

SAFETY, HEALTH AND ENVIRONMENT SPECIFICATION

FOR

Additional SOW for the construction of concrete stairs, berm, steel platforms and stormwater discharge pipe.

DATE OF COMPILATION : 4 September 2023

COMPILED BY : Betty Mabitsela

NOTE TO INTERNAL DEPARTMENT

The SHE specifications are SAM's minimum requirements. The Internal Department 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. SAM in no way assumes the Internal Department legal responsibilities. The Internal Department is and remains accountable for the quality and the execution of the Safety, Health and Environmental programme. In addition, the relevant site Risk Control Department to include inputs that are specific to the site and operation where applicable. 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. The Internal Department must take into account all information in this specification and ensure that adequate resources and competences to deal with the matters detailed herein so that all relevant contents are dealt with in a way which is in compliance with legislation.

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i. **LIST OF ABBREVIATIONS**

AIA	Approved Inspection Authority
BRA	Baseline Risk Assessment
CC	Compensation Commissioner
COVID-19	Coronavirus Disease 2019
H&S	Health and Safety
SHEQO	Safety, Health, Environment and Quality Officer
CR	Construction Regulations (Gazette 10113 of 7/02/2014)
DMR	Driven Machinery Regulations
DoL	Department of Labour
ER	Engineer's Representative
GAR	General Administration Regulations
GSR	General Safety Regulations
HIRA	Hazard Identification Risk Assessment
ID	RW Internal Department performing work
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
SHEP	Safety, Health and Environment Plan
SHES	Safety, Health and Environment Specification
EMS	Environment Management Services
PM	Programme Manager
PPE	Personal Protective Equipment
RHCS	Regulations for Hazardous Chemical Substances
RE	Resident Engineer
RW	Rand Water
SABS	South African Bureau of Standards (Authority)
SAM	Strategic Asset Management
SAC	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

ii. **OMISSIONS FROM THIS SHE SPECIFICATION**

By drawing up this SHE specification SAM has endeavoured to address the most critical aspects relating to SHE issues in order to assist the internal department in adequately providing for the health and safety of employees on site.

Should SAM not have addressed all SHE aspects pertaining to the work that is being done, the internal department needs to include it in the SHE plan /file and inform SAM of such issues.

iii. **PROJECT GOALS**

RW is determined to ensure that the highest H&S standards will prevail throughout the project and is committed to ensuring the following goals on the project is achieved:

- ZERO incidents for the duration of the Project.
- ZERO exposure of employees and visitors to Occupational Health Risks for the duration of the Project.
- ZERO harm to the environment.
- Good Quality Service and Quality End Product.
- Compliance to all applicable Legal and Other Requirements at all times.

Good and Transparent relations with the community and other interested parties around the Project

1. PROJECT AND SCOPE OF WORK DETAILS

1.1 Project Title:

Additional SOW for the construction of concrete stairs, berm, steel platforms and stormwater discharge pipe

1.2 Project description/detailed scope of work:

The works consist of earthworks, construction of chambers and associated civil works for 5500m of 1700mm internal diameter steel pipeline with a wall thickness of 16mm (H39 Pipeline Phase 2) laid from the intersection of Dale Road and Modderfontein Road in Midrand to the Randjesfontein Estate in Midrand, 300m of pipe jacking of 2000mm ID concrete pipe sleeve, and reconstruction of Hampton Road and Milner Road in Glen Austin, Midrand

The internal department shall at all times observe proper and adequate H&S precautions on the Site. Where adequate H&S precautions are not being observed, SAM may order the Internal Department to comply with minimum H&S requirements. Compliance with such an order will not absolve from any of their responsibilities and obligations under the project.

NB: The internal department referred to in this document for the project is the Environmental Management Services (EMS) department that will be performing the work.

The client referred to in this document for the project is Bulk Water Distribution Department

