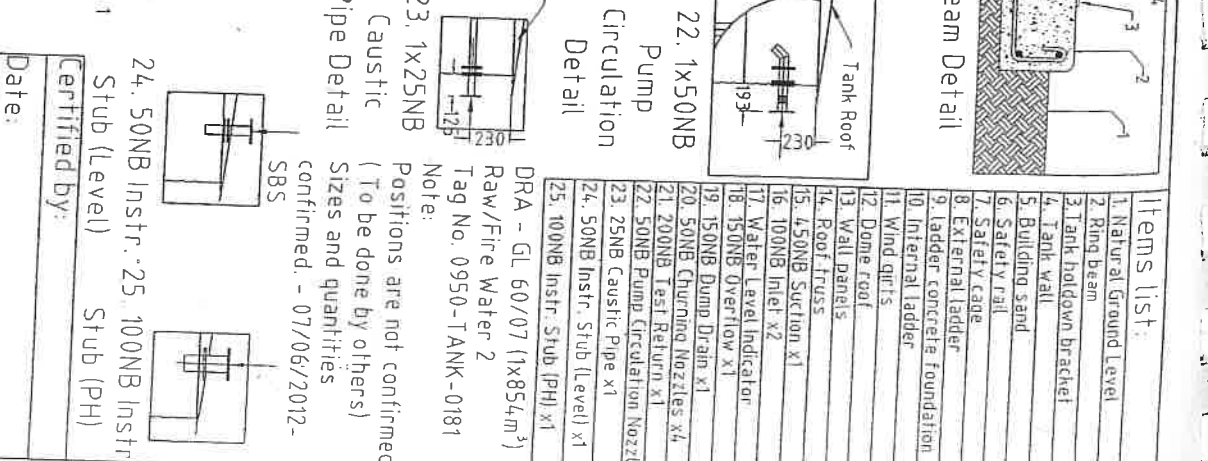
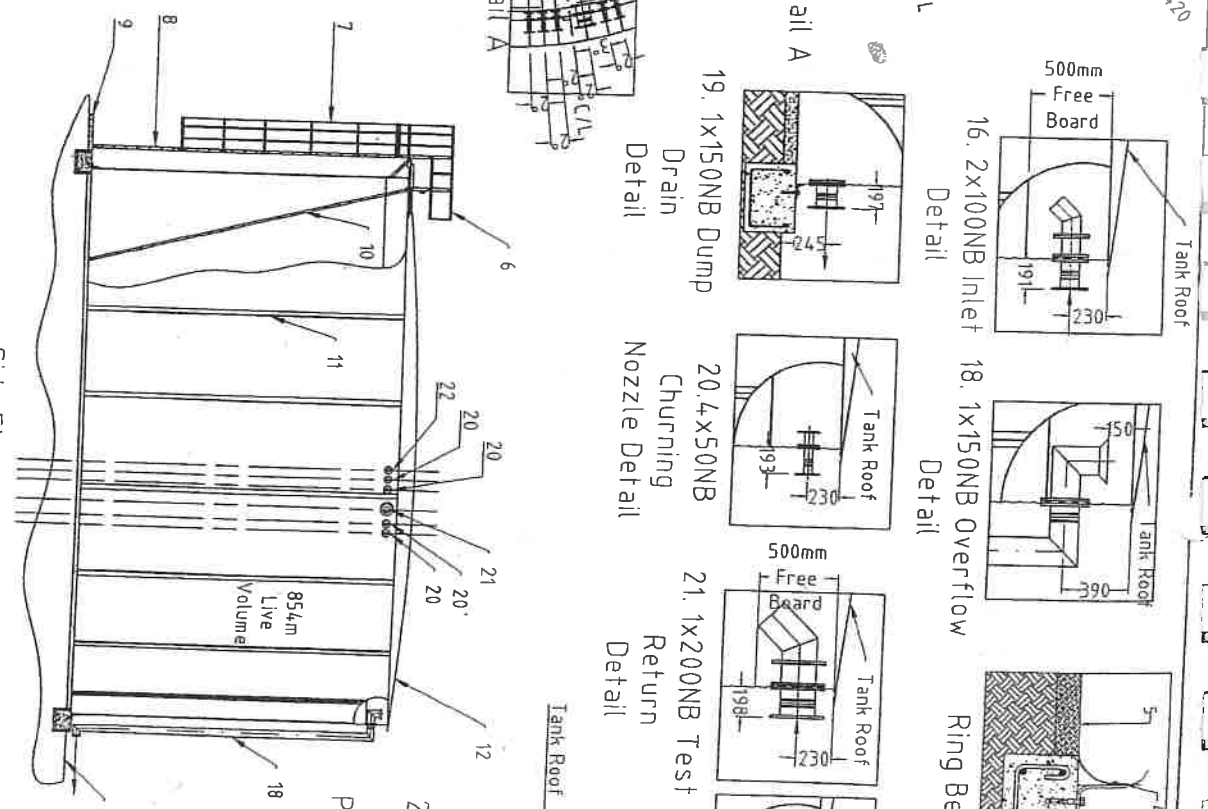
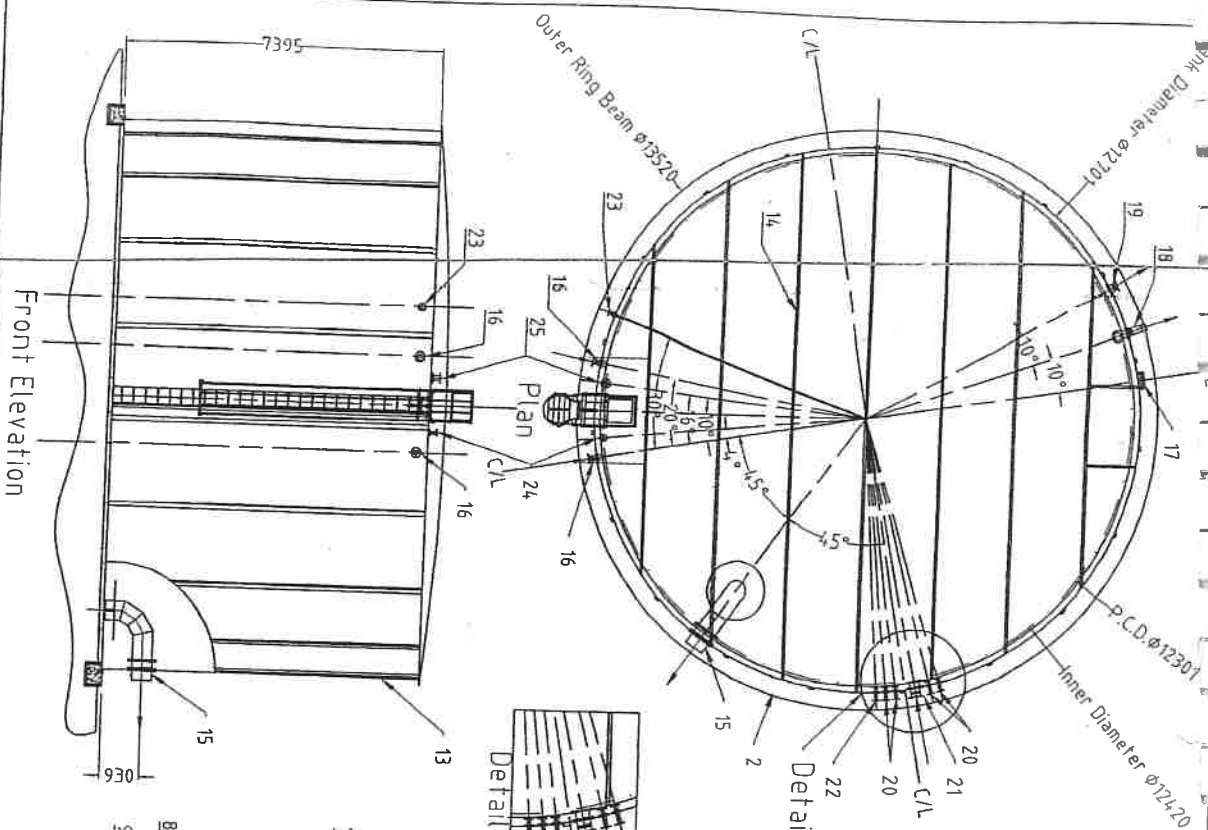


