23.	10(1)(a)	Temporary Works Supervisor (previously known as Formwork and support, CR 2014) <u>Requirements/Competencies:</u>
24.	13(1)(a)	Excavation supervisor <u>Requirements/Competencies:</u> Person to carry out <u>excavation inspections at planned intervals and as and when required.</u> <u>Competency based on exposure and experience but preferably with the following: HIRA</u> , a recognised safety certification (minimum: of 2 weeks training) (e.g. SAMTRAC / Modern SHEQ Management course), Excavation Inspection Course and OHS Act and Regulations (latest version of the Act and regulations)
25.	14(1)	Supervisor of demolition work
26.	14(11)	Explosives expert <u>Requirements/Competencies:</u> Responsible person in the use of explosives and to develop the method statement in accordance with applicable explosives legislation
27.	16(1)	Scaffold supervisor <u>Competencies:</u> Competency based on exposure and experience but preferably with the following: Scaffolding Erector and Inspector Certificate, HIRA and OHS Act and Regulations (latest version of the Act and regulations).SANS 10085
28.	16(1)	Scaffold erector <u>Competencies:</u> Competency based on exposure and experience but preferably with the following: Scaffolding Erector and Inspector Certificate, HIRA and OHS Act and Regulations (latest version of the Act and regulations)
29.	16(1)	Scaffold inspector <u>Competencies:</u> Competency based on exposure and experience but preferably with the following: Scaffolding Erector and Inspector Certificate, HIRA and OHS Act and Regulations (latest version of the Act and regulations)
30.	17(1)	Suspended platform supervisor
31.	17(8)(c)	Suspended platform expert
32.	18(1)	Rope Access Supervisor (previously known as Boatswain Chair , CR 2014)
33.	19(8)(a)	Material hoist inspector
34.	20(1)	Bulk Mixing plant supervisor (previously known as Batch Plant, CR 2014)
35.	20(2)	Bulk Mixing plant operator
36.	21(2)(b)	Explosive Actuated fastening Device Inspector (previously known as Explosive Power Tool, CR 2014)
37.	21.2 (g)(i)	Explosive Actuated fastening Device controller
38.	22(e)	Tower crane operator

39.	23(1)(d)(i)/(k)	Construction vehicle and mobile plant Operator/Inspector
40.	24 (c)/(d)	Temporary electrical installations Controller/Inspector
41.	28 (a)	Stacking and storage supervisor
42.	27 (h)	Fire equipment inspector

NB: All other relevant appointments not specified will be identified by the contractor and the necessary appointments to be put in place.

3. TRAINING

The aim of this section is to outline **DEVELOPMENT BANK SOUTHERN Africa's** expectations in respective of the scope of the training which the Principal Contractor and Sub Contractor employees receive. The scope of the training includes but is not limited to the type of work being performed and the relevant procedures. Additional to the requirements, will be that the Principal Contractors and sub-contractors would have the appropriate qualifications, certificates and are under competent management and supervision i.e. a supervisor with the appropriate knowledge, training, qualifications and experience.

Training Service Providers used in the training of Principle and Sub Contractor Employees should have the following verifiable credentials:

- Proof of valid Seta Accreditation Certificate for NQF Aligned Training;
- Registered Assessors, Facilitators and Moderators;
- Proof of recognition by relevant Quality Assurer

Records of all training and qualifications of all contractor employees must be kept. The Contractor shall maintain comprehensive records of all employees under his control (including all employees of the sub-contractor) attending induction training. Acknowledgement of receiving and understanding the induction must be signed by all persons receiving the induction respectively.

When there is an amendment to the Acts and/or to the regulations, SHE specification and SHE plan, all affected staff shall undergo the relevant re-training.

For appointees that do not meet the minimum competencies as indicated above: full compliance to the above competencies would be expected within 6 months after the contract is placed. A training plan must be submitted on a monthly basis to reflect progress of meeting the minimum training requirements.

General

Prior to induction all Principal Contractor and Sub-contractor employees must undergo a pre-employment medical examination and found fit for duty. A copy of the certificate of medical fitness as per Annexure 3 must be presented for permanent record at the induction venue and kept at site offices for permanent record.

All employees and visitors on site shall carry the proof of induction training in form of an induction card. Client Induction is valid for a year from the date it was conducted and thereafter refresher induction shall be re-scheduled at least one month before the induction period expires. The relevant site Risk Control/SHEQ Training Officer shall keep a database of all records pertaining to induction and will inform contractors of pending expiry though the overall responsibility of maintaining current induction cards still lies with the principal contractor. All induction cards issued must be returned on completion of the project to the Issuer.

Note:

- **Where projects involve Environmental Authorisations, arrangements will be made with the Relevant Project Environment Control Officer to jointly conduct induction with the relevant site Risk/SHEQ personnel prior to commencing work on site.**
- **No work shall commence without the required inductions provided by the Client.**
- **Client will rearrange for inductions for Contractor employees and re-approve SHE File where Contractor is not on site for more than 1 month.**

Construction Site induction carried out by the Principal Contractor

The Principal Contractor shall ensure that all his employees, sub-contractor employees and visitors undergo general work induction as contemplated in the (OHS Act- CR 7(6) & 7(7) with regard to the approved SHE plan, general hazards prevalent on the construction site, construction risk assessment, rules and regulations, and other related aspects. The induction should also include identification of sensitive features such as wetlands/ vlei areas, red data species, graves, etc.

Job specific induction carried out by the Principal Contractor/Sub-Contractor Supervisor on the site

The Principal Contractor will be required to ensure that before an employee commences work on the project that the supervisor in control with responsibility for the employee has informed the employee of his scope of authority, any hazards associated with the work to be performed as well as the control measures to be taken. This will include man-task specifications, the discussion of any standard task procedures or hazardous operational procedures to be performed by the employee. The Principal Contractor is to ensure that the

supervisor has satisfied himself that the employee understands the hazards associated with any work to be performed by conducting task/job observations.

Proof of job specific induction signed by Inductor and trainee must be submitted to Construction Safety Officer before employee is permitted will to work.

Other Training.

All Operators, Drivers and Users of construction vehicles, mobile plant and other equipment must be in possession of valid proof of training.

All employees in jobs requiring training in terms of the Act and Regulations must be in possession of valid proof of training as follows:

Occupational Health and Safety Training Requirements: (as required by the Construction Regulations and as indicated by the SHE Specification Document & the Risk Assessment/s and recommendations by the Health and Safety Committee):

- * General Induction (Section 8 of the Act)
- * Site/Job Specific Induction (also visitors) (Sections 8 & 9 of the Act)
- * SHE Representatives (Section 18 (3) of the Act)
- * Training of the Appointees indicated above
- * Operation of Cranes (Driven Machinery Regulations 18 (11)
- * Operators & Drivers of Construction Vehicles & Mobile Plant (Construction Regulation 21)
- * Basic Fire Prevention & Protection (Environmental Regulations 9 and Construction Regulation 27)
- * As a minimum basic First Aid to be upgraded when necessary (General Safety Regulations 3)
- * Storekeeping Methods & Safe Stacking (Construction Regulation 26)
- * Emergency, Security and Fire Co-ordinator.

4. Risk Assessment (Additional Guidelines).

Types of risk assessments:

Base-line	Base-line risk assessments must be conducted to profile the project risks and approved by the Principal Contractor's competent person i.e. Risk Assessor and Client/ Agents Representative before the project commences must be updated regularly to ensure its relevance to changing scope and/or circumstances.
Issue-based	Conducted when there any changes/or emerging risks
Continuous activity based	<p>The intent is Zero Tolerance to unsafe acts and conditions on the construction site through the assessment of risk of each operation executed by the Principal Contractor and the provision of the necessary means to eliminate or minimise the risk to ensure a healthy and safe working environment.</p> <p>The process involves input from the Site Manager, Supervisor(s), SHE Officer, and the specialist Artisans for the job as well as the SHE representative for the workplace concerned. Additional Activity based risk assessments are required for certain tasks throughout the project.</p> <p>Guidelines for actual steps involved in an Activity based risk assessment are:</p> <ul style="list-style-type: none"> – Each activity is listed; – Specific hazards are identified and listed against each activity; – The magnitude of each risk is rated as Low, Medium or High; – All known existing controls are listed for example: Safe Work Procedure for scaffolds and ladders; registers and checklists, appointments etc. – The relevance, effectiveness and sufficiency of these controls are assessed; – In the event of deficient controls for the particular activity. Further mitigating actions will be recorded and safe working procedures drawn up where applicable; – Responsible person appointed to supervise the task and carryout Planned Job Observation(s). – Completed Risk Assessment must be handed to the DEVELOPMENT BANK SOUTHERN AFRICA. Site/Project Manager representative for comment and approval; – Names of employees who have received instruction on the work content and the sequence of the activities listed in the risk assessment are to be recorded, obtain their confirmation of comprehension of their roles (signature or other markings). This instruction must be done through an interpreter if required and recorded on the Pre-Job Brief (Daily Safe Task Instructions), with reference to applicable Risk Assessments.

5. SAFE WORK PROCEDURES AND PRACTICES.

The aim of this section is to provide an indication of the activities that require safe work procedures and practices to mitigate the identified risks. There must be written safe work procedures for all activities. Risk Assessments should refer to the safe work procedures.

A safe working procedure should be written when:

- Designing a new job or task;
- Changing a job or task;
- Introducing new equipment or substances; and
- Reviewing a procedure when problems have been identified, e.g. from near miss incidents or an accident/incident investigation.

The safe working procedure should identify:

- The supervisor for the task or job and the employees who will undertake the task;
- The tasks that are to be undertaken that pose risks;
- The equipment and substances that are used in these tasks;
- The control measures that have been built into these tasks;
- Any training or qualification needed to undertake the task;
- The personal protective equipment to be worn;
- Actions to be undertaken to address safety issues that may arise while undertaking the task.

6. EMERGENCY PREPAREDNESS AND RESPONSE.

The aim of this section is to remind the Principal Contractors and his sub-contractors about the importance of developing a site specific emergency response plan.

Using the **DEVELOPMENT BANK SOUTHERN AFRICA**. Site specific emergency plan where applicable, the Principal Contractor, together with his sub-contractors, will develop their own emergency response plan (as a guideline) for both site and offices and submit this plan to the DEVELOPMENT BANK SOUTHERN AFRICA. Project Manager for approval. It may be decided that one site specific emergency response plan be used for all contractors. Principal Contractor will ensure that employees and sub-contractor employees are trained on this plan.