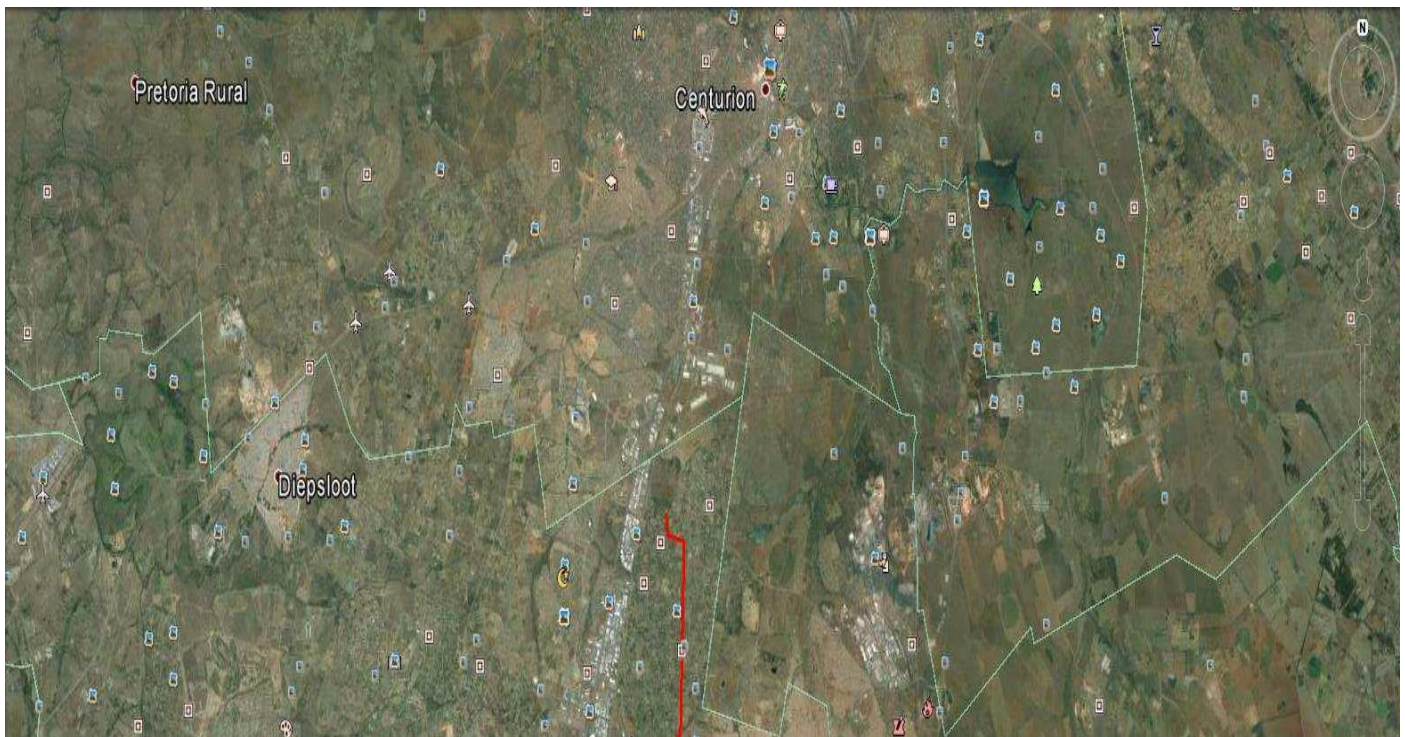
1.3 Programme details:

Time allowed for preparation of SHE plan/file	Dependent on the client / site representative
Approval date of SHE Plan/ file	As per the agreed timelines after submission but subject to content as per these requirements
Induction dates	To be advised after approvals of SHE Plan/file by Risk Control
Anticipated Commencement date of work on site	TBA
Estimated Project completion date or project duration	TBA

1.4 Site Details:

Locality of the works: The site is located about 30km north east of the Johannesburg Central Business District, within Midrand, City of Johannesburg Metropolitan Municipality, Gauteng Province.

The H39 phase 2 Pipeline route starts approximately near the intersection of Allan Road and Modderfontein Road (25°59'23.11"S, 28°9'10.5"E), runs parallel to Allan Road in a northeast direction, the pipe then turns in a northern direction after crossing the Eskom Training Centre access road to run along Hampton road. After the crossing the Old Olifantsfontein Road (R562) the pipe runs along Milner Road. After the pipe crosses Olifantsfontein Road (K27/R562) it turns in a northwest direction to run parallel to the Olifantsfontein Road (K27/R562) for a distance of approximately 250m before turning in a northern eastern direction inside the Randjesfontein Estate. The pipe will terminate approximately 380m before crossing Everfair Avenue inside the Randjesfontein Estate.