Items list

1. Natural Ground Level
2. Ring beam
3. Tank holdown bracket
4. Tank wall
5. Building sand
6. Safety rail
7. External ladder
8. External ladder
9. Ladder concrete foundation
10. Internal ladder
11. Wind girts
12. Dome roof
13. Wall panels
14. Roof truss
15. 4.50NB Suction x1
16. 100NB Inlet x2
17. Water Level Indicator
18. 150NB Overflow x1
19. 150NB Dump Drain x1
20. 50NB Churning Nozzles x4
21. 200NB Test Return x1
22. 50NB Pump Circulation Nozzle
23. 25NB Caustic Pipe x1
24. 50NB Instr. Stub (Level) x1
25. 100NB Instr. Stub (PH) x1

DRA - GL 60/07 (1x854m)
Raw/Fire Water 2
Tag No. 0950-TANK-0181
Note:
Positions are not confirmed
(To be done by others)
Sizes and quantities
confirmed. - 07/06/2012-
SBS

23. 1x25NB
Caustic
Pipe Detail
SBS

24. 50NB Instr. - 25. 100NB Instr
Stub (Level) Stub (PH)

Certified by:
Date:
Signed

File: General Arrangement 60/07
Cad file name: DRA Minerals

Water Systems (Pty) Ltd
1 Sea Gift House, 9 Cherry Road, Pine town, 3610
Kwazulu Natal, South Africa

Tel: 031 716 1820
Fax: 031716 1821
e-mail: info@sbsgroup.co.za

Dwg no: WSD-E-GAF60/07-2
Issue: 02
Date: 28 / 05 / 2012
Amend: 06 / 06 / 2012
Drawn: BEW

The information contained herein is property to SBS Water Systems (Pty) Ltd and to Pioneer Water Tanks (Australia 94) Pty Ltd and is covered by patent and copyright. This drawing is confidential and its contents may not be copied or reproduced or used for any purpose other than that originally intended without prior written permission of SBS Water Systems (Pty) Ltd or Pioneer Water Tanks (Australia 94) Pty Ltd.

High Risk Scope of Work Form

Document Reference:	Revision Number	Original Issue Date	Review Date
BGC-CORP-FORM-004	0	January 20, 2025	January 18, 2030

Project Name:	Inspection, Refurbishment, Repair and Replacement of Corroded Bottom Fire hydrant water Tanks Course, Perimeter Sealing System and Protective Lining of Fire Hydrant Water Tank – Kibali Gold Process Plant
Site Location:	Kibali Gold Mine - Process
Risk Rating of SOW: (Based on Pre-Job Risk Assessment)	☒ High ☐ Very High (Check one)

Stakeholders	Name	Signature	Date
Requestor	Tresor MIGELE		Click here to enter a date.
Technical Representative	Serge Bukasa		Click here to enter a date.
Health and Safety Manager	Click or tap here to enter text.		Click here to enter a date.
Environmental Manager If applicable	Click or tap here to enter text.		Click here to enter a date.
Community Relations Manager If applicable	Click or tap here to enter text.		Click here to enter a date.
Department Manager	Nathan Madu		Click here to enter a date.
Contract Specialist	Click or tap here to enter text.		Click here to enter a date.

Martin Chilambo
17/06/2026

1. Project Overview	3
2. General Description of Work.....	3
3. Health and Safety Requirements	6
4. Environmental Requirements.....	7
5. Social Requirements.....	8
6. Certifications and Competencies	9
7. SOW Management	10
8. Appendix	10

1. PROJECT OVERVIEW

Outline the specific deliverables, objectives and boundaries of the project.

The Kibali Gold Process Plant Fire Hydrant Water Tanks (2EA) are critical assets within the site's fire protection system, providing emergency water storage for firefighting operations. Inspection of the tank has identified significant corrosion of the lower shell course, deterioration of the perimeter sealing system, and failure of the protective lining on the supporting concrete ring beam. These defects have allowed moisture ingress, resulting in accelerated corrosion and potential degradation of both steel and concrete components.