Periodic emergency drills will be undertaken by **DEVELOPMENT BANK SOUTHERN AFRICA**.; however, the principal contractor must initiate his own emergency drills annually

with permission from the **DEVELOPMENT BANK SOUTHERN AFRICA**. Project Manager. This must be recorded and provided on request.

Emergency Care

- A list of emergency numbers must be posted at phones and in every office. Principal Contractor must ensure that his employees and sub-contractor employees are familiar with the emergency numbers and also are provided with stickers, with the emergency numbers printed on, to place inside their hardhats if working in remote areas.
- Contractors shall have one first aid box for the first 5 persons and thereafter one for every 50 or team of workers on site or part thereof.
- More first aid boxes shall be provided if the risks, distance between work teams or workplace requirements require it (it should be available and accessible for the treatment of injured persons at that workplace).
- Minimum contents of a first aid box as per OHS Act as per (OHS ACT-GSR 3)
- A prominent notice or sign in a conspicuous place at a workplace (SABS 1186 approved signs to indicate location of first aid boxes), indicating where the first aid box or boxes are kept as well as the name and contact details of the First Aider of such first aid box or boxes.
- The First Aider must be familiar with the material safety data sheets (MSDS) kept on site.
- The First Aider with a valid certificate will manage the first aid box and will update the contents accordingly.
- The Principal Contractor and sub-contractor shall ensure that alternative arrangements shall be made for possible incidents occurring after normal working hours.
- Where services are not available from the medical centre or where there is no medical centre, the Principal Contractor shall make alternative arrangements for any medical assistance. Proof of this must be made available in the Principal contractors SHE Plan.
- Emergency hospital care must be accessed preferably in a private hospital, but at the nearest hospital.
- The Principal Contractor shall create a 'mock' emergency drill schedule for the duration of the project. The emergency plan shall be tested at least once during the first 90 days of the project, and thereafter annually.

7. ENVIRONMENTAL MANAGEMENT.

The aim of this section is to outline **DEVELOPMENT BANK SOUTHERN AFRICA'S** requirements with regards to management of the environment in and around the construction site.

i. General Requirements

The minimum environmental requirements required environmental compliance on any construction site include:

- a) Spillage clean up kits
- b) Drip trays for vehicles
- c) Waste disposal at a registered waste site
- d) Separation of waste
- e) Signage for no go areas
- f) Silt fencing
- g) Silt sock fitted to trench pump
- h) Dust suppression on dust road (twice daily)

ii. Environment File (EA Projects):

A separate Environment file will be required for evaluation of compliance to the conditions of any environmental authorisations. The file must be referenced as per the conditions of the authorisation or EMP / EMPr.

The appointed ECO will review the environmental file simultaneously while the safety file is being evaluated.

This file will be reviewed and approved by the ECO before work commences on site.

Refer to Project Environmental Management Plan (EMP) /and Generic EMP, Environment Authorisations where applicable.

The following is list of documentation that may be held on site and must be made available to the ECO and/or Approving Authority on request:

- Site daily diary /instruction book/ Incident reports;
- Daily toolbox talks.
- Copies of ECO reports (management and monitoring);
- Environmental Management Plan (EMP).
- All environmental authorisations and licences.
- Environmental appointments of Person(s).
- Complaints register.

Note : A separate Environment File will be required for the evaluation of compliance as per the conditions of the environment authorisations. This file will be reviewed and approved by the ECO.

The following criteria needs to be complied by any Contractor before performing work:

iii. Spillage of Hazardous Chemical Substances.

A register of Hazardous Chemical Substances and Material Safety Data Sheets should be kept on site.

Herbicide usage

Herbicide register for usage to be compiled and maintained, and a copy handed to the Project Manager / environmental advisor on completion of the project / contract. The application of herbicides to be in accordance with the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act No. 36 of 1947. Only approved and tested herbicides with a low environmental risk shall be used.

Only registered pest control operators may apply herbicides on a commercial basis. All staff applying herbicides must be trained in the application of herbicides.

16.2 Fire hazard

The Contractor shall ensure that staff are educated in fire prevention and will be held responsible to avoid the risk of fire. No area is to be denuded of vegetation to create firebreaks, to prevent or make fires. No open fires are allowed on site. The contractor must ensure that operations are in compliance with statutory requirements at all times.

iv. Waste.

- A wasteplan is to be compiled before commencing of work.
- A register of hazardous and non-hazardous waste to be kept on-site.
- All waste to be disposed of at a registered waste site and records kept. The contractor should identify this site prior to commencement for all waste streams.
- No waste, whether it be biodegradable or not, is to be left on site once work has ended.
- Domestic and hazardous waste generated will not be burned, buried, or disposed of on DEVELOPMENT BANK SOUTHERN AFRICA..or other Landowners' property but will be controlled and removed to a registered waste site on a regular basis (Daily/Weekly/Monthly).
- The contractor and sub-contractor working on site must ensure that oil, fuel, and chemicals are confined to specific and secure areas throughout the construction period.

- These materials must be stored in a bunded area with adequate containment for potential spills and leaks.
- Contractors must ensure that sufficient waste bins / containers are made available for waste control.

v. Material requirement.

The use of any material or property belonging to a specific Landowner will not be undertaken prior to arrangements with the applicable Landowner. Written proof of such agreement to be handed to Project Manager for record keeping

vi. Dust and Noise.

The Contractor shall monitor dust and noise caused by mobile equipment, generators and other equipment during construction. Factors such as wind can often affect the intensity to which these impacts are experienced.

To ensure that noise does not constitute a disturbance during construction activities, all construction works shall occur between specific working hours. This must be stipulated in the contract.

Mitigation measures to be implemented as required / agreed upon with the Project Manager/ Project Environmental Control Officer/Advisor.

Dust suppression measures must be in place to reduce the dust caused by the movement of heavy vehicles. All dust road in use should be watered a minimum of twice a day.

vii. Environmental Incidents

All environmental incidents such as pollution (air, water, land, noise, etc.), bird kills, animals killed, plants destroyed, public complaints etc. must be reported to **DEVELOPMENT BANK SOUTHERN AFRICA**. Project Manager and SHEQ Officer . Where applicable, CI Project Manager or SAM SHEQ Officer will inform the Environmental Control Officer/Advisor within 24 hours of its occurrence for further assistance on the investigation and reporting to Government Authorities.

All environmental incidents occurring on site must be recorded, detailing how each incident was dealt with. Proof thereof must be kept in an incident register.

The Contractor will be held liable for any infringement of statutory requirements of the National Environmental Management Act of 1998 or any other relevant legislation.

viii. Water

No construction is allowed in regulated areas without authorisation. These are the areas within the 1:100 year floodlines. 500m from a wetland, or in any situation where shallow water tables exist. In the event that it becomes evident that any of these conditions exist appropriate advice must be obtained on the matter.

Should any pollution of the watercourse occur, the Department of Water Affairs (DWA) must be notified immediately via the ECO/Corporate Environmental Advisor.

Water usage on site to be verified with the **DEVELOPMENT BANK SOUTHERN AFRICA**. Site's Representative to ensure compliance with legislation. Bore hole water must be verified for human consumption fitness. All incidents related to water contamination to be reported within 24 hours.

Chemical toilets :

- May not be within close proximity of the drainage lines / ways,
- To be closed systems and not soak away french drains types.
- Adequate cleaning services must be provided for maintaining the toilets.
- All spillages from toilets to be cleaned up immediately.

ix. Handling of Stockpiles and Cultural and Heritage Resource Artefacts

Mitigation Measure	Management Objectives	Measurable Targets
Stockpiles		
<ul style="list-style-type: none"> • All stockpiled material must be easily accessible without any environmental damage. • All temporarily stockpiled material must be stockpiled in such a way that the spread of materials are minimised. • No stockpiles should be placed within the 1:100 flood lines. • The contractor must avoid vegetated areas that will not be cleared. • Storm water runoff from the stockpile sites and other related areas must be directed into the storm water system with the 	<ul style="list-style-type: none"> • Minimise scarring of the soil surface and land features • Minimise disturbance and loss of soil • Minimise construction footprint • Minimise sedimentation of nearby drainage lines • Maintain the integrity of 	<ul style="list-style-type: none"> • No visible erosion scars once construction is completed • The footprint has not exceeded the agreed site. • Minimal invasive weed growth • No signs of sedimentation and erosion

<p>necessary pollution prevention measures such as silt traps and may not run freely into the immediate and surrounding environments.</p> <ul style="list-style-type: none"> • Stockpiles are to be stabilized if signs of erosion are visible. • Soils from different horizons must be stock piled such that topsoil stockpiles do not get contaminated by sub-soil material. • Topsoil stockpiles must be monitored for invasive exotic vegetation growth. Contractors must remediate as and when required in consultation with the ER and ECO. • No plant, workforce or any construction related activities may be allowed onto the topsoil stockpiles. • Topsoil stockpiles must be clearly demarcated as no-go areas. • Top soil piles must not be higher than 1.5m to avoid compaction thereby maintaining the soil integrity and chemical composition. 	<p>topsoil's for landscaping and rehabilitation</p> <ul style="list-style-type: none"> • Containment of invasive plant growth • Minimise contamination of storm water run-off 	
Cultural and Heritage Resources Artefacts		
<ul style="list-style-type: none"> • Local museums and the South African Heritage Resources Agency (SAHRA) should be informed if any artefacts are discovered in an affected area. • Employees should be aware of procedures to follow in such circumstances. • Any discovered artefacts should not be removed and the ECO should be informed so that necessary action can be taken. 	<ul style="list-style-type: none"> • Proper training to employees on how to deal with artefacts discoveries 	<ul style="list-style-type: none"> • Monthly

x. Signing-off of the contract

No project should be signed off before Site SHEQ/ECO has given assurance that no environmental liabilities exist. The Responsible Person, Project Manager, SAM/Site Risk or Environmental Advisor shall carry out a physical inspection before acceptance of work done.

No invoice to be processed before work is accepted.

The Contractor shall be conversant and in the course of carrying out the Works the Contractor shall comply with the provisions of all Acts, regulations, ordinances, by-laws, Standards, Codes, Rules and requirements of public, municipal and other authorities.

The Project Team may at any time without notice to the Contractor examine and investigate the Contractors' compliance with all Applicable Legislation and the environmental management conditions.