2. PROJECT DOCUMENTATION

2.1 Project Lifecycle SHE Document Requirements

Site access	
• Medicals (CoF) – Annexure 3 • Operational Legal Appointments with certificate of competencies. This also is dependent on Works to be undertaken i.e. submissions to Client before start date of activity on site. • Safe Working Procedures / method statements including work at fall risk positions as per Risk Assessment • Inductions • Activity based HIRA. • Staff list with ID Copies / Valid Passports with work permits.	• Maintained detailed SHE File • Operational Legal Appointments-submissions to Client before start date of activity on site • Emergency contact numbers

2.2 SHE File Contents

The internal department must have a SHE file in which records of this specification are kept. All information required in the specification, for the duration of the project is to be recorded in the file. The SHE file that will be maintained will be for the project site, must be kept on site and be available on request for audit and inspection purposes by the relevant Risk Control Department or DoL. The completed SHE file (i.e. hard and soft copy) shall be handed over to the Client/Site representative the end of the project.

2.3 Required SHE File Contents

Description	Detail in comprehensive SHE File (x indicates required)
Project Organogram	x
Contact List including Emergency Numbers	x
Project Scope of Work	x
SHE Specification & Baseline Risk Assessment	x (RW to issue)
SHE Plan Approval Memorandum	x (RW to issue)
Legal Permits: Notification to Department of Labour	x

Site Entry/ Access Certificate		x (RW to issue)
Certificates of Competencies		x (Key staff & Operational)
Annual Medical Records		x
Staff List with Copies of valid certified ID/Passport Documents & work permits		x
Client Induction Registers (SHEQ/Risk Control)		x (RW to issue)
Internal Department Tools and Equipment Inventory for the project		x
COVID-19 Plan		x
Legal Appointments: As required by the OHS ACT & Other Regulation (Dependant on Works to be undertaken i.e. submissions to Client before start date of activity on site)		
Reg.	Appointment	
Section 8	Supervisor	x
Section 17	Health and Safety Representative	x
GSR 3	First Aider	x
GSR 5(1)	Confined space Inspector	x
GAR 9 (2)	Incident/Accident Investigator	x
Legal Appointments- Required as per Construction Regulations (Dependant on Works to be undertaken i.e. submissions to Client before start date of activity on site)		
Reg.	Appointment	
23(1)(d)(i)/(k)	Constr. vehicle and mobile plant operator/Inspector.	x
28 (a)	Stacking and storage supervisor	x
Risk Assessments – Baseline and activity based HIRA		x(Activity based/Min RA)
Safe Work Procedures and Method Statements		x
Mandatory Registers Required for All Contracts:		
	First Aid Box Inspection Register	x
	PPE Issue Register	x
	Risk Assessment Communications Register	x
Contract Specific Registers/Checklists:		
Ladder Inspection Register		x
Construction Vehicles and Mobile Plant Inspection Register Plant		x
Emergency Response and evacuation Procedures		x
SHE Toolbox Talks/DSTI's		x
Job Observations		x

2.4 Project and Site Requirements

The following additional project requirements apply:

Item	Requirement:
General Project Site Rules	ALL employees may NOT: - Partake, possess or sell drugs or alcoholic beverages on site including cannabis. - Indulge in practical jokes, horseplay, fighting or gambling - Destroy or tamper with safety devices, symbolic signs, fire extinguishers. - Bring onto site or have in your possession a firearm, lethal weapon. - Assault, intimidate or abuse any other person. - Operate construction equipment (vehicles or plant) without the necessary training and authorization. - Enter any area unless authorized to do so by the person in charge - Negligently, carelessly or wilfully cause damage to property of others. - Refuse to give evidence or deliberately make false statements during investigations. - Smoke on site unless in a designated smoking area. - Use cell phones on site - Take site photos with electronic device unless permission is given - Perform work that they have not been informed of or trained on - Engage in horseplay or fail to comply with COVID-19 associated regulations such as maintaining social distance, reporting for duty if they feel ill with Covid-19 related symptoms, failing to report if they feel ill with COVID-19 related symptoms during working hours, - Disregard the screening and hygiene practices in place

	• Discriminate or victimise / stigmatise other employees that have symptoms of COVID-19 • Disseminate fake news regarding COVID-19
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2.5 SHE FILE submission at the end of the project

Use of the SHE file will commence once the Internal Department is on site. The SHE file must be maintained, kept on site and be made available on request for audit and inspection purposes. The SHE file (i.e. hard and soft copy) is to be handed over to the relevant site Risk Control Department. Further requirements regarding the content of the consolidated SHE files will be provided to Internal Department during the project by the relevant Risk Control Department / SHEQ.

3. ROLES AND RESPONSIBILITIES

3.1 Client

The Client for this project is Bulk Water Distribution. The client shall ensure that the EMS is afforded time to conduct work for the duration of the project. All work should be in accordance with client's requirements within the predetermined times in order to meet the project requirements.