This project involves the inspection, refurbishment, repair, and replacement of deteriorated tank components to restore the structural integrity, watertightness, corrosion protection, and operational reliability of the firewater storage facility. The scope includes detailed condition assessment, replacement of corroded bottom shell panels and associated hardware, installation of a new perimeter sealing system, rehabilitation of damaged concrete surfaces, application of a protective coating and lining system, hydrostatic testing, and recommissioning of the tank.

The works are intended to extend the service life of the asset, mitigate the risk of future corrosion, and ensure the continued availability of a reliable firewater supply for the safe operation of the Kibali Gold Process Plant.

2. GENERAL DESCRIPTION OF WORK**2.1. DELIVERABLES (KPI'S)**

Deliverable	Description	Expected Date
Deliverable 01	Mobilization, Inspection and Engineering Assessment	2026/07/30
Deliverable 02	Tank Isolation, Drainage, Cleaning and Dismantling	2026/08/28
Deliverable 03	Supply and Replacement of Corroded Components	2026/09/30
Deliverable 04	Foundation Rehabilitation and Protective Coating Works	2026/10/15
Deliverable 05	Testing, Inspection and Commissioning	2026/10/27
Deliverable 06	Documentation, Handover and Close-Out	2026/11/30

2.2. PROJECT LOCATION

Provide an address and describe the specific location of the scope of work.

Kibali Gold Mine, Haut – Uele, Doko

2.3. EQUIPMENT AND TOOLS REQUIRED

List all equipment and tools required to perform the Job.

Items supplied by Contractor

- Concrete repair mortars, grouts and rehabilitation materials.
- Protective coating and lining systems for steel and concrete surfaces.
- Surface preparation and cleaning materials.
- Inspection, testing and quality control equipment.
- Pumps, hoses and temporary water management equipment.
- Personal protective equipment (PPE) and safety systems.
- Qualified supervisors, technicians, coating applicators, inspectors and support personnel.
- Material certificates, inspection records, quality documentation, warranties and as-built documentation.
- Review and approval of contractor method statements, risk assessments, and quality documentation.

Items supplied by Barrick

- Scaffolding, lifting equipment, temporary supports and access systems.
- Controlled access to the work area and designated laydown/storage space.
- Authorization and coordination for firewater tank isolation and system shutdown.
- Support for temporary fire protection arrangements during the outage period.
- Appointment of a site representative and coordination with plant operations.
- Administration of permits to work (including hot work, confined space, and lifting operations).

- Provision of available site drawings, asset records, and maintenance history (where applicable).
- Access to existing site utilities where available (power, water, and compressed air).
- Emergency response support and site safety services during execution of works.
- Approval of waste disposal routes and compliance with site environmental procedures.
- Final inspection and acceptance of the completed works.

2.4. INSURANCE AND WARRANTY REQUIREMENTS

Provide list of applicable insurances or warranties.

Requirements to be identified by the Contract Specialist

1. INSURANCE

The Contractor shall provide and maintain, at its own cost, adequate insurance cover for the full duration of the project and defects liability period, including:

- Construction All Risk (CAR) insurance covering the full contract works, materials, and temporary work.
- Public liability insurance covering injury to third parties and damage to property.
- Employer's liability / workmen's compensation insurance for Contractor personnel.
- Professional indemnity insurance where engineering, assessment, or design responsibility is included.

All insurance policies shall be issued by reputable insurers, remain valid for the duration of the contract, and name Kibali Gold Mine as required. Proof of insurance shall be submitted prior to mobilization.

2. WARRANTY

The Contractor shall provide a minimum twelve (12) months workmanship warranty from the date of final acceptance and handover.

The warranty shall cover defects arising from workmanship, installation errors, or failure of supplied materials under normal operating conditions. The Contractor shall repair or replace defective works at no cost to Kibali Gold Mine.

In addition, manufacturer warranties shall be provided for coating systems, sealing systems, and structural materials where applicable.

The Contractor shall also warrant the watertight integrity of the refurbished tank during the warranty period.

2.5. PROJECT RISK IDENTIFICATION

All project risks shall be identified within the Pre-Bid Risk Assessment taking into consideration all safety, environmental and community risks. Please attach the Pre-Bid Risk assessment to this document.

3. HEALTH AND SAFETY REQUIREMENTS

The Contractor shall apply all requirements established in Barrick's Health and Safety standards, as well as policies and procedures. The Contractor must consider all the requirements to prepare and submit a specific health and safety plan for the project using Barrick's Safe Work Plan form (please attach).

3.1. SPECIFIC SAFETY REQUIREMENTS

List the specific safety requirements associated with the job/work and all applicable procedures.

The Contractor shall comply with Kibali Gold Mine safety procedures and all applicable legal requirements throughout the works. All personnel must be inducted, authorized, and work under the Permit to Work system.

The Fire Hydrant Water Tank shall be treated as a confined space, requiring atmospheric monitoring, standby rescue arrangements, and approved entry procedures. All high-risk activities including working at height, hot work, lifting operations, and electrical isolation shall be controlled through approved permits and risk assessments.

Adequate PPE, trained personnel, and daily toolbox talks are mandatory. Fire safety and emergency response readiness must be maintained at all times due to the critical nature of the firewater system.

The Contractor shall implement environmental controls, incident reporting procedures, and maintain stop-work authority for unsafe conditions. Non-compliance with safety requirements may result in work suspension or removal from site.

3.2. HEALTH AND SAFETY PROCEDURES

List all applicable Health and Safety operational procedures.

The Contractor shall implement and comply with an approved Health, Safety and Environment (HSE) Management Plan in line with Kibali Gold Mine requirements and applicable legislation.

All personnel shall be inducted, trained, and authorized before accessing site and shall follow the Permit to Work system for all activities, including confined space entry, hot work, working at height, lifting operations, and electrical isolation (LOTO).