At all times during the execution of the Works, the Contractor shall preserve and protect the natural environment in the general area of the site and the external areas that may be affected by his operations.

Environmental protection shall include, but not be limited to, the following issues: Noise pollution, gaseous emissions, noxious and/or offensive odours, liquid waste collection and solid waste separation and collection.

In the event of any perceived conflict between the "environmental laws" and the Contract documents, the Contractor shall, prior to commencing the Work, refer such conflict to the Project Management Team for clarification.

Without limiting the Contractors' responsibilities under the Applicable Legislation, the Work shall be conducted in such a manner as to ensure that:

- No substance, which can harm or is likely to harm the environment, is to be allowed to leak, spill or escape from any container or storage area.
- No oil or other effluent is permitted to escape into the drainage system and/or local storm water system.
- No oil or other effluent is permitted to escape into the ground and cause soil contamination.
- All powdered pollutants generated during execution of the Work are contained to prevent air pollution.
- No sediment generated is permitted to escape into the drainage system and/or local storm water system.
- No harmful solids or liquids are permitted to spill from containers whilst in transit on the premises.
- All oil-based waste material shall be kept segregated and placed in sealed 200 litre drums. This material shall be disposed of through a recognised oil recycling company.

- All water-based waste material shall be kept apart. Small amounts shall be collected and stored in 200 litre containers. Large amounts shall be pumped into a bulk tanker for disposal. Prior to disposal, all water-based material shall be sampled to allow analyses to be carried out.

8. FORUMS FOR SHEQ COMMUNICATION.

This provides an outline of the different forums, where **DEVELOPMENT BANK SOUTHERN AFRICA**. engages with the contractor/s on SHEQ issues. This also includes the frequency of the different forums as well as the mediums to be employed.

The Principal Contractor/s and their sub-contractor/s will have to provide a communication strategy outlining how they intend to communicate SHEQ issues to their staff, the mediums they will employ and how they will measure the effectiveness of their SHEQ communication.

Every meeting conducted on site shall include SHEQ as a standing agenda point and minutes of these meetings shall be available on site at all times.

Attendance lists and minutes shall be kept for all the health and safety meetings.

Type of forum	Objective	Chairperson	Frequency	Required Attendees
Monthly Project Progress	This is the forum where all projects matters within a programme are discussed on a monthly basis. Duration is approximately 4 hours	Programme Manager	Monthly	DEVELOPMENT BANK SOUTHERN AFRICA..: Site Management Project Team [excludes contractor(s)]
Progress Meeting	This forum where project specific are discussed. SHEQ issues are standing agenda points on this forum	DEVELOPMENT BANK SOUTHERN AFRICA. Project Manager	Weekly/ Bi-weekly/ Monthly	Principal Contractor/s and their sub-contractor/s: <ul style="list-style-type: none"> ○ Project Managers ○ Site managers ○ Appointed Engineers or Designers DEVELOPMENT BANK SOUTHERN AFRICA..: Project Team
Pre-Job Brief Meeting	This is a meeting which is held prior to the commencement of the day's work with all relevant personnel associated with the work task in attendance. The job, relevant procedures,	Contractor Supervisor	Daily	Principal Contractor/s and their sub-contractor/s: <ul style="list-style-type: none"> ○ All relevant personnel

	associated hazards, safety measures, i.e., the task risk assessments shall be discussed. Each employee who attends the briefing shall sign the back of that pre-job brief form. Toolbox talks shall be included in the pre-job brief meetings. The toolbox topics will be based on SHE issues pertaining to the construction site. The topic contents shall be in writing.			
Contractor Statutory SHE Meetings	This is a meeting where the Principal Contractor to ensure project SHE goals are met and to ensure SHE rules and procedures are understood. The Committee shall meet to discuss SHE issues concerning the current work being performed, training, upcoming work and SHE requirements, incidents and lessons learned specific SHE problems, safety performance, action plans and other relevant SHE issues such as but not limited to: Hazardous conditions/materials / substances, Work procedures, Protective clothing / equipment, Housekeeping, SHE Representative Reports, Accident / Safety incidents, Audit findings and close out, Work permits, Non-conformances, Emergency preparedness, Traffic control, Medicals, Training. Forthcoming High hazard	Principal Contractor Construction Supervisor	Monthly	<p>Principal Contractor/s and their sub-contractor/s:</p> <ul style="list-style-type: none"> ○ Project Managers ○ Site managers ○ Supervisors ○ Health and Safety Practitioners/Office rs ○ Health and Safety Representatives <ul style="list-style-type: none"> ● DEVELOPMENT BANK SOUTHERN AFRICA.: <ul style="list-style-type: none"> ○ CI ECO/SHEQ ○ CI Project Representative

	activities, General SHEQ issues.			
SHE Steering Committee Meetings	This is a meeting where SHE practitioners for different principal and subcontractors meet if they are working within the same locality or if the activities performed by each contractor interact with one another	Client SHERQ Representative	Monthly/Quarterly	<p>Principal Contractor/s and their sub-contractor/s:</p> <ul style="list-style-type: none"> ○ Construction Health and Safety Officers • DEVELOPMENT BANK SOUTHERN AFRICA.: <p>SHERQ Reprehensive</p>

9. SHEQ INCIDENT MANAGEMENT (PRINCIPAL CONTRACTOR AND SUB-CONTRACTORS)

The Contractor shall compile and implement procedure for Reporting and investigation of incidents – This document sets out the procedures to be followed when reporting, recording and investigating incidents that occur on a construction site.

The Principal Contractor shall report all incidents/accidents as required in terms of legislation including near miss incidents, first aid, medical treatment, lost time incidents (lost time injuries and fatalities); Section 24 and 25 incidents; electrical contact; property damage; crime, chemical spillage and other environmental incidents immediately.

Where a **fatality or permanent disabling injury occurs** at a construction site, Contractor must provide the **Provincial director with a report contemplated in section 24 of the Act**, in accordance with regulations 8 and 9 of the General Administrative Regulations 2013 and that the reports included measures that the contractor intends to implement to ensure a safe construction site as far as is reasonably practicable.

All fatal incidents, employee and contractor incidents, shall be reviewed by the committee within one week after the incident and the members of the Project Progress meeting notified of corrective actions taken. Preliminary investigation information shall be shared.

An incident portfolio of evidence and a comprehensive and detailed investigation report shall be submitted to the **DEVELOPMENT BANK SOUTHERN AFRICA.** project manager/ SHEQ Officer within 7 days after the incident which shall include: Date, time and place of incident; Description of incident; Root cause of incident/accident; Type of injury (if any); Medical treatment provided (if any); Persons involved; Names of witness/s; Corrective action to

prevent recurrence (with clear deadlines and responsible persons). It is required that all corrective action is closed out within 3 months. If this is not practicable within the time frame, then it is to be submitted at a later date agreed to by the **DEVELOPMENT BANK SOUTHERN AFRICA** Project Manager.

The Principal Contractor shall ensure that all accidents/incidents are investigated by him/her and are discussed at the SHE committee meeting held on site. Accidents/incidents shall be investigated and recorded in terms of the requirements of the Occupational Health and Safety Act, the National Environmental Management Act and National Water Act as applicable.

Please note that providing the Accident/incident investigation report does not exempt the Principal Contractor from providing accident reports required by Statutory Authorities, in particular, the Contractors' responsibility for reporting accidents in accordance with the requirements of the OHS Act and COID Act.

The Client/Agent shall be allowed to participate in any accident/incident investigation if the accident/incident is directly linked to any activity within the scope of the construction project

The Principal Contractor shall keep on site/workplace a record of all accidents and incidents reported in the form of the OHS Act Annexure 1 investigation form as referenced in the OHS Act. (Incident Investigation Report)

DEVELOPMENT BANK SOUTHERN AFRICA. reserves the right to conduct an independent investigation in any incident

Investigation Teams below are expected as a minimum for the Principal Contractor to establish for incidents and accidents. In addition to the Principal Contractor and his sub-contractor investigations, **DEVELOPMENT BANK SOUTHERN AFRICA.** will also, separately, conduct its own separate investigation especially for disabling injuries, fatalities, serious environmental legal contraventions and damages to **DEVELOPMENT BANK SOUTHERN AFRICA.** property. The principal contractor and sub-contractor would be required to co-operate with the **DEVELOPMENT BANK SOUTHERN AFRICA.** investigation Team.

Parties to be involved in the investigation are as follows:

Incident Type	Definition	Chairman:	Attendees:
First Aid Injuries	An incident in which an injured person is treated at the incident scene by the first Aider and released back for duty	Supervisor of Injured Person / Principal Contractor: Relevant Supervisor	Principal Contractor/s and their sub-contractor/s <ul style="list-style-type: none"> • SHE representative • Construction Safety Officer • Injured
Medical Treatment Injuries	An incident in which an injured person is treated by the OHP/Medical doctor and released back for duty	Principal Contractor's OHS Act Section 16(2) appointee	<u>Principal Contractor/s and / or their sub-contractor/s</u> <ul style="list-style-type: none"> • SHE representative • Construction Safety Officer • Injured (if possible) • Witness (if any) • Supervisor of the injured <p><u>DEVELOPMENT BANK SOUTHERN AFRICA.</u></p> <ul style="list-style-type: none"> • CI Project Representative
Disabling Injuries Including Occupational Diseases	Incident which arises in the course of duty which results in any occupational illness/ injury/ diseases, and giving rise to any related temporary or permanent disablement as determined by the Medical practitioner. The DI will be further classified as disabling in the event of one or more of the following criteria are applicable: <ul style="list-style-type: none"> – The injured person is unable to continue performing his normal duties and tasks for which he/she was employed for 14 days or more, – The loss or more than one day or shift following the day or shift during which an incident occurred, 	Principal Contractor's OHS Act Section 16(2) appointee	<u>Principal Contractor/s and / or their sub-contractor/s</u> <ul style="list-style-type: none"> • SHE Representative • Construction Safety Officer • Injured (if possible) • Witness (if any) • Supervisor of the injured • OHS Act Section 16(2) of the injured <p><u>DEVELOPMENT BANK SOUTHERN AFRICA.</u></p> <ul style="list-style-type: none"> • DEVELOPMENT BANK SOUTHERN AFRICA. Site Project Manager • DEVELOPMENT BANK SOUTHERN AFRICA. SAM SHEQ Representative • DEVELOPMENT BANK SOUTHERN AFRICA. Site Risk Representative