Project representatives:

CLIENT/SITE REPRESENTATIVES	
Name	Position
Tsholofelo Jantjies	Rw project manager
SAM PROJECT REPRESENTATIVES	
Aubrey Nxumalo	Senior Manager: Master Planning
Jacob Mamabolo	Senior Civil Technologist
Mandy Malindi	SHEQ Manager
Betty Mabitsela	SHEQ Officer

3.2 Internal Department Responsibilities:

The Internal Department carries the primarily accountability and responsibility for ensuring full compliance to the provisions of the OHS Act 85 of 1993 and its associated regulations.

- **Appointments and Competencies**

The Internal Department 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 relevant Risk Control department in terms of technical and CHS competence prior to commencement of work.

- **COVID-19 and Construction Management**

The appointed Construction Manager shall, in addition to their responsibilities, be responsible for addressing employee or workplace representative concerns on the virus. These responsibilities are in terms of the Regulations issued in Chapter 2 – General Provisions applicable to National State of Disaster (Act 57 OF 2002) (COVID-19) COMPLIANCE EMPLOYEE (REG. 5(4)(e) APPOINTEE). He/she shall keep all employees informed on the disease, its management and prevention and update them on latest information published through official government platforms; the COVID-19 prevention measures are complied with, the COVID-19 health and hygiene protocols are complied with and the workplace plan is complied with.

Where a health and safety committee has been elected, the Construction Manager shall consult with that committee on the nature of the hazard in that workplace and the measures that need to be taken. In the event of any accidents or incidents involving COVID-19, ensure that all the relevant documentation and reporting procedures, in terms of the Act, are complied with.

NB:

- For projects where a Construction Manager has not been appointed, the responsible person (16.1 /16.2 appointee) or supervisor shall take on the responsibility for COVID-19.
- The internal department may consolidate the responsibilities into the Construction Manager / Supervisor Appointment letter or a separate appointment can be made based on REG. 5(4)(e) of the National State of Disaster (Act 57 OF 2002)
- **Supervision**

A competent supervisor appointed to manage the works must have had training and/or experience in their area of responsibility. The supervisor must show evidence of basic training in OHS, and an understanding or training in areas of responsibility (i.e. risk assessments, method statements etc.).

An assistant supervisor may be appointed where justified by the scope and complexity of the works. Curriculum Vitae (CVs) are to be submitted for approval to the relevant Risk Control Department. The supervisor will be held responsible for the safety of working teams and subordinates, housekeeping and stacking and storage of materials in their particular area. It is recommended that the site be supervised by a competent dolomite person.

4. Hours of Work

The hours of work for the site are:

- Mon - Thurs. (07h00 – 17h00)
- Fri (07h00 – 17h00)

All work conducted on site shall be in accordance with the Basic Conditions of Employment Act. The Internal Department is required to timeously notify their Project/Site representative 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 Site Risk Control Department.

5. RISK MANAGEMENT

The aim of this section is to:

- Highlight the construction site SHE risks and hazards (Reference must be made to the Provided baseline risk assessment).
- Request the Internal Department to identify hazardous and potentially hazardous work operations. Internal Department needs to demonstrate that the site hazards and the Internal Department activities' risks and the mitigating measures that have been considered in their risk assessments.
- There must be method statements and written safe work procedures for all the Internal Department activities. Method statements and Risk Assessments should be available as per the work programme. In addition, both of these documents are to be comprehensive and aligned to one another.
- Where there are scope changes, the risk register must be revised in consultation with the project team.
- Method statements and risk assessments are to be used in all DSTI activities. Records for all activities are to be kept and they will be verified during inspection processes.
- Emerging risks and hazards must be managed during the work.

Activity based risk assessments must be conducted by an appointed and competent person of the Internal Department. Preliminary hazard identification shall be conducted by the Internal Department prior to work beginning on site. The detailed risk assessment must be in the SHE file and be available for inspection by any authority/ RW Representative.

A. Site Specific Health and Safety Hazards

The SAM SHEQ team and design team will outline the site specific health and safety hazards pertaining to the environment and physical conditions that the Internal Department will be exposed to in performing this work on site.

The SAM Project / site representative will make all reasonable efforts to ensure that the information provided is complete and correct. However, the Internal Department shall make their own assessment of the hazards and risks associated with the work under the project.

The **Baseline Risk Assessment is attached to this SHE specification** in order to make the Internal Department aware of the hazards:

It is however pointed out to the Internal Department that the list may not be totally comprehensive and it is the duty of the Internal Department 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 File which will be passed on for scrutiny and approval by the SAM SHEQ representative

During the work, the Internal Department or the Project / Site Representative may identify emerging hazards and risks. For each such newly identified hazard or risk, the Internal Department shall review the relevant section(s) of the Baseline Risk Assessment.