The Fire Hydrant Water Tank shall be treated as a confined space, requiring atmospheric testing, continuous monitoring where necessary, and standby rescue arrangements.

Appropriate PPE shall be worn at all times, and all work shall be carried out under approved risk assessments and method statements with daily toolbox talks.

Emergency preparedness, incident reporting, environmental protection, and stop-work authority shall be strictly enforced throughout the project.

4. ENVIRONMENTAL REQUIREMENTS

The Contractor shall apply all the requirements established in Barrick's Environmental Guidelines for Contractors, comply with Barrick's Environmental Policy, and meet all other applicable environmental requirements, procedures or standards to present the specific environmental management plan for the project if applicable.

4.1. ENVIRONMENTAL SPECIFIC REQUIREMENTS

List the specific Environmental requirements associated with the job/work and all applicable procedures.

The Contractor shall comply with Kibali Gold Mine environmental management procedures and applicable environmental legislation throughout the execution of the works.

All waste generated (including sludge, corrosion debris, spent abrasives, coatings, packaging, and contaminated materials) shall be properly segregated, stored, and disposed of through approved site waste management channels.

Spill prevention and containment measures shall be implemented during all fuel handling, coating application, and maintenance activities to prevent contamination of soil and water.

Dust, fumes, and emissions from surface preparation and coating works shall be controlled using appropriate engineering and operational controls.

No discharge of untreated water, chemicals, or hazardous substances shall be permitted into the environment.

The Contractor shall ensure proper storage and handling of hazardous materials in designated areas with secondary containment.

Environmental incidents, including spills and non-compliance events, shall be reported immediately to Kibali Gold Mine, and corrective actions shall be implemented without delay.

4.2. ENVIRONMENTAL PROCEDURES

List all applicable Environmental operational procedures.

The Contractor shall implement environmental procedures in accordance with Kibali Gold Mine requirements and applicable environmental regulations.

All activities shall be planned and executed to minimize environmental impact, including control of waste, emissions, dust, noise, and potential contamination.

Waste shall be properly segregated, stored in designated areas, and disposed of through approved and licensed waste management routes. Hazardous and non-hazardous waste shall not be mixed.

Spill prevention measures shall be applied during all fuel, chemical, and coating handling activities, with spill kits available on site at all times.

Surface preparation and coating works shall be controlled to prevent dust and airborne contamination, and no untreated discharge into soil or water systems shall be permitted.

Environmental inspections, monitoring, and reporting shall be carried out regularly, and all incidents shall be reported immediately with corrective actions implemented without delay.

5. SOCIAL REQUIREMENTS

For the development of this project, the Contractor must apply all the social requirements established in Barrick's social performance policy, with the objective to support the company's social commitment to sustainable development.

5.1. SOCIAL SPECIFIC REQUIREMENTS

List the specific social requirements associated with the job/work and all applicable procedures.

The Contractor shall comply with Kibali Gold Mine social policies and applicable labour laws. Fair employment practices, non-discrimination, and prohibition of child or forced labour shall be strictly enforced.

Local employment and skills development shall be promoted where possible, in line with site requirements.

Adequate worker welfare, accommodation standards (where applicable), and basic facilities shall be ensured for all personnel.

All grievances or social issues shall be reported and managed through Kibali Gold Mine's approved grievance mechanisms, with respect for local communities maintained throughout the project.

5.2. SOCIAL PROCEDURES

List all applicable Social operational procedures.

The Contractor shall implement social procedures in accordance with Kibali Gold Mine requirements and applicable labour and social legislation.

All personnel shall be engaged under fair and lawful employment practices, with strict compliance to non-discrimination, prohibition of child labour, and prohibition of forced or compulsory labour.

Local hiring and use of local services shall be encouraged where feasible, in line with site policies and community engagement objectives.

A grievance mechanism shall be maintained to allow workers and affected stakeholders to report concerns, which shall be investigated and addressed promptly.

Worker welfare, including accommodation (where provided), hygiene, and basic services, shall be maintained to acceptable standards throughout the project duration.

All social impacts shall be managed in coordination with Kibali Gold Mine, ensuring respectful engagement with surrounding communities at all times.

6. CERTIFICATIONS AND COMPETENCIES

Mark an X in the box next to all applicable certifications and competencies.

COMPETENCE	Applies	COMPETENCE	Applies
Fall From Heights	☒	Fire (Hot Work)	☐
Confined Space	☒	Hazardous Substances	☐
Stored Energy (LOTOTO)	☒	Excavations and Penetration (trenching)	☐
Lifting	☒	Working with High Voltage Lines	☐
Hazards Recognition/ Risk Assessment	☒	Mobile Equipment	☒
Blasting and Explosives	☐	Other:	☐

Other Applicable Competencies/Certifications

Click or tap here to enter text.

Images/drawings:
Drag and drop images from your files here...

Document Reference:	Revision Number	Original Issue Date	Review Date
BGC-CORP-FORM-002	0	January 20, 2025	January 18, 2030

Project Name: (Reference SOW)	Kibali Fire Hydrant Water Tank Refurbishment & Protective Lining Project.		
Project Description:	The project involves the inspection, assessment, refurbishment, repair, and replacement of corroded sections of the fire hydrant water tanks at the Kibali Gold Process Plant. The scope includes detailed inspection of tank bottoms and associated components to identify corrosion, deterioration, and structural defects affecting the integrity and operational reliability of the fire water storage system. The works will include removal and replacement of severely corroded bottom plates and damaged components, surface preparation, installation of a perimeter sealing system, and application of a protective internal lining/coating system to prevent future corrosion and extend the service life of the tanks. All repair and refurbishment activities will be carried out in accordance with applicable engineering standards, quality requirements, and safety regulations to ensure the fire water tanks remain structurally sound, leak-free, and fully operational for emergency fire protection services at the Kibali Gold Process Plant. Objectives • Restore the structural integrity of the fire hydrant water tanks. • Eliminate corrosion-related defects and leaks. • Improve tank reliability and operational availability. • Install an effective perimeter sealing system. • Apply a durable protective lining to prevent future corrosion. • Extend the service life of the fire water storage assets. • Ensure compliance with site safety, quality, and fire protection requirements.		