	<p>inclusive of weekends, and schedule off-duty days,</p> <ul style="list-style-type: none"> – All fractures and amputations – A person becomes unconscious, irrespective of the duration, as the results of workplace exposure or any incident, – An occupational illness which necessitates medical treatment and or restricted work and /or days/shifts off-duty, – Compensable occupational diseases recorded as a single DI on the day of diagnosis. – Any damage to the bone such as closed fracture, amputation of the fingertip etc. 		<ul style="list-style-type: none"> • Corporate SHEQ Representative
Fatalities	An incident that occurs at work or arising out of, or in connection with the activities of persons at work, or in connection with the use of plant or machinery, in which, or in consequence of which a person dies,	Principal Contractor's OHS Act Section 16(2) appointee	<p><u>Principal Contractor/s and / or their sub-contractor/s</u></p> <ul style="list-style-type: none"> • SHE Representative • Construction Safety Officer • Injured (if possible) • Witness (if any) • Supervisor of the injured • OHS Act Section 16(2) of the injured <p><u>DEVELOPMENT BANK SOUTHERN AFRICA.</u></p> <ul style="list-style-type: none"> • DEVELOPMENT BANK SOUTHERN AFRICA. Project Manager • DEVELOPMENT BANK SOUTHERN AFRICA. Site Project Manager • DEVELOPMENT BANK SOUTHERN AFRICA. SAM

			SHEQ /Corporate Risk/Site Risk Representative
Near Miss Incidents	An incident that has the potential of causing an injury or negative impact to the environment	Principal Contractor/s Construction Supervisor 6.1 appointee	<u>Principal Contractor/s and / or their sub-contractor/s</u> <ul style="list-style-type: none"> • Person/s affected by near miss • SHE representative • Construction Safety Officer • Supervisor of the area • Principal Contractor 's OHS Act Section 16(2) appointee
Environment Incidents	An event resulting in temporary or permanent cumulative or immediate adverse effects on the environment, e.g. an oil or chemical spillage, or release of toxic gas	Principal Contractor/s Construction Supervisor 6.1 appointee	<u>Principal Contractor/s and / or their sub-contractor/s</u> <ul style="list-style-type: none"> • SHE representative • Construction Safety Officer • Witness (if any) <p>DEVELOPMENT BANK SOUTHERN AFRICA.</p> <ul style="list-style-type: none"> • Site Project Manager/Representative • ECO where applicable • DEVELOPMENT BANK SOUTHERN AFRICA. SAM SHEQ Officer/Corporate Environmental Advisor (in the event of major environment incidents)
Damage To DEVELOPMENT BANK SOUTHERN AFRICA../ Third Party Property	Property damage is damage to or the destruction of DEVELOPMENT BANK SOUTHERN AFRICA. property, caused either by a person or by natural phenomena.	Principal Contractor/s Construction Supervisor 6.1 appointee	<u>Principal Contractor/s and / or their sub-contractor/s</u> <ul style="list-style-type: none"> • SHE representative • Construction Safety Officer • Witness (if any) <p>DEVELOPMENT BANK SOUTHERN AFRICA.</p> <ul style="list-style-type: none"> • DEVELOPMENT BANK SOUTHERN AFRICA. Site Project Manager • DEVELOPMENT BANK SOUTHERN AFRICA. SAM SHEQ Officer • SAM SHEQ Risk Control Investigator

Crime	An action or omission that constitutes an offense that may be prosecuted by the state and is punishable by law	Principal Contractor/s Construction Supervisor 6.1 appointee	<u>Principal Contractor/s and / or their sub-contractor/s</u> <ul style="list-style-type: none"> • SHE representative where applicable • Construction Safety Officer • Witness (if any) <p>DEVELOPMENT BANK SOUTHERN AFRICA. (Where applicable)</p> <ul style="list-style-type: none"> • DEVELOPMENT BANK SOUTHERN AFRICA. Site Project Manager • DEVELOPMENT BANK SOUTHERN AFRICA. SAM SHEQ Officer • SAM Risk Control Investigator • Detective (SAPS) • Suspect(s) • Witness (if any) • Protective Services Official (if possible) • Principal contractor and / or their sub-contractor
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- All investigation teams must include at least 1 person (from both the **DEVELOPMENT BANK SOUTHERN AFRICA.** and Principal Contractor) that is competent in Incident Investigation.
- Contractors shall ensure the incident/accident scene is not disturbed until after the investigation unless it is done to prevent further injury or for rescue purposes (OHS Act, Section 24(2) applies). Investigation shall begin promptly after the incident/accident. Where applicable and with proper authorization, photographs may be taken of the scene of the incident as well as any equipment involved in the incident. The investigation report shall be submitted to **DEVELOPMENT BANK SOUTHERN AFRICA.** Project Manager, within 3 days after the incident occurred unless proof can be given that due to technical or other difficulties, more time is needed.
- It is essential that the Principal Contractor demonstrate that corrective action has been taken and that correction action is communicated to all Contractors staff affected.

- Feedback on the status of close out of corrective actions must be communicated at the following forums: Site Progress Meeting, Project Progress Meeting and at Contractor SHE Meetings.

10. OPERATIONAL CONTROL REQUIREMENTS

1. Notices & Signs

All symbolic safety signage, that the Principal Contractor or his/her sub-contractors are to use/display are to conform the requirements of SANS 1186.

The display of the following signs is mandatory:

- For Contractors with Site Establishment: The Contractor Company sign must be posted at their site offices to reflect the name and contact details of the: Construction Supervisor; Health and Safety Manager/Officer; First Aider; Health and Safety Representative and Evacuation Warden. Sign to also include site specific number as per the construction work permit where applicable.
- “Radio-Active Material” symbolic signs at radioactive storage areas.
- The location of every first aid box; fire extinguisher and emergency exit is to be clearly indicated by means of a sign.
- At the entrance to premises where machinery is used: Restricted access i.e. **“Authorised Person Only”** signs on entry.
- When in use, an Explosive Power Tool shall have a sign, warning people of its use.
- The Contractors shall provide the signage where work is conducted and where unauthorised entry is prohibited and/or where alerting and cautioning passers-by to be aware of potential dangers.
- Notices & Signs at entrances / along perimeters indicating **“No Unauthorised Entry”**.
- Notices & Signs at entrance instructing visitors and non – employees what to do, where to go and where to report on entering the site/yard with directional signs. E.g. Visitors to report to Site Office”
- Notices & Signs posted to warn of overhead work and other hazardous activities. E.g. **General Warning Signs**.
- All equipment brought onto the construction site, (including motorised equipment, e.g. bobcat) that requires PPE to be worn during operation, must have the relevant PPE

mandatory sign/s attached. The type and use of PPE will be placed at all entry points to the construction site.

Note: *Signage to be adequate to ensure after hour safety.*

2. Fire Safety

Contractors must develop a fire safety plan/procedure for the specific construction site prior to commencing work. The procedure must take into consideration the size of the site, type of work being done (e.g. cutting, welding, grinding, etc.) and amount of combustible materials. All workers entering and working in the construction site need to be trained in fire safety and any duties they are required to perform. Pre-existing fire systems in buildings shall be maintained during construction whenever possible. Any changes must be approved by the Client/Agent.

The fire safety plan shall include:

- The designation and organization of site personnel to carry out fire safety duties, including fire watch service if applicable.
- The emergency procedures to be used in the case of fire, including: Sounding the fire alarm, notifying the fire department, instructing site personnel, Firefighting procedures and integrating with existing emergency procedures.
- The control of fire hazards in and around the building.
- Maintenance of firefighting facilities.

Cutting, Welding, and Hot Work

Prior to cutting or coring of concrete suspended slabs, cast in place or pre-cast walls, slab on grade the contractor must either X-ray the slab or if X-ray is not feasible provide other approved alternate method for determining live electrical concealed in slab or walls. Signage shall be posted to ensure no one enters the affected area during X-raying.

When welding or cutting work is performed, an adequate number of approved fire extinguisher SHEs shall be provided by the contractor. The contractor shall provide a thirty-minute fire watch after the operations has ended to ensure that no fire starts. Extraction fans to be provided when welding work is performed.

Fire Guidelines:

- **Fire alarm shut downs:** Contractors must inform the Client/Agent in writing 7 days prior to any part of a fire system being shut down.
- **Fire Warning:** A suitable means of alerting site personnel to a fire shall be provided, and capable of being heard in all areas of the building.
- **Portable Extinguishers:** suitable extinguishers must be available in the construction site and in cases of hot work, be readily available at the location.

- Combustible Liquid and Flammable Liquid Storage: storage of combustible and flammable liquid in the construction site is not permitted unless stored in approved flammable cabinets or outdoors away from the buildings.
- Smoking Restrictions: Smoking is not permitted indoors, at entrances to buildings or near air intake systems as per **DEVELOPMENT BANK SOUTHERN AFRICA**. Smoking Policy and legislation requirements

3. Construction Vehicles and Mobile Plant

- a) The Contractor shall implement a site traffic plan (circular movement) to ensure the safe movement of all Construction related mobile plant.
- b) Contractors shall implement pedestrian and vehicle routings as part of the site traffic plan to demonstrate the route employees may proceed when coming on or going off shift
- c) All motor vehicles operated by Contractors within the area shall, in all respects, comply with the Road Traffic Ordinance and Road Traffic Act. Designated drivers shall be in possession of a driver's licence, valid for the class of vehicle as well as an operator certificate where applicable. The driver's license shall be kept by the person so authorised and shall produce such card on request.
- d) All drivers of construction vehicles and mobile plant to have medical certificates of fitness. Each Project site will have system/ process to manage vehicle access to site.
- e) The contractor shall attach identification markers on all of his/her vehicles that are permitted to enter the site.
- f) The speed limit within the bounds of the construction site is 30 km/h. (To be completed by the project team). A consolidated traffic plan must be in place where there are many vehicles within a project site.
- g) No drivers or operator may talk on cell phones or two way radios whilst driving, unless a hands free kit is used.
- h) It is the responsibility of the driver to ensure:
 - He/She and his/her passengers wear seat belts whilst the vehicle is in motion.
 - Comply with all safety, direction and speed signs.
 - Ensure that vehicle loads are properly secured and loaded onto vehicles.
 - Ensure that vehicles are not overloaded.