A revised SHE specification and baseline Risk Assessment shall be submitted to the Internal Department who will review their own risk assessments. The Internal Department will prepare and submit to the relevant Risk Control Department representative for approval.

The Internal Department shall not proceed with work in hazardous areas until the Project / Site representative has reviewed the Risk Assessment and has approved.

The Internal Department 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 Internal Department SHE file.

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

B. COVID 19

Coronavirus Disease 2019 (COVID-19) is a respiratory disease caused by the SARS-CoV-2 virus. To reduce the impact of COVID-19 outbreak conditions on Rand Water internal department employees, client representatives, visitors and members of the public, it is important for all internal department to adequately plan for COVID-19.

Internal departments shall make sure that they plan for COVID-19 appropriately by identifying all its related risks in their respective workplace settings and determining the relevant control measures to implement. As the COVID-19 outbreak conditions are constantly changing, the internal department internal department must ensure they have access to new information on the virus, its transmission, and impact and make this information available to all employees. All COVID—19 related plans and risk assessments must also be modified accordingly.

NB: To access new and relevant information on COVID-19, the internal department shall regularly check the websites of the National Department of Health, National Institute of Communicable Diseases and the National Institute for Occupational Health whether any additional PPE is required or recommended in any guidelines given the nature of the workplace or the nature of a worker's duties.

To support the national strategies to being implemented by the government in relation to prevention and management of COVID-19, the following is expected from the internal department:

- Full compliance is required with the legislation governing workplaces in relation to COVID – 19, i.e. the Occupational Health and Safety Act, Act 85 of 1993, as amended, read with the Hazardous Biological Agents Regulations. Section 8 (1) of the Occupational Health and Safety (OHS) Act, Act 85 of 1993, as amended, which requires the employer to provide and maintain as far as is reasonably practicable a working environment that is safe and without risks to the health of employees. Specifically, section 8(2)(b) which requires steps such as may be reasonably practicable to eliminate or mitigate any hazard or potential hazard before resorting to personal protective equipment (PPE).
- Full compliance with the COID Act where the Compensation Commissioner requires all employers to assist employees with claims through their respective COIDA Insurers providing for any employee who falls ill through the exposure to Covid-19 at their workplace.
- Full compliance with the COVID-19 Occupational Health and Safety Measures in Workplaces COVID-19 (C19 OHS), 2020 directive published by DOEL on 28 April 2020 (sent as an attachment with this memo).
- Full compliance with any guidelines issued by the National Department of Health (NDoH), National Institute of Communicable Diseases (NICD) and the National Institute for Occupational Health (NIOH).

Submission of a staff list, COVID19 Risk Assessment and a detailed Health and Safety implementation plan for the safe re-activation of the applicable site that must be approved by RW SHEQ Representative and the Project Manager on the project. The Construction Manager / Supervisor takes full responsibility and accountability of the

implementation of the Covid-19 plans. The latter two documents are independent from the existing SHE Plan and Risk Assessment in use for the project but must form part of the existing SHE management system. An in depth analysis of each risk associated with the virus and actions required to mitigate all such risks must be clear and concise [refer to Workplace Preparedness: COVID-19 (SARS-CoV-19 virus) Coronavirus – A Practical Guide for Employers documents from Department of employment and Labour (DOEL)].

Due COVID-19, no overtime will be allowed or approved during the lockdown levels unless it is an emergency or impacts health and safety.

Examples of these risks will include but will not be limited to:

- Travelling to work – public transport – exposure to the virus;
 - E.g. Social distancing should be maintained in provided transport and should it be filled at 70% capacity or as required by the relevant legislation
- Older employees or employees with chronic diseases;
- Site access by non-employees;
- Poor personal hygiene practices on sites;
- Unhygienic facilities such as offices, toilets, canteens etc.;
 - E.g. Ablution facilities should be cleaned and disinfected regularly and a cleaning log sheet kept and maintained.
- Inadequate PPE;
- Poor ventilation;
- Site meetings and;
- Tracing of infected employees
- Unhygienic accommodation provided for employees

Before work resumes after intervals of lockdown levels, internal department is required to prepare the site with key personnel to make the site safe for his employees. Ensure employees required to work are fit to work without any chronic conditions or compromised immune systems.

Absenteeism and sick leave shall be managed as per the basic conditions of employment or any legal document gazetted in light of the COVID19 pandemic.