Tasks	Hazards	Controls
Site mobilization and work area setup	Vehicle movements, slips, trips, falls, unauthorized access	Conduct site induction, establish exclusion zones, install barricades and signage, maintain good housekeeping, use high-visibility PPE

BARRICK

Pre-Bid Risk Assessment Form

BGC-CORP-FORM-002

Tank isolation, draining, and cleaning	Stored energy, residual water pressure, chemical exposure, slips on wet surfaces	Follow Lockout/Tagout (LOTO) procedures, verify isolation, drain tanks safely, use appropriate PPE, ensure proper ventilation
Tank inspection and thickness testing	Oxygen deficiency, toxic gases, heat stress, entrapment	Conduct gas testing, continuous atmospheric monitoring, provide ventilation, maintain standby rescue team, use confined space permits
Removal of corroded steel plates and components	Sharp edges, falling materials, hand injuries, cuts	Use cut-resistant gloves, lifting aids, proper tools, establish exclusion zones, wear eye protection
Hot work (cutting, grinding, welding)	Fire, explosion, burns, fumes, eye injuries	Obtain hot work permit, remove combustible materials, provide fire watch and extinguishers, use welding PPE, ensure ventilation
Replacement and installation of bottom plates	Crushing injuries, pinch points, dropped loads	Use certified lifting equipment, inspect lifting gear, follow lifting plans, maintain clear communication between workers
Lifting and rigging operations	Load failure, hanging loads, equipment overturning	Use qualified riggers and operators, inspect lifting equipment, establish exclusion zones, follow approved lifting procedures
Surface preparation (abrasive blasting/mechanical cleaning)	Dust inhalation, noise, flying particles, eye injuries	Use respiratory protection, hearing protection, face shields, dust suppression systems, restrict access to blasting area
Application of protective coatings and linings	Chemical exposure, inhalation of vapors, skin irritation, fire risk	Review SDS requirements, use chemical-resistant PPE (neoprene gloves, polyurethane – coated chemical suits, full – face respirator with organic vapor cartridges, PVC safety boots), ensure ventilation, eliminate ignition sources, monitor air quality
Installation of perimeter sealing system	Hand injuries, awkward postures, exposure to chemicals	Use correct tools, ergonomic work practices, wear gloves and eye protection, follow manufacturer's instructions
Electrical equipment use	Electric shock, damaged cables, fire	Use inspected and certified equipment, install GFCI/RCD protection, conduct pre-use inspections, keep equipment dry

Pressure testing and recommissioning	Sudden release of pressure, leaks, equipment failure	Follow approved testing procedures, establish exclusion zones, use calibrated instruments, monitor pressure gradually
Waste handling and disposal	Environmental contamination, cuts, chemical exposure	Segregate waste, dispose according to environmental procedures, use suitable containers, wear appropriate PPE
Demobilization and site cleanup	Slips, trips, manual handling injuries	Remove materials systematically, maintain housekeeping, use proper lifting techniques, inspect area before handover
Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
Select all the Fatal Risks present:		
☒ Stored Energy ☒ Confined Spaces	☐ Falling from Heights ☒ Mobile Equipment	☐ Blasting and Explosives ☐ Rotating Equipment
	☒ Lifting ☐ Fall of Ground	☒ Hazardous Substances and Chemicals ☒ Fire

Control Effectiveness:	Regular inspections, condition assessments, corrosion monitoring, quality-controlled repairs/replacements, protective coating application, and post-work integrity testing significantly reduce the risk of tank failure, water leakage, structural deterioration, and loss of fire protection capacity, ensuring the fire hydrant water system remains reliable and compliant with operational requirements.
Additional actions needed before job start:	• Obtain approved work permits and risk assessments. • Conduct site inspection and verify tank condition. • Isolate and drain the water tank safely. • Confirm availability of materials, tools, and spare parts. • Brief workforce on scope, hazards, and emergency procedures. • Verify competency of personnel and required PPE.

BARRICK

Pre-Bid Risk Assessment Form

BGC-CORP-FORM-002

	• Establish barricades and access control around the work area. • Confirm rescue and emergency response arrangements. • Review quality requirements and inspection/test plans.
Identified Risk Level:	☐ Low ☐ Medium ☒ High ☐ Very High

Responsible	Name	Signature	Date
Technical Representative	Serge Bukasa		2026/06/15
Safety Representative	Bernard coulibly, John Banza	B. Coulibly 	2026/06/15

Appendix																																																	
Risk Ranking matrix: Compares likelihood of the risk with the consequence level based on the consequence criteria. *This matrix will be used to evaluate the significance of the risk and its priority for attention.	<table><tr><th colspan="5">Likelihood Level</th></tr><tr><td>5</td><td>Medium</td><td>Medium</td><td>High</td><td>Very High</td></tr><tr><td>4</td><td>Low</td><td>Medium</td><td>High</td><td>Very High</td></tr><tr><td>3</td><td>Low</td><td>Medium</td><td>High</td><td>Very High</td></tr><tr><td>2</td><td>Low</td><td>Medium</td><td>Medium</td><td>High</td></tr><tr><td>1</td><td>Low</td><td>Low</td><td>Medium</td><td>High</td></tr><tr><td colspan="5">Consequence Level</td></tr><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>					Likelihood Level					5	Medium	Medium	High	Very High	4	Low	Medium	High	Very High	3	Low	Medium	High	Very High	2	Low	Medium	Medium	High	1	Low	Low	Medium	High	Consequence Level					1	2	3	4	5				
						Likelihood Level																																											
	5	Medium	Medium	High	Very High																																												
	4	Low	Medium	High	Very High																																												
	3	Low	Medium	High	Very High																																												
	2	Low	Medium	Medium	High																																												
	1	Low	Low	Medium	High																																												
Consequence Level																																																	
1	2	3	4	5																																													
Likelihood criteria: Likelihood levels will be chosen from the table below based on the probability that the expected impact selected in from the consequence criteria will be experienced.	Level			Probability																																													
	5 Almost Certain			>90%																																													
	4 Likely			50% - 90%																																													
	3 Possible			>25% - <50%																																													
	2 Unlikely			10% - 25%																																													
	1 Very Unlikely			<10%																																													