- i) All requirements with regard to the transportation of tools/equipment/material and persons on the back of construction vehicles must be adhered to:
 - No Personnel to be transported in the back of construction vehicles with tools.
 - Tools, equipment and material to be secured in order to prevent movement;
 - Fixed and firmly secured seats with seat belts – adequate for the number of passengers being transported;
 - The driver and all passengers to be seated with seatbelts fastened whilst the vehicle is in motion. (National Road Traffic Act no 93 of 1996).
his vehicles (including private vehicles) on the premises.
- j) The Principal Contractor shall ensure that his employees and those of his subcontractors do not.
 - Ride on back of elevators, cranes or other mobile plant equipment.
 - Leave vehicles unattended with the engine running.
 - Park vehicles in unauthorised zones/areas.
- k) **DEVELOPMENT BANK SOUTHERN AFRICA.** Reserves the right to search any vehicle on the premises or when entering or leaving the premises.
- l) The Contractor shall be solely responsible for the safety and security of any of
- m) A current maintenance logbook is required for all cranes and large plant equipment, and shall be available for inspection at any time. The logbook shall be located in the cabin of the crane or plant equipment.
- n) Principal contractor is to ensure that visibility (e.g.: switching on of lights, reflectors, barricades equipped with lights, etc.) is enhanced on all Construction Vehicles and Mobile plants in order to identify the location of the vehicles or plant.
- o) The Contractor must maintain his vehicles in roadworthy condition and a valid license. These vehicles shall be subject to inspection by the Client/Agent's representative. Vehicles which are not roadworthy will not be allowed onto the site. If mobile plant equipment is used on the public road, the same requirements as for vehicles apply and should be adhered to.
- p) In the event where the principal Contractor and his sub-contractor do not own the equipment, the principal Contractor is still responsible for ensuring all conditions are complied with by all of his subcontractors or hire companies.
- q) Drivers/operators shall be responsible for the travel-worthiness of all loads conveyed by them. Precautions shall be taken to lash all loads properly. Loads projecting from vehicles shall be securely loaded and in daytime a red flag and during darkness a red light or red reflective material shall be attached to the extreme end of such projecting material.
- r) All servicing and repairs must be carried out by the Contractor in a designated area.

- s) All waste from servicing must be disposed of in accordance with the environmental legislation.
- t) Every mobile machine whose vision is impaired when reversing must have a siren/hooter, which sounds, when the machine is reversing. This includes trucks, cranes, loaders, etc.
- u) Operators have great difficulty in seeing light vehicles behind their machines. Drivers of light vehicles must avoid stopping or parking in the vicinity of machines. At least 30 (thirty) meters must be left clear between such a vehicle and such a machine.
- v) Drip Trays to be placed under the vehicles where are possible leaks to avoid soil and ground pollution.

4. Personal Protective Equipment

In terms of Section 8 of the OHS Act, the duty of the employer is to take steps to eliminate or mitigate (hierarchy of control measures) any hazard or potential hazard to the safety or health of employees before resorting to PPE.

Principal contractor's employees and his sub-contractor employees at the construction site, including visitors, shall use the following SANS or the relevant internationally recognised authority approved risk based PPE at all times, as a minimum:

- Head protection (Hard hat).
- Steel toe capped safety boots.
- Eye protection.
- Long sleeved and long pants protective clothing. *NB: At least two of each to be issued to each employee.*
- High visibility vests.
- Refer to General Safety Regulation 2 of the OHS Act- if there are particular activities/areas/risk assessments that require a specific type of PPE, then that specific PPE requirement must be adhered to (e.g.: for dusty environments – eye goggles; for welding – welding helmet; etc.).

The Contractor shall ensure that his employees understand why the personal protective equipment is necessary and that they use them correctly.

Strict non-compliance measures must be administered to any employee not complying with the use of PPE and shall be removed from the Site.

PPE shall be worn in any designated area requiring such a PPE.

Issue, Replacement and Control of PPE: The Principal contractor must provide a detailed programme on the issuing, maintenance and replacement of PPE for all his employees and

subcontractors on site. The Principal contractor is required to keep an updated register of all PPE issued to staff, including that of his sub-contractors

5. Housekeeping

Principal Contractors and Sub-contractors

- The Principal Contractor and his sub-contractor shall maintain a high standard of housekeeping within the site. Ensure prompt disposal of waste materials, scrap and rubbish is essential. Also refer to what the requirements are in the EMP

Scrap/Waste Removal System

- Scrap management as per agreement with Project Manager.
- All items of Scrap/Unusable Off-cuts/Rubble and redundant material removed from working areas on a regular basis.
- Scrap/Waste disposed of in designated containers/areas
- Removal from site/yard on a regular basis.

Stacking & Storage

- Before stacking any material, the Contractor, sub-contractor or their employees must consult the **DEVELOPMENT BANK SOUTHERN AFRICA**. Project/site Manager for allocation of a stacking area, General Safety Regulations 8 of OHS Act.
- Adequate care must be taken by the Contractor to ensure that storage and stacking is correctly and safely carried out.
- Materials/objects shall not be left unsecured in elevated areas –falling objects may cause serious injuries/fatalities
- All packaging material including boxes, pallets, crates, etc. to be removed from the work area immediately.

Waste Control/Reclamation

- Re-usable off-cuts and other re-usable material removed frequently and kept to a minimum in the work areas.
- All re-usable materials neatly stacked/stored in designated areas. (Nails removed/bent over in re-usable timber).

After job completion

- On completion of his work, the contractor is responsible for clearing his work area of all materials, scrap, temporary buildings and building bases to the satisfaction of the Client/Agent.

Inadequate standard of housekeeping

- **The DEVELOPMENT BANK SOUTHERN AFRICA.** Project/Site Manager has the right to instruct the Principal Contractor and his sub-contractor to cease work until the area has been tidied up and made safe. Neither additional costs nor extension of time to the Contract shall be allowed as a result of such a stoppage. Failure to comply will result in site cleaning by another cleaning contractor company at the cost of the Principal Contractor

Regular safety/housekeeping inspections

- The Principal Contractor shall carry out regular safety/housekeeping inspections (at least weekly) to ensure maintenance of satisfactory standards. The Principal Contractor shall document the results of each inspection and shall maintain records for inspection.

6. Permit to Work

Contractors must adhere to the approved **DEVELOPMENT BANK SOUTHERN AFRICA.** Permit to work system to control identified high risk activities. There will be only **one Permit to Work system (DEVELOPMENT BANK SOUTHERN AFRICA.)** on the construction site.

If the type of work requires that contractors must be trained, competence assessed and authorised in writing to perform the duties of an authorised or responsible person as contemplated in the applicable **DEVELOPMENT BANK SOUTHERN AFRICA.** regulations e.g. Hot Work, Radiation, confined space work, excavation, blasting etc.

The CI Project Manager is to provide more details on the permit to work system for the specific work to be conducted by the Principal Contractor.

7. Hazardous Materials/Chemicals Management

The aim of this section is to outline to the Principal Contractors and his sub-contractors how hazardous substances, as defined in the Hazardous Chemical Substances Regulations (OHS Act), should be managed.

- Prior to any HCS being brought onto the site or produced on the site, the Principal Contractor shall supply the **DEVELOPMENT BANK SOUTHERN AFRICA.** Project Manager with the following: Material Safety Data Sheets (MSDS) in accordance with the requirements of the OHS Act – Regulations for Hazardous Chemical Substances; Purpose for bringing the hazardous substance onto the site; Proposed arrangements for safe storage; Proposed methods for handling/usage; Proposed method of disposal; and Hazard communication / training plan.
- The information is to be provided at least **two (2) working days** prior to the expected delivery on site.

- The **DEVELOPMENT BANK SOUTHERN AFRICA**. Project Manager shall approve the use of any hazardous substance after receiving the above information.
- No HCS are not to be brought onto the site until the **DEVELOPMENT BANK SOUTHERN AFRICA**. Project Manager approval is received.
- All HCS containers to be clearly labelled. Containers that are not marked will not be allowed. No HCS to be stored in food or drink containers.
- Users of HCS to wear/use the correct PPE as per the HCS material safety data sheet.
- Users of HCS to be adequately trained in the HCS that they are handling.
- The Contractors to have and maintain a register with all the HCS that they have on site
- Site Risk Control/SHEQ Teams **must** be notified of any HCS, explosive, and radiation sources that may enter the premises.

Flammable and Combustible Liquids

- Proposals to store fuel on site must have written approval from the **DEVELOPMENT BANK SOUTHERN AFRICA**. Project Manager.
- The volumes of fuel allowed to be stored will depend on site conditions and Statutory Regulations. A maximum storage of 40 litres of fuel is allowed to be stored. Anything greater than 40 litres to be stored in a licensed flammable/combustible liquid store.
- Adequate numbers of dry chemical fire extinguishers shall be provided, installed and maintained.
- Before a machine is refuelled, the motor must be stopped. Refuelling shall take place at designated safe areas and appropriate warning signs installed. Suitable drip trays must be used to prevent spillage at the filling nozzle.
- All fuel storage areas must comply with the following requirements: -
Storage should be well clear of buildings; Storage areas must be kept free from all combustible materials. All danger signs must be prominently displayed, i.e. Flammable Liquid, No Smoking, No Naked flames. Hazchem identification. Adequate firefighting equipment must be available. Diesel tanks will be installed in a bund area; bund area must be able to contain 110% of tank capacity. Bund area shall be of a concrete or steel construction. Bund area shall have a lockable drain valve. No other material/equipment shall be stored in the bund area. See Construction Regulation 23, of the OHS Act.

Explosives

- Explosives shall not be brought onto the site or be used without the express permission of the relevant DEVELOPMENT BANK SOUTHERN AFRICA. Representative.
- Explosives or detonators shall not be stored on the site.
- Detonators and other explosives shall never be carried in the same box.

- The provisions of all relevant Acts and Regulations shall be strictly observed.