All internal department sites and offices shall focus on the following recommended health & safety measures but shall not limited to:

- Handling of COVID-19 - related cases in the workplace including a provision of a quarantine room for suspected / confirmed cases on site;
- Influenza vaccine to help build immunity against the common flu and or multivitamin supplements to boost their immune system;
- Management of COVID-19 waste;
- Low population density for work arrangements/ break intervals such as lunch and tea to facilitate social distancing;
- Rotation of office staff or work teams to minimise contact;
- Required COVID-19 training and education on PPE use including the training on the use of the thermometer facilitated preferably by a health professional; awareness on COVID-19; induction material to include COVID-19 etc.
- Use of essential PPE including masks and gloves;
- Person(s) screening (Testers) to be provided with proper masks (N95, or surgical or FFP2 mask); face shield and disposal suit.
- Mobile Flushing Toilets with running water for hand washing
- SHE Committee meetings to include the management of COVID-19 as an item on the agenda or the establishment of a Covid-19 task team to provide feedback to this meeting will be supported. Social distancing & precautionary measures to be considered with any meeting arrangements. Virtual communications are encouraged for meetings where possible to minimise human contact.

- NB: All internal departments shall be expected to submit a COVID 19 report to Rand Water on a weekly basis and to immediately report any suspected / confirmed cases.

The detailed table below of the Covid Risks and implementation plan that is proposed by the Construction Covid-19 Rapid Response Task (CCRRT) for all construction companies and built environment professional service provider companies intending to go back to work must be used when developing COVID-19 plan and risk assessment.

Risk	Mitigation Plan	Responsibility
Travelling to work – public transport – exposure to the virus	• Internal departments to transport staff from a designated place • Where not possible to avoid, use of public transport to comply with the transport limitations • Provide employees with information on the virus and precautions to take during travel i.e.: - If possible, maintain social distancing (at least 2 m) between yourself and anyone else when travelling - Frequently clean hands by using alcohol-based hand rub or soap and water - Avoid touching eyes, nose or mouth - Always wear a suitable face mask • Cancel travel for employees experiencing symptoms of the virus • Regular testing of body temperature	Internal department
Site access by non-employees	• All non-employees visiting the site must complete a site access register that includes their contact details in case they will need to be traced at a later stage. • Body temperature check with thermometer upon employee's arrival as well as departure. • Introduce staggered start and finish times to reduce congestion and contact at all times. • Take body temperature of anybody stepping on or stepping off site • Monitor site access points to enable social distancing • Change the number of access points, either increase to reduce congestion or decrease to enable monitoring. • Disinfectant is to be placed in the trough and all shoes coming onto site or leaving site will be disinfected. • Remove or disable entry systems that require skin contact e.g. fingerprint scanners or biometric system. • Require all workers to wash or clean their hands before entering or leaving the site. • Allow plenty of space (two metres) between people waiting to enter site. • Regularly clean common contact surfaces in reception, office, access control and delivery areas e.g. scanners, turnstiles, screens, telephone handsets, desks, particularly during peak times. • Reduce the number of people in attendance at site inductions and consider holding them outdoors wherever possible. • Drivers should remain in their vehicles if the load will allow it and must wash or clean their hands before unloading goods and materials.	Internal department
Poor Personal Hygiene on sites	• Provide additional handwashing facilities to the usual welfare facilities if a large spread out of site or significant numbers of personnel on site. • Provide misting hand sanitizers in all strategic places on site.	Internal department and Employees. Applicable in part to off-site Office based work being done by