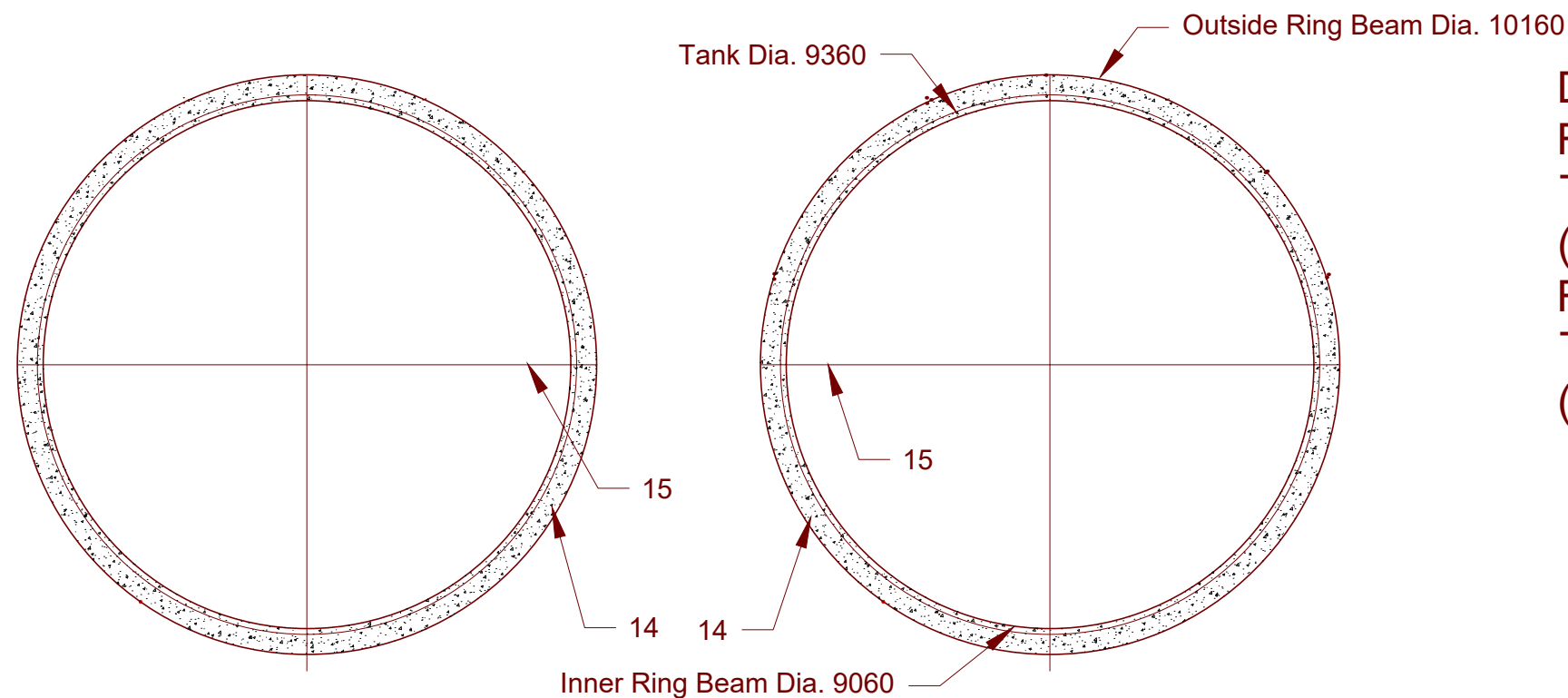
Consequence Criteria:
Consequence levels will be chosen from the table below based on the expected impact on Barrick, choosing the worst case of the consequence types that are pertinent. This should reflect the assessment of the existing controls and their effectiveness.

Level	Financial (Operating cash flow)	Shareholder Value (NPV/ Market cap)	Health and Safety	Environment	Society (Community, NGO, Government, Media)	Legal
5	>\$250m	>\$1b	Multiple fatalities or significant loss of quality of life to multiple people.	Severe regional impact resulting in permanent long-term impact to the environment. Immediately reportable to Government or State	Significant loss of trust by affected, national and/or government threatening the continued viability of the operation. International and national government, NGO and media condemnation. Systemic pattern of gross human rights violations affecting multiple people	Prolonged litigation likely. Potential jail terms and/or high fines for executives and directors. Potential very high fines for the company.
4	>\$100m<\$250m	>\$500m<\$1b	Single fatality or critical injury with a permanent negative impact to quality of life for one person	Significant impact with medium to long-term impairment and residual ecosystem effects. Regulatory agency mandated remediation and/or monitoring over a long-term period to determine extent of adverse environmental impact. Immediately reportable to Government or State.	Community unrest and/or protest requiring intervention and substantial management attention. National and/or regional media coverage over several days and/or NGO condemnation. Individual gross human rights violation or systemic negative human rights impacts.	Prosecution of individuals and/or significant fines for individuals and/or the company.
3	>\$20m<\$100m	>\$50m<\$500m	Serious injury to one or more persons resulting in temporary negative impact to quality of life. (RDI & LTI)	Moderate impact resulting in medium-term impacts to the environment. Remediation completed in compliance with regulations over a medium-term period without any anticipated residual adverse environmental impacts. Potentially reportable to State or government, but not immediately.	Persistent community grievances, complaints, unrest or protests. National and/or regional media coverage and/or NGO scrutiny. Systemic or severe individual negative impacts on human rights.	Significant legislation or permit non-compliance or litigation likely resulting in settlement costs and/or fines.
2	>\$1m<\$20m	>\$10m<\$50m	Reversible injury to one person, (no lost time to work performance) but requiring medical treatment. (MTI)	Localized, minor impact within the current or planned disturbance area (or isolated offsite impacts.) Limited remediation, and/or controls required to meet regulatory standards. Potentially reportable to State or Government but not immediately.	Persistent complaints and grievances, unrest or protests. Local Media coverage. Isolated negative impacts on human rights	Legislation or permit non-compliance or litigation likely resulting in need for legal engagement
1	<\$1m	<\$10m	Minor injury not affecting work performance and requiring only a single first aid treatment.	Environmental incident with an area already distributed by operations, with short-term impacts. Remediation carried out as part of routine processes. Not reportable to the government.	Minor complaints and grievances from local communities. No impact on human rights.	Minor non-compliance with legislation or permits.