Compressed Gas Cylinders (General Safety Regulation 9) and SABS 1548

The following requirements apply to all gas cylinders' storage:

- Contractors shall establish storage areas as approved by the **DEVELOPMENT BANK SOUTHERN AFRICA** Project Manager.
- Storage areas should be well clear of buildings.
- The storage areas shall be fenced, shaded, stable, and solid surfaces.
- For security and ventilation purposes, a wire mesh fence should surround the storage area. Keep the enclosure locked.
- All danger signs must be prominently displayed at storage area; e.g.
- No Smoking and naked flames.
- A protective covering must be provided.
- Adequate ventilation must be provided.
- Storage areas must be kept free from all combustible materials; no other materials must be stored in cylinder enclosure.
- Full cylinders must be kept apart from empty cylinders so that it will not be necessary to open valves to check whether cylinders are empty or full.
- Cylinders must always be chained separately in an upright position and special stands must be used for cylinders.
- Cylinders must be stored in rows with aisle in-between for easy removal in event of fire.
- Mark empty cylinders clearly and move to approved storage areas.
- Adequate firefighting equipment must be available.
- Cylinders for different gasses must be stored separately.
- Flammable and oxidising gasses must not be stored together; greases and oils must never be allowed to come in contact with oxygen.
- Only flame-proof electrical lighting should be used, if required.
- Cylinders will only be allowed on site in an approved trolley, properly secured and with a chain.
- All gas cylinder torches to have flashback arrestors fitted on both sides.
- Clamps are to be used to separate cables

8. Radiography, Ultrasonic, Non-Destructive Testing (NDT)

The Contractor carrying out radiography, ultrasonic or other non-destructive testing (NDT) on the site must comply with the requirements of the relevant legislations, codes of practice and any specific Client/Agent procedures.

In particular, the Contractor shall ensure that:

- No radioactive sources may be brought onto site without prior written consent of the Client/Agent.
- Where a statutory appointment exists, he has appointed, in writing, a suitably qualified and experienced Radiation Protection Officer to provide advice on the observance of the law and other relevant health and safety matters.
- Radiography areas and clearly identified by the erection of suitable barriers, sirens, warning notices and / or flashing lights. Vehicles transporting shall be clearly identified.
- Radiation operators must submit proof of certification and an annual permit issued by the department of health.
- Sources must be stored according to legal requirements.
- All contractors must be informed of X-ray activities.
- X-ray work may only commence with a valid permit to work.
- Refer to requirements in: SANS code of practice: 100228: “Code of Practice for the Identification and Classification of Dangerous Substances and Goods”. Published by the South African Bureau of Standards.

9. Falling Risk Positions

Whenever persons are required to work in a fall risk position where their potential exposure to falling either from, off, or into, a fall protection plan (which includes fall prevention) will be compiled, implemented and reviewed and every possible and practicable means shall be adopted to provide such persons with effective training and safeguards.

All persons required to work in fall risk positions shall be declared medically fit.

Working on fall risk positions shall only be carried out under the supervision of a competent person.

Safety belts are not allowed to be used in **DEVELOPMENT BANK SOUTHERN AFRICA**. An appropriate full body safety harness will be worn when working at an elevation of 2 (two) meters or more.

Mitigation measures to be put in place:

- All tools in fall risk positions must be attached to lanyards, attached to person or structure or effectively prevented from falling.
- Equipment in fall risk positions must be tied back to the structure.

- Loose items in fall risk positions. E.g. Bolts and nuts to be kept in tins or similar robust containers and not in paper boxes.
- When working at fall risk positions, nets and/or other suitable material should be used catch falling debris and sparks directly below where the task is being performed
- Roof work discontinued when there is bad/hazardous weather
- Fall protection measures (including warning notices) when working close to edges or on fragile roofing material
 - Fall protection includes: Safety harnesses and double lanyards; approved lifelines; and other approved means.
 - Fall protection equipment to be implemented where fall prevention is not possible and shall comply with SANS Standards -: SANS 503&508 Series and other recognised international standards.

Scaffolding

- All scaffolding used shall comply with the OHS Act and Regulations as well as SANS 10085.
- Scaffolding erectors to be trained as specified in SANS 10085.
- Scaffolding access ladders shall form part of the scaffold structure and not the ladder register.

Ladders (Portable)

- All ladders used on the site shall be in compliance with the OHS Act and Regulations.
- All Ladders shall have an identification tag, logged in a register, and inspected on a monthly basis and prior to use.
- Damaged ladders shall be marked as “DAMAGED” and removed from the project site.
- Prior to work being performed, a risk assessment must be conducted, and work must be conducted as per General Safety Regulation 6 and 13A and Construction Regulation 10 of the OHS Act.

10. Excavations, Trenches and Floor Openings

- a) Digging, excavation, or driving a peg, pile or spike into the ground operations by the Contractor may not commence without the written authorisation from the Client/Agent's representative.
- b) Prior to commencing work on any excavation or trench, utility owners shall be contacted and advised of the proposed work and to determine the location of all underground installations; i.e., sewer, telephone, water, fuel, electric, etc. Overhead hazards shall be assessed and dealt with prior to commencement of work. Where details of existing services are not available from the client, the contractor is to make an assessment of the area for such services.

- c) Adequate precautions shall be taken by the Contractor to prevent slumping of excavations, as well as to prevent rocks and loose material falling onto workers.
- d) All excavations done by the Contractor are to be clearly demarcated and barricaded to prevent accidental access.
- e) Only solid barricading will be used at areas where a fall hazard is present. Solid barricading and / or hole covers shall be provided around all holes or openings to prevent any person being injured as a result of a fall. The solid barricading must be visible to prevent persons from coming close to the danger area.
- f) Barricading must be placed as close as possible to the excavation. (Also refer to item 22.11)
- g) If an excavation or trench endangers the stability of buildings or walls, shoring, bracing, or underpinning will be provided. Excavations and trenches that are adjacent to backfilled excavations or trenches, or which are subject to vibrations from railroad traffic, road traffic, blasting in open cast mining or the operation of machinery (e.g., shovels, cranes, trucks), must be secured by a support system, shield system or other protective systems (i.e., Steel-pile shoring, bracing).
- h) Where it is impracticable to provide fixed guard railing, effective removable barriers shall be provided at all unguarded openings in guard railing or floors, and shall be maintained in position at all times until the hazard no longer applies.
- i) Warning signs and flashing warning lights at night shall be displayed in suitable positions to warn any persons approaching the area of the location and extent of any excavation.
- j) No material to be within 1m of the excavation edges.
- k) No work shall commence in an excavation unless the excavation has been declared safe by the competent person
- l) Whilst work is being performed in an excavation, there shall be a supervisor, at all times
- m) All excavations must be on register and inspected daily before work commences and after inclement weather by the contractor's appointed competent person, declared safe and his findings noted in the register
- n) Emergency – access ladders – access may not be further than 6 meters from the point where any worker within the excavation is working.

11. Barricading (Guarding of Excavations, Trenches and Floor Openings)

Areas where the restriction or prevention of unauthorised persons/members of public/passers-by is required

- Name and contact detail of person and Contractor Company that is responsible for the barricading shall be posted on the actual barricading.
- *All barricading shall be of the rigid type. Chambers are to be fenced off, on residential and industrial areas; diamond mesh fence of at least 1.5m height with overhanging orange net will be used on all sides. All openings and edges must be barricaded with solid barricading to withstand an impact of at least 100 kg and adequately maintained.
- Only solid (scaffolding or standalone) barricading with Orange “Snow Netting” will be allowed.
- Physical barriers to prevent persons falling into openings in floors, staircases, open-sided buildings and any structure in the course of erection, where dangerous openings exist.
- Contractors must pre-plan the delivery of floor grating, stair treads, landings and handrails to ensure safe access and protection for persons working on structures.

12. Blasting/If Applicable

- a) A copy of the written permission from the Chief Inspector of Department of Labour shall be obtained before use of any explosive material – refer to requirement in Explosives Regulation 13 of the OHS Act.
- b) Requirements for the transporting and storage of explosives to be in accordance to Explosives Regulation 13.4 of the OSH Act and SANS 100228 **“Code of Practice for the Identification and Classification of Dangerous Substances and Goods”** Published by the South African Bureau of Standards.
- c) Should blasting be necessary during the construction phase, the necessary authorisation must be secured from the relevant authorities. Adjacent land owners must be notified prior to the blasting activities on site.
- d) The Construction operations may necessitate that ground and rock be blasted. Prior to a blast a siren will have to be sounded. Warning flags will have to be displayed at the entrance to the area of the blast and guards will be placed at strategic points.

- e) Should the Contractor be required to carry out blasting operations, he is to fully acquaint himself with, and adhere to the blasting procedures and legislation. Every blast must be cleared with the appropriate Client/Agent representative before charges are placed.
- f) Only a licensed operator is allowed to blast.
- g) For all blasting operations, a blasting mat shall be used to cover the blasting area so as to reduce the amount of flying debris. The method statements and blasting pattern must be approved by the appropriate **DEVELOPMENT BANK SOUTHERN AFRICA** personnel before and blasting commences. Before any open trench blasting commences, the Contractor shall be in possession of a Blasting Permit (BLP Form) as well as Transport Permit (TTP Form) from the South African Police Service Explosives Section. All tunnel blasting (i.e. Pipe Jacking), shall comply with the Mine Health and Safety Act and the permits shall be issued by the Department of Minerals and Energy.

13. Working near Public Roads

- a) The Principal Contractor, his employees and subcontractors required to work on or nearby roadways shall wear high visibility vests, and be protected by red cones or flags during daylight and by red or amber flashing lamps at night.
- b) Work areas must be adequately barricaded so as to preventing unauthorised access.
- c) Road traffic warning signs shall be placed well ahead of the work area in a comprehensive traffic plan.

14. Machinery, Tools and Equipment

The aim of this section is to outline the process used by **DEVELOPMENT BANK SOUTHERN AFRICA** project management team to ensure that all equipment brought onto site by the Principal Contractor and their sub-contractors is appropriate to the task being performed and in good condition.

The Contractor shall ensure that all machinery, tools and equipment are identified, safe to be used and is maintained in a good condition.

- a) All machines driven by means of belts, gear wheels, chains and couplings shall be adequately guarded. A machine is guarded when persons cannot gain inadvertent access to the moving parts.
- b) The Principal Contractor shall ensure that all machinery, tools and equipment to be listed on an inventory list and handed to security with a copy kept on site.