Risk	Mitigation Plan	Responsibility
	• Ensure soap and fresh water is always readily available and kept topped up. • Provide hand sanitiser where hand washing facilities are unavailable. • Regularly clean the hand washing facilities and check soap and sanitiser levels. • Provide suitable and enough rubbish bins for hand towels with regular removal and disposal. • Sites to have extra supplies of soap, hand sanitiser and paper towels and these will be securely stored. • Non-compliant employees will face disciplinary action in order to safeguard	Professional service providers as well
Unhygienic facilities such as offices, toilets, canteens etc.	Toilets: • Restrict the number of people using toilet facilities at any one time. • Employees to wash hands before and after using the facilities. • Enhance the cleaning regimes for toilet facilities particularly door handles, locks and the toilet flush. • Portable toilets should be avoided wherever possible, but where in use these should be cleaned and emptied more frequently. • The provision of flushable toilets where possible. • Provide suitable and enough rubbish bins for hand towels with regular removal and disposal. Offices and canteens: • The workforce should also be required to stay on site once they have entered it and not use local shops. • Dedicated eating areas should be identified on site to reduce food waste and contamination. • Break times should always be staggered to reduce congestion and contact. • Hand cleaning facilities or hand sanitiser should be available at the entrance of any room where people eat and should be used by workers when entering and leaving the area. • The workforce should be asked to bring pre-prepared meals and refillable drinking bottles from home. • Workers should sit 2 metres apart from each other whilst eating and avoid all contact. Eating facilities should be redesigned to accommodate this requirement. • Where catering is provided on site, it should provide pre-prepared and wrapped food only. • Payments should be taken by contactless card wherever possible. • Where only cash can be used, the usual hands cleaning and with sanitizers and soap should be observed. • Crockery, eating utensils, cups etc. should not be used. • Drinking water should be provided with enhanced cleaning measures of the tap mechanism introduced. • Tables should be cleaned between each use. • All rubbish should be put straight in the bin and not left for someone else to clear up. • All areas used for eating must be thoroughly cleaned at the end of each break and shift, including chairs, door handles, vending machines and payment devices.	Internal department and employees
Inadequate PPE	• No employee on site without adequate and relevant PPE.	Internal department

Risk	Mitigation Plan	Responsibility
	- Re-usable PPE should be thoroughly cleaned after each single use and not shared between workers (e.g. overalls, reflector vests etc.) - Single use PPE should be disposed of so that it cannot be reused into biohazard bins.	
Poor ventilation	Increase ventilation in enclosed spaces	Internal department
Site meetings	- Only necessary meeting participants should attend. - Attendees should be two meters apart from each other. - Rooms should be well ventilated / windows opened to allow fresh air circulation. - Consider holding meetings in open areas where possible.	Internal department

C. Site specific risks:

Wetlands, open trenches exposing pipes, sewage line and overhead power lines and the sinkhole are expected to be found on site. The internal department shall ensure that the work area is inspected thoroughly before conducting work. Any interaction with such shall be reported immediately and ensuring employees are removed from the dangerous situations.

6. PROJECT SPECIFIC RISKS IDENTIFIED

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

A Permit system is required for all medium and high risk activities, and competent resourced persons are to be used if the Internal Department is not doing the work themselves.

6.1 Confined space

The area that is going to be backfilled is considered a confined space and toxic gases may exist. The Internal Department shall inspect and monitor the oxygen concentrations of the sinkhole and provide suitable means of ventilation should the oxygen concentration not be at the acceptable levels. All persons entering the confined space shall be adequately trained on work in confined spaces, the risk assessment as well as rescue measures in cases of emergency. This will apply only if entry is made into the confined space.

6.2 Working near public roads

The working area is close to busy public road. Roads signs must be in place and community needs to be informed of any road closures on time. Traffic management must be submitted for approval and proper communication must be in place.

6.3 Ergonomics and Occupational Health

Ergonomic factors need to be considered during all stages of the work. Lifting heavy loads, and repetitive work, while synonymous with the work, are to be considered a high risk and mechanical aids and the hierarchy of control are to be considered and applied. The risk associated with heavy sandbags and confined working spaces are to be considered and mitigated where possible. Method statements, HIRA and DSTIs are to include ergonomic and health issues.

6.3 Working on heights

The installation of stepladders will be done inside the chambers. The method statement and risk assessment for the work must comprehensively developed and adequately implemented to avoid any adverse effects. Fall protection measures must be included in the method statements including the fall arrest mechanisms that will be implemented. The relevant areas must be demarcated to prevent the employees from accessing possible danger zones.

6.4 General Items

- Planning for access needs to coincide with the relevant Risk Control Department's internal induction programmes and requirements for medical certification of fitness;

7. MANAGEMENT OF ALCOHOL AND SUBSTANCE ABUSE

No person (employees, consultants, visitors) shall report for duty or continue with his/her duties, if under the influence. No person may consume or have in possession alcohol or drugs/controlled substances while on the project site.

8. COMPLIANCE

All parties on site are to comply with legal and other requirements as part of the contract.

8.1 Non Conformances / Work Stoppage

The RW Site/Project representative reserves the right to stop work and issue a work stoppage non-conformance report whenever safety, health or environmental violations are observed. Any non-conformances/findings/observations found in these inspections shall be raised and discussed with the relevant Internal Department representative.

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 work, in any phase of the project, and/or amendments with regards to site / project 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 Site / Project Representative and Internal Department 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.
- The Internal Department 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 Site / Project representative shall review the affected parts/sections of the SHE specification with the purpose of providing sufficient SHE information to the Internal Department when necessary.