Control Effectiveness: A relative assessment of the degree of modification that is currently present and effective compared with that which is reasonably achievable for a particular risk.		Descriptor	Guide
		Fully Effective	Controls are as good as realistically possible, both well-designed and implemented as well as they can be.
		Substantially Effective	Controls are generally well-designed and well implemented but some improvement is possible in their design or implementation.
		Partially Effective	Controls are well-designed but are not implemented that well. OR While the implementation is diligent, it is clear that better controls could be devised.
		Largely Ineffective	There are significant gaps in the design or in the effective implementation of controls – much more could be done.
		Totally Ineffective	Virtually no credible controls relative to what could be done.

Fatal Risk	Critical Controls
Stored Energy	De-energize: Identify sources of energy and ensure they are zero-state
	LOTOTO: Remember to always lock out – tag out – try out
	Guards, Barriers, and Barricades: Ensure they are in position and effective
	Lock-out Device: Use the appropriate lock out device to isolate the energy source
Falling from Heights	Personal Lock and Tag: Have your OVN lock and tag, with unique key
	Rescue Plan: Ensure a rescue plan is in place before starting work above 1.8m.
	Fall Equipment: Inspect and wear the correct fall-restraint or arrest equipment when working above 1.8m.
	Tie Off: Stay 100% tied off at all times on approved anchor points.
Lifting	Elevated Platforms: Only work from certified elevated platforms.
	Barriers: Ensure barriers are in place to prevent people or objects from falling over edge; ensure exclusion zones are demarcated.
	Lift Plan: Determine how the lift will be carried out with input from all persons involved.
	Equipment and Rigging: Ensure all lifting equipment is inspected, certified, and load is secured and controlled.
Blasting & Explosives	Calculate and Confirm: Analyze the weight of the load and all associated equipment parameters.
	Drop Zone: Erect barricades and exclusion zones to restrict access to the area under a suspended load or within a drop zone.
	Communication: Positive communication from a single person to operator.
	Communication: Scheduled and effective blast notification to all site personnel.
Hazardous Substances and Chemicals	Blast Design: Compliance with the approved drill and blast design.
	Transport Equipment: Safely transport explosives using approved, certified, and maintained explosives-transport equipment.
	Exclusion Zones: Establish and restrict access of personnel and equipment to blast exclusion zones with barricades.
	Access Control: Lock out – tag out on stinger and blast tag boards, to ensure all individuals are accounted for.
Confined Space	PPE: Wear correct hazardous-materials PPE in line with Safety Data Sheet (SDS)
	Access: Restrict access to authorized personnel only
	Emergency Response: Containment: and exposure measures must be on hand and working according to SDS guidance
	Detection and Alarm Systems: Correct detection devices and alarms are in place and fully functional.
	Handling and Transfer: Protection protocols are in place when handling and transferring chemicals based on SDS.
	Rescue Plan: Formulate a rescue plan and ensure that a spotter is in place at all times.
	Permit: Ensure you have a signed and complete permit to access entry point.
	Energy Isolation: All possible energy sources have been identified and controlled per lock out – tag out – try out (LOTOTO)
	Access Control: Work area to be demarcated and access control to be managed by a spotter at all entry points.
	Atmosphere: Test and confirm atmosphere is life-sustaining and continue monitoring.