- c) All machinery, tools and equipment to be regularly inspected at least monthly or as required by legislation and risk assessments, registers of tools shall be kept in the SHE file. The equipment should be numbered or tagged so that it can be properly monitored and inspected.
- d) All machinery, tools and equipment must have the necessary approved test or calibration documentation where applicable prior to being brought onto the premises and the records shall form part of the SHE plan.
- e) All fuel driven equipment must be inspected by the **DEVELOPMENT BANK SOUTHERN AFRICA**. SHE Practitioners/Officers prior to mobilizing it onto site.
- f) All fuel driven equipment must be properly maintained in accordance with the manufacturer's recommendations and legal requirements.
- g) The Contractor shall supply, at his cost, all items of plant and equipment necessary to perform the work else other CI.
- h) The Client/Agent reserves the right to inspect items of plant or equipment brought to site by the Contractor for use on this Contract. Should the Client/Agent find that any item is inadequate, faulty, unsafe or in any other way unsuitable for the safe and satisfactory execution of the work for which it is intended, the Client/Agent shall advise the Principal Contractor in writing and the Principal Contractor shall forthwith remove the item from the site and replace it with a safe and adequate substitute. In such cases, the Principal Contractor shall not be entitled to extra payments or extensions of time in respect of delay caused by the Client's/Agent's instructions.
- i) The Principal Contractor/sub-contractor will ensure that he has all the necessary registers to record all tools and equipment.
- j) All employees shall be competent when operating or using machines and tools i.e. have a valid certificate. And proof of any form of task related training.

15. Machine Guarding

- a) An assessment should be conducted in writing to ensure that all machines and tools are fitted with a guard and the assessment should be kept on the SHE file.
- b) The machine or tool should be guarded to prevent limbs or loose clothing from getting under, into, above or around the dangerous moving parts.
- c) Every shaft, pulley, wheel-gear, sprocket, coupling, clutch, friction drum, spindle end screw, key, bolt on a revolving shaft, driving belt, chain rope or similar object shall be securely fenced or guarded.
- d) Guards should form a permanent part of the machine or tool, easy to remove non corrosive, rigged and as far as reasonable heat resistant.

- e) Machine guards must be painted on the outside in the same colour as the machine or tool.
- f) Inside of guards and moving or rotating parts must be painted orange.
- g) All guards must be inspected by a competent person on a monthly basis as well as by users prior to use. These inspections and proof of corrective action taken must be recorded and kept on site.

Records:

- A register should be used which indicate the name, number of the machine or tool and the number of guards.
- The register should be kept on the safety file.

16. Hand Tools and Pneumatic Tools/Explosive Actuated fastening Tools

- a) All hand tools (hammers, chisels, spanners, etc.) must be recorded on a register and inspected by the supervisor on a monthly basis as well as by users prior to use.
- b) All pneumatic tools (tools driven by gas, usually compressed air) should be numbered, recorded and inspected at least monthly as well as by users prior to use. And the revolutions per minutes measured in accordance with the manufacturer specifications.
- c) Tools with sharp points in tool boxes must be protected with a cover.
- d) All files and similar tools must be fitted with handles.
- e) It is illegal for a pneumatic tool to be operated by using a compressed gas cylinder. Pneumatic equipment shall only draw supply from mobile air compressors or from compressed air lines installed within the premises after gaining permission from the Client/Agent Representative.
- f) When using the interlocking type of connection of an airline, connectors shall be secured with wire clips through holes provided to prevent accidental disconnection.
- g) Compressed air shall NOT be used for any purpose other than that for which it is provided. Compressed air should not be used to remove dust from clothing.
- h) Hoses to be orderly routed and elevated if required in order to prevent tripping hazards.

Records:

- Check list for hand tools
- Check list for air tools including records of the measurement of revolutions on grinders
- Gas cylinder trolley checklist
- Register

17. Explosive Actuated fastening Tools

- a) Written permission to use these tools on site must be obtained by the **DEVELOPMENT BANK SOUTHERN AFRICA**. Project/Site Manager
- b) Only used by trained / authorised and appointed personnel.
- c) Prescribed warning signs placed / displayed where tool is in use.
- d) Work area must be properly isolated/ demarcated during use of tool.
- e) Inspected at least monthly by competent person and results recorded.
- f) Issue and return recorded including cartridges / nails and unused cartridges / nails / empty shells recorded.
- g) Cleaned daily after use.
- h) Users should be issued with suitable protective equipment.
- i) Cartridges and explosive power tools to be stored separately

Records:

- Register for the issue and return of cartridges.

18. Lifting Machines and Lifting Tackle

- a) A risk assessment shall be conducted prior to commencing with the task to identify the risk involved and appropriate mitigation measures must be put in place.
- b) If it is the Principal Contractor's intention is to use lifting machines on site, it should be indicated in the Principal Contractor's SHE plan as well as the inspection so that the **DEVELOPMENT BANK SOUTHERN AFRICA**. Project/Site Manager can conduct an inspection when equipment is brought onto site If his/her intention is to use a sub-contractor he must enter the name of the sub-contractor into the notification letter to the Department of Labour.
- c) All lifting machine operators shall be competent to operate a lifting machine. They must be in possession of a valid permit.
- d) The Principal Contractor should verify if the lifting machines have been examined and a performance test done.
- e) The training should have been done according to the Code of practice by a provider registered by the Department of Labour.
- f) Before using any lifting machines or tackle the operator should inspect it.
- g) All lifting machines shall be examined be colour-coded and subjected to a performance test by an accredited person/company at intervals not exceeding 12 months.

h) All lifting tackle should be examined and be colour-coded (colour tagged and not 'painted') by an accredited person/company at intervals not exceeding 3 months.

i) See the below table for example

Colour Coding per term	1 st Term Jan – Mar	2 nd Term Apr – June	3 rd Term July – Sep	4 th Term Oct – Dec
	Blue	Yellow	Green	Brown

a) Refer to the requirements of the Driven Machinery Regulation 18 and Construction Regulation 19 and 22 of the OHS Act.

b) All lifting tackle should be recorded on a register.

c) All hooks shall be fitted with a safety latch/catch.

d) A lock out system should be implemented to ensure that only an operator that is competent can draw lifting machines and fork lifts.

e) All lifting tackle should be conspicuously and clearly marked with identification particulars and the maximum mass load which it is designed for.

f) No person shall be moved or supported by means of a lifting machine unless such a machine is fitted with a cradle approved by an inspector.

g) A risk assessment should be conducted prior to starting with the task.

- Account should be taken of wind forces.
- Lifting machines are erected taking into account a safe distance from excavations.
- When working in close proximity to power lines, the contractor must apply for a permit. Refer to Electrical Machinery Regulation 15 of the OHS Act.
- Account should be taken of the bearing capacity of the ground.

h) Principal Contractors and their employees shall keep out from under suspended loads, including excavators, and between a load and a solid object where they might be crushed if the load should swing or fall. They shall not pass or work under the boom or any crane or excavator.

- i) Contractors and their employees shall ensure that crane loads are not carried over the heads of any workmen.
- j) Guide ropes to be used to prevent loads from swinging.
- t) Rigger requirements: Rigger ID document, medicals, induction card, National Rigging Certificate (NRC) Competency certificate which states the tons to be lifted, Trade test certificate in accordance with the standards recognized by the National Apprenticeship Board in terms of Section 7 of the training of Artisans Act, Lifting tackle & equipment certification and Industry ID Skills card

Records:

- Record books and test certificates of lifting machined and tackle should be kept on the safety file.
- A copy of the risk assessment should be kept on the safety file.
- A certificate of approval shall be obtained from the Department of Labour Inspector.
- Register of all lifting machines and tackle on site (For inspection purposes).
- Training certificates and certificates of fitness for operators of the equipment

19. Confined Space

- a) Trained competent person has tested using a dosimeter to ensure that the atmosphere is safe to work in.
- b) Trained competent person to ensure that locking out of all energy sources (i.e. water, compressed air, electricity, steam etc) has been completed. .
- c) Permits issued and signed.
- d) Ensure that the correct PPE is issued, i.e. overall, safety footwear, safety harness, (respirator / dust mask, hearing protection, BA equipment, recovery ropes, and radios).
- e) Correct lighting installed or hand held lighting sufficient.
- f) Footwear in good condition.
- g) Trained first aider doing “hole watch” duty at all times.
- h) Register of names of all persons entering and leaving in the confined space.
- i) Ensuring that communication is maintained at all times with “hole watch”;
- j) Being aware of any possible hazards that may be encountered while in confined space.
- k) Ensuring sufficient ventilation.

- i) No workers suffer from claustrophobia.
- m) Monitoring confined space.
- n) Ensure instruction are clear and concise and fully understood by all;
- o) The right tools for the job are being used.
- p) Check entry register and ensure all workers are accounted for.
- q) Inspection by supervisor to ensure area is clean and no materials or equipment are left behind.

20. Asbestos Control Management (If Applicable)

- a) The Contractor shall ensure that the release of asbestos dust into any environment or water system complies with the provisions of the Atmospheric Pollution Prevention Act, 1965 (Act No. 45 of 1965), the Environment Conservation Act, 1989 (Act No. 73 of 1989), the National Water Act, 1998 (Act No. 36 of 1998), and the National Environmental Management Act, 1998 (Act No. 107 of 1998).
- b) The Contractor shall inform the DBSA Project Manager and SHEQ if during construction Work, asbestos or suspected asbestos containing material is found. Only Asbestos Approved Contractor can work on asbestos containing material. Asbestos monitoring should be carried out in accordance with MDHS 39/4 during asbestos work.
- c) Monitoring should be performed by and Approved Inspection Authority. Medical surveillance should be carried out on all people working with asbestos.

Prohibition

No person shall –

- Use compressed air or permit the use of compressed air to remove asbestos dust from any surface or person.
- smoke, eat, drink or keep food or beverages in an area not specifically designated for it or require or permit any other person to smoke, eat, drink or keep food or beverages in such area; or apply asbestos by means of spraying or any other similar process or require
- The asbestos area should be demarcated and relevant signs should be posted at all entrances and exits. After the asbestos work is finished, a clearance certificate should be issued by a competent person.
- An employer or self-employed person shall, in order to avoid the spread of asbestos dust, take steps, as far as is reasonably practicable, to ensure that the asbestos in storage or being distributed is properly identified, classified and handled in accordance with SABS 0228.

- Asbestos must be transported in a container or a vehicle in which asbestos is transported is clearly identified, classified and packed in accordance with SABS 0228 and SABS 0229.

21. Site Establishment

- a) The principal contractor must ensure that a layout design of the site is provided to the Engineer depicting the position of offices, ablution facilities, storage, workshops, stockpile areas, waste disposal facilities and access routes. The designing of the site layout must take into account minimum disturbance to residents, businesses and the surrounding environment.
- b) Prior to the commencement of any vegetation clearing or tree felling activities, the Principal Contractor must ensure that the Engineer is contacted to confirm areas that are to be cleared. No trees or indigenous shrubs will be removed without the prior permission of the Engineer, unless in keeping with the final site reinstatement.
- c) Where possible, wetlands shall be avoided during construction and disturbance to these areas minimized.
- d) Construction may only occur within or close to watercourses if prior permission is obtained from the Engineer.
- e) Location of all underground services must be requested before commencement of construction. If this information is not available, the contractor, must only begin with excavation on receiving approval from the engineer and after endeavoring to identify the existence of all underground services.
- f) The Principal Contractor must obtain permission from the Engineer for roads that are to be created for construction access.
- g) These roads must have as little cut and fill as possible.
- h) In order to prevent erosion, drainage systems must be created on all temporary access roads.
- i) These roads must be maintained in a good state of repair.
- j) Photographs of the state of existing roads which are to be used for access roads shall be taken for record purposes.
- k) Necessary signs to control movement of all vehicles must be posted.
- l) Site security lighting must be positioned in a way that the direct beam is focused away from adjacent residential properties and businesses and does not pose a nuisance or danger to road users.

22. Site Security

- a) Certain areas where work must be carried out, is recognized as unsafe areas and certain other areas may from time to time become unsafe, due to 3rd party actions. The Principal Contractor must as far as reasonably possibly anticipate unsafe areas and must ensure that his site staff is safe from 3rd party actions, which include but is not limited to:
 - b) Unrests,
 - c) Violent Demonstrations,
 - d) Theft,
 - e) Injury from 3rd parties at all times
- f) The Principal Contractor must ensure that when work is to be carried out in the above-mentioned areas, make provision for security services to accompany site staff during the execution of their work, as The Principal Contractor is responsible for the Health, Safety and Security of his own staff.

23. Clearing & Grubbing

- a) Before any construction the Principal Contractor must ensure that the roadway is cleared and all vegetation and trees including their roots removed and must be disposed in the registered municipal landfill site
- b) All construction works must be carried out in as safe a manner as possible.
- c) Excavated suitable materials must be used when possible in the works.
- d) Provision has to be made for drainage of the temporary and permanent works.
- e) Backfilling around structures, wells etc., shall be done after dismantling with the help of excavated/approved materials and compacted to the required density as directed by the Engineer.
- f) The topsoil obtained from clearing and grubbing shall be stored along the ROW available as required for spreading on the embankment slopes and other Environmental aspects.

- g) All unsuitable material in the Engineer's opinion arising out of the site clearance operation shall be disposed of as per Specifications at locations/dump areas (within or outside) made available by the Employer/Engineer.
- h) After Clearing and Grubbing and making the ground ready for further embankment, work shall commence only after establishing, establishing and recording. A soil sampling for that ground shall be taken jointly for further testing.

24. Concrete Work

- a) The Principal contractor must ensure that all practicable measures are taken to prevent the uncontrolled collapse of new or existing structures or any part thereof, which may become unstable or is in a temporary state of weakness or instability due to the carrying out of construction work.
- b) No structure must be loaded in a manner which would render it unsafe.
- c) Communication and preparation before truck arrives on site.
- d) Ensure site is ready for spinner truck.
- e) Flagman / banks man to be used when truck is backing into position on site.
- f) Principal contractor must Ensure all workers have correct PPE before the pouring of concrete. Safety shoes / gum boots, safety glasses, rubber gloves, hardhat, overall. Workers trained in the use of issued PPE.
- g) Concrete splashes into your eyes, DO NOT RUB THEM, WASH OUT WITH CLEAN WATER AND SEEK MEDICAL TREATMENT.
- h) Assistance with the handling of the flexible line and to move the petrol machine into position if being used.
- i) Ensure vibrator engine in good condition and all guards are in place.
- j) No standing under suspended loads and ensures that load / bucket is controlled with a tag line at all times.
- k) Flagman to be clearly identified with a bright yellow Day-Glo vest and should be using a whistle.
- l) Bucket must be washed down correctly in the designated area mind about the environment.

25. Bricklaying

- a) The Principal must use only trained personnel e.g. Working at Height, Manual Handling and Bricklaying.
- b) Principal contractor must Provide Safe access and Safe/Suitable working platform required where working at heights.
- c) PPE for mortar to include gloves where practicable and goggles/ masks where there is a risk of contamination All mixing equipment must be inspected before use, and the inspection recorded in a register.
- d) Principal contractor must ensure the Good housekeeping practices must be practiced at all times, to ensure a trip free and clean work place
- e) Principal contractors Employees required to lift heavy cement or sand bags must be trained in proper material lifting practices and Manual Handling.
- f) When brickwork is done at night, the site supervisor must ensure that there is adequate provision made for lighting

26. Plastering

- a) The Principal Contractor Shall ensure that materials, sample and method statement is approved by CL.
- b) The Principal contractor shall ensure that Plastering tools accessories are approved.
- c) The Principal contractor shall ensure the working platform and lighting arrangement is provided.
- d) The Principal contractor shall ensure that employees working with plastering (cement) are medically fit and are given the correct protective gear for the task.
- e) Employees shall be inducted on the correct posture for the task.
- f) The Principal contractor must ensure that before any work commences, proper training **Control of Substances Hazardous to Health (CSHH)** for the task must be provided.

- g) The Principal contractor **MSDS** for Cement as Hazardous Cement must be Presented to all Employees.
- h) The Principal contractor must ensure that before any work commences, proper PPE for the task must be provided & Personnel working at height shall wear Full Body Harness.

27. Roof Works or Working height

- a) The Principal contractor must designate a competent person to be responsible for the preparation of a fall protection plan.
- b) To ensure that the fall protection plan contemplated in paragraph is implemented,
- c) amended where and when necessary and maintained as required; and
- d) The Principal contractor must take steps to ensure continued adherence to the fall protection plan.
- e) Principal contractor must ensure that No gear, debris or other material shall be dropped from heights. It must be lowered or chuted to ground level.
- f) Never leave tools, equipment or material unattended on steelwork or cable racks. It could be stolen, or could fall causing possible injuries and damage.
- g) Openings in floors / gantry walkway, roof tops etc. shall be suitably barricaded, boarded over, and if necessary fitted with toe boards, Sides / edges of open floor areas shall be fitted with handrails.
- h) The Principal contractor must ensure Full Safety harnesses shall be worn when working 1.8 meters or higher from the ground and the person shall be secured to a life line or to the structure. If the person works higher than 5 meters a double lanyard (length of 1.8 meters long each lanyard and can stretch to 5 meters) shall be used. If the person works between 1.8 meters and 5 meters use of a single lanyard (of 1 meter –fixed) shall be used.
- i) The Principal contractor must ensure Always that your lanyard attachment to the steel is firm and secure. When using a double lanyard at least one lanyard shall be attached at all times. Make sure the lanyard is attached as far above your head as possible. The lanyard must be attached even if in a stationary, moving or working position.
- j) The Principal contractor must ensure that When working on scaffold platforms the lanyard shall be attached to a secure position above your head at all times.

- k) Vertical climbing of steel is prohibited. Alternative means like ladders or scaffold shall be used. Do not attempt to work in an elevated position in adverse weather conditions e.g. when it is raining and scaffold is outside.
- l) The Principal contractor must ensure that the Supervisor shall ensure that a suitable access or descent is used when pulling cables.
- m) The Principal contractor must ensure that all equipment's used to hoist material or lower material must be inspected monthly and must be safe for use at all times. This includes ropes. Ropes used may not be frayed or excessively worn.
- n) The Principal contractor must ensure that Prior to all tasks being done a risk assessment must be done.
- o) Adequate supervision must be available at all times for the teams carrying out any work in an elevated position.
- p) Employees working above 1.8 m high must all time wear and secure their full body safety harness to anchor point.
- q) Always check that the harness is in a good condition, numbered and entered into safety harness register.
- r) Ensure that employees are trained to use safety harness.
- s) Secure the full body harness around your waist.
- t) Ensure that all buckles are properly fastened correctly.
- u) Ensure that the coupling link for the lanyard is at the back.
- v) Ensure that harness fits comfortable around your waist.
- w) Always ensure that your lanyard attached firmly to anchor point.
- x) When moving from one point to another do not remove your lanyard completely, first remove one lanyard and attach to anchor point moving forward and then remove the other and attach anchor point.
- y) Safety harness must be stored properly and neatly in the stores and not thrown on the floor.

28. Electrical Installations (Including Temporary)

The Principal contractor must ensure All electrical installation work on site must comply with the relevant regulations and standards Electrical Installation Regulations,2009, and the Electrical Machinery Regulations, 1988, promulgated by Government Notice No. **R. 1593 of 12 August 1988**

- a) The Principal contractor must ensure that before construction commences and during the progress thereof adequate step are taken to ascertain the presence of and guard against danger to workers from any electrical cable or apparatus which is under, over or on the site.
- b) The Principal contractor must ensure that all parts of electrical installations and machinery are of adequate strength to withstand the working conditions on construction sites.
- c) The controls of all temporary electrical installations on the construction site is designated to a competent person who has been appointed in writing for that purpose.
- d) all temporary electrical installations used by the contractor are inspected at least once a week by a competent person and the inspection findings are recorded in a register kept on the construction site.
- e) all electrical machinery is inspected by the authorized operator or user on a daily basis using a relevant checklist prior to use and the inspection findings are recorded in a register kept on the construction site.
- f) Electrical work should also be handled with a permit to work system for activities involving work on live/energised systems, or the process of energising or making live an electrical system.
- g) Certificates of Compliance must be issued for all temporary electrical connections on site.

ACCEPTANCE OF HEALTH AND SAFETY SPECIFICATION

I _____ (name & surname) of _____
_____(company) Upon receipt of this specification, agree and acknowledge right to impose
penalties should I or any of my employees or contractors fail to comply with these conditions.

Signed: _____ On this date: _____ ()
/05/2023.) At: _____ (Site Name)

CONFIRMATION AND ACCEPTANCE

Confirmation and Acceptance	Signature	Date
I _____ confirm that I have read and understood the Health and Safety Specifications as set out above.		
I _____ confirm that I have read and understood and confirm my intention to comply with all the legal requirements.		
I _____ confirm my acceptance and understanding of the assigned responsibilities and duties involved.		