Before the workforce is allowed back in the area, Internal Department shall ensure:

- Investigation of the work stoppage and the area is to re-inspected by the Internal Department SHEQ Officer and supervisor and corrective actions taken documented on the work stoppage form;
- Sign off of the “Work Stoppage report” issued by the Site / Project to declare the area/activity/person/plant/or equipment safe for work.

8.2 Client Site Induction

The Internal Department shall ensure that all employees have undergone an induction programme prior to commencing work on site. On-site induction training will be completed by the site Risk Control Department.

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

Note

- COVID19 related information shall be included in induction training done for internal department employees on site.

8.3 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.

8.4 Visitors to Site

Visitors to the site shall be required to undergo and comply with RW Site SHE induction 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. No minors are allowed on site.

Visitors are to be made 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 work, of any nature.

9. SITE FACILITIES

All employees are to be afforded decent, clean, hygienic facilities at all times. General housekeeping, stacking and storage are to be the responsibility of supervisor. Ablution facilities are to be in accordance with statutory or generally acceptable standards. Separate facilities (sanitary) are required for each gender. All facilities to be kept clean, hygienic and in a good state of repair.

10. ACCESS CONTROL TO THE SITE

- **Project Site Access**

A site access certificate shall be issued to the Internal Department before permission to access the site is granted.

11. EMERGENCY PREPAREDNESS AND RESPONSE

The internal department will develop their own emergency response plan submit this plan and in the SHE File. The emergency plans will be adapted to complement the RW emergency plan once on site. The internal department will ensure that employees are trained on the emergency plan. 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. Emergency Services are to be notified to be on standby in case of emergency during execution of the work.

- **Fire hazards and Management**

No open fires are allowed on site. The internal department 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 during the project. The designation and organization of site personnel to carry out fire safety duties, including fire watch service if applicable.

12. ENVIRONMENTAL MANAGEMENT

- **Waste**

All waste that is generated on site must be removed from the site and appropriately disposed of.

13. SHE INCIDENT MANAGEMENT

The internal department is to follow Rand Water incident reporting procedures. Additionally, the internal department must report all incidents to the Project /Site representative and Risk Control / SHEQ.

14. OPERATIONAL CONTROL REQUIREMENTS

Internal Department is to ensure that all operational aspects are controlled according to RW policies and procedures, and 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, that the internal department is to use/display is to conform the requirements of SANS 1186. The display of the following signs is mandatory:

- The Internal Department 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 posted to warn of overhead work and other hazardous activities. E.g. **General Warning Signs.**
- All equipment brought onto the site, (including motorised equipment, e.g. bobcat) that requires PPE to be worn during operation, must have the relevant PPE mandatory sign/s attached.

• **Construction Plant and Equipment**

Appropriate forms of plant and equipment are to be used, with appropriate registers and maintenance programmes. Registers of all plant and equipment on site are to be kept. Maintenance of all plant and equipment is to be carried out by the appropriately competent person

- All motor vehicles operated by the internal department 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.
- All drivers of construction vehicles and mobile plant to have medical certificates of fitness.
- The speed limit within the bounds of the site is 30 km/h.
- No drivers or operator may talk on cell phones or two way radios whilst driving, unless a hands free kit is used.
- 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.
- 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).
- The internal department shall ensure that all employees 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.
- Any vehicle on the premises may be searched when entering or leaving the premises.
- The internal department shall be solely responsible for the safety and security of all his vehicles (including private vehicles) on the site.
- The internal department 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.
- 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.
- 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.
- 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.
- Drip Trays to be placed under the vehicles where are possible leaks to avoid soil and ground pollution.

• **Housekeeping, Stacking and Storage**

The internal department shall maintain a high standard of housekeeping within the site. Storage areas agreed upon and on plan are to be maintained. Littering 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 SHEQ Officer.

• **Fall Protection**

Focus on limiting fall risks is to be the focus on all fall risk position. Relevant access utilized at all times. 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.

- **Personal Protective Equipment**

In terms of Section 8 of the OHS Act reasonable steps must be taken to eliminate or mitigate (hierarchy of control measures) any hazard or potential hazard to the safety or health of employees before resorting to PPE.

The internal department's employees at the 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.
- 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).

The internal department shall ensure that all employees understand why 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 he/she shall be removed from the Site. PPE shall be worn in any designated area requiring such a PPE.

The internal department must create a PPE issue register for all employees on site. The register must be updated as and when necessary.