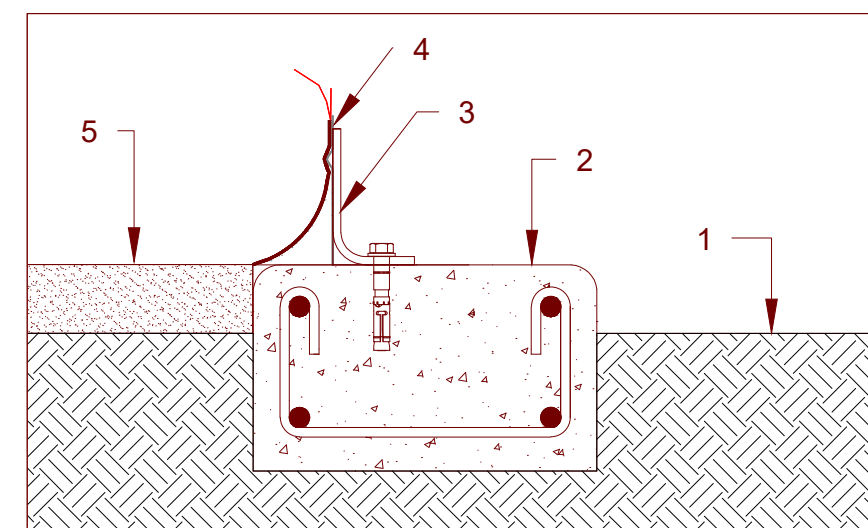
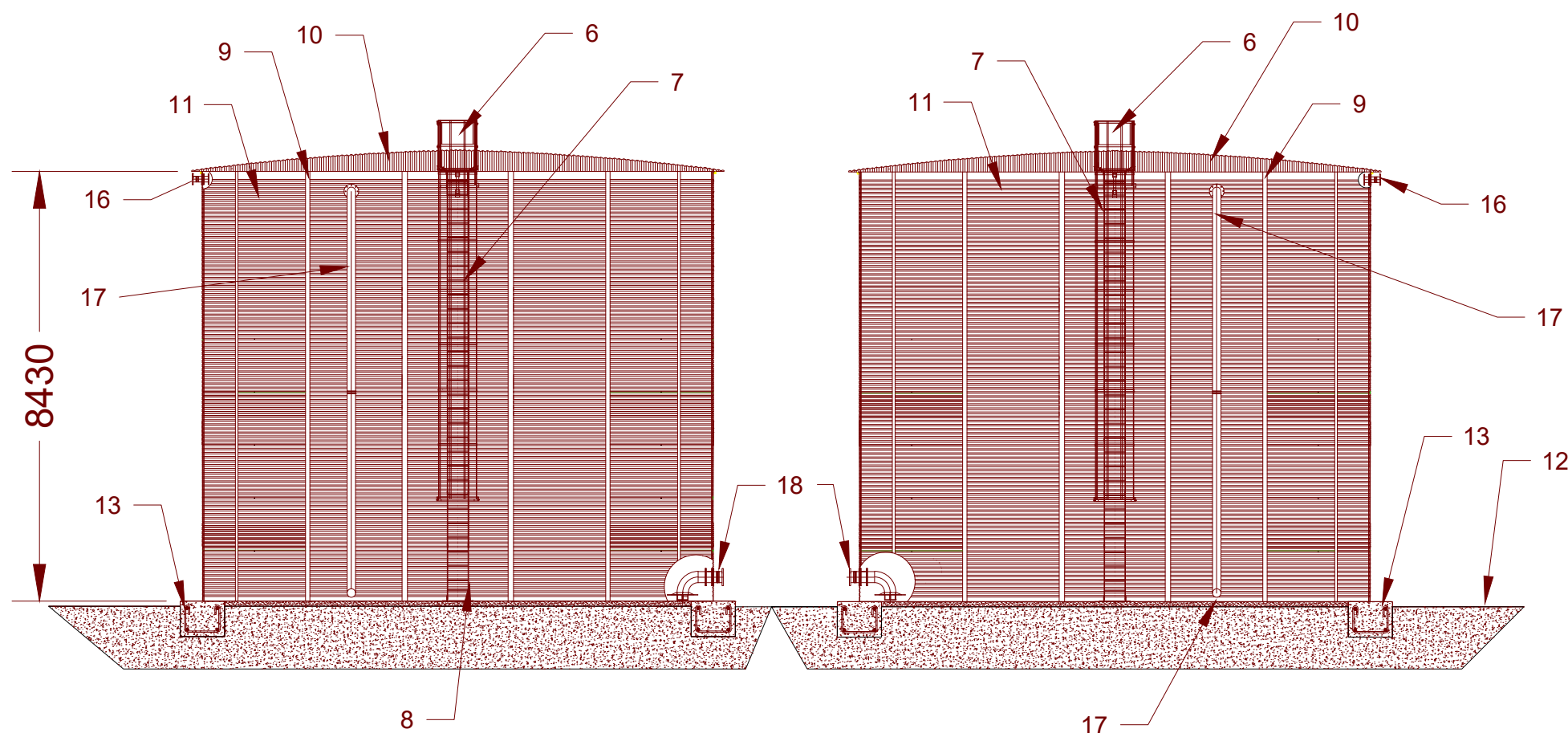
Mobile Equipment	Pre-Use Inspection: Confirm functionality of braking, steering, and safety devices.
	Parking: Follow safe, secure, and stable parking practices in designated parking areas.
	Traffic Management Plan: Adhere to road designs, rules, signage, and segregation of equipment and pedestrians.
	Berms and Windrows: Ensure that berms and windrows are installed to standard and maintained.
	Communication: Ensure positive communication is maintained at all times.
Fall of Ground	Mobile Devices: Do not use phones, smart watches, or tablets when driving.
	Workplace Inspection: Inspected, properly scaled down, and made safe.
	Geotechnical Inspection: Ensure that inspections are completed, and workplaces are continuously monitored.
	Ground Control Management Plan: Ensure that the plan is implemented and communicated.
	Barricading and Exclusion Zones: Ensure exclusion zones have been identified and maintained.
Rotating Equipment	Water Management: Establish a water management plan.
	Guards, Barriers, and Barricades: Ensure these are effective, in place, and maintained.
	Safety Devices: Ensure safety devices and interlocks have been tested and are in working condition.
	Energy Isolation: All possible energy sources have been identified and controlled per lock out – tag out – try out (LOTOTO).
	Combustible Materials Storage: Store combustible/flammable materials separately and safely.
Fire	Ventilation: Ensure adequate ventilation in working areas and that systems are functioning and maintained.
	Fire Detection, Alarm, and Suppression: Ensure fixed and mobile equipment has functional fire detection and suppression system.
	Evacuation Plan: Be prepared and know your emergency plan, egress, refuse chamber, self-rescuer, and muster point.
	Hot Work Permit: Obtain a permit and implement the associated controls before starting work.



DRA - 2 x GA 30/08 (1x500m³)
Fire Water Tank #1
Tag No. 0950-TANK-0180
(Raw water)
Fire Water Tank #2
Tag No. 0950-TANK-0181
(Raw Water)

Items list:

1. Nominal ground line
2. Ring beam
3. Tank holdown bracket
4. Tank wall
5. Building sand
6. Safety rail
7. Safety cage
8. External ladder
9. Wind girts
10. Dome roof
11. Wall panels
12. Nominal ground line
13. Ring beam
14. Ring beam
15. Roof truss
16. 100NB Inlet Nozzle
17. 150NB Overflow Pipe
18. 200NB Suction



Ring beam detail

The information contained herein is property to SBS Water Systems (Pty) Ltd and to Pioneer Water Tanks (Australia 94) Pty Ltd and is covered by patent and copyright. This drawing is confidential and its contents may not be copied or reproduced or used for any purpose other than that originally intended without prior written permission of SBS Water Systems (Pty) Ltd or Pioneer Water Tanks (Australia 94) Pty Ltd.



Water Systems (Pty) Ltd

1 Sea Gift House, 9 Cherry Road, Pinetown, 3610
 Kwazulu Natal, South Africa

Tel: 031 716 1820
 Fax: 031716 1821
 e-mail: info@sbsgroup.co.za

Title: **Layout 30/08**

Cad file name: **FPS**

Dwg no: **WSD-E-LAF30/08**

Drawn: **JH**

Issue: **01**

Date: **14 / 10 / 2011**

Amend: