



FOSKOR (PTY) LIMITED SCOPE OF REQUIREMENTS

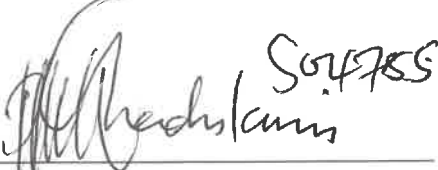
for

**Provision of Professional Civil Engineering Services
in Water Use License Application until completion of
the application (estimated to be October 2026)**

DOCUMENT AND SERVICE CONTRACT APPROVAL

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14 August 2025



FOSKOR (PTY) LIMITED

SCOPE OF REQUIREMENTS

For

Professional Civil Engineering Services in Water Use License Application until completion of the application (estimated to be October 2026)

1. INTRODUCTION

Foskor (Pty) Ltd. is an opencast mining and beneficiation operation situated in Phalaborwa. The core business of the Phalaborwa operation is the mining and beneficiation of phosphate rock. (The Foskor operation situated in Richards Bay is primarily a producer of phosphoric acid, phosphate-based fertilizers, and lower volumes of sulphuric acid).

Foskor (Pty) Ltd (Mining Division) is an Open Cast Mine that produces phosphate rock for export or domestic beneficiation. Approximately 2.2 million tons of phosphate rock is produced annually. The product is finely ground apatite mineral from coarsely crystalline calcium-fluoride-phosphate compound of igneous origin. The intermediate and final products are for the domestic and international markets and provide the following advantages:

- Make South Africa self-sufficient from phosphate imports.
- Earn foreign currency from the export of the products.
- Create approximately 2000 direct job opportunities, with associated indirect job opportunities in the Greater Phalaborwa Region.

The dominating rock type in the Phalaborwa area, older than 3000 million years, is granite-gneiss of the Archaic Complex. Intrusive in this are younger rock types of the Phalaborwa Igneous Complex. Inclusions of serpentine, talc and amphibole schist are found in the granite-gneiss and igneous rock.

2. BACKGROUND

Foskor Mining Division is a water user in terms of chapter 4 of the National Water Act, 1998 (Act No. 36 of 1998) (NWA). Foskor is in possession of the Water Use License (License No: 06/B73C/G/12356) (WUL) issued by the Department of Water and Sanitation (DWS) in the year 2011 and, this Licence is due for renewal in November 2026. A process to renew has been initiated with DWS and, due to the Mine being in the Critical Environmental Management area (i.e. proximity of SANParks / KNP), several activities to justify why this Licence must be renewed and issued are required from the Mine to comply with Environmental Protection and Monitoring.

The Mine has critical activities that are listed under NWA section 21 (g). Section 21(g) of the NWA defines water use as disposing of waste in a manner which may detrimentally impact on a water resource.

Critical water uses included in this section 21 (g) and, require justifications (on how these facilities are managed effectively currently and going forward) from the registered Professional Civil Engineer are Selati Tailings Dam, Southern Tailings Dam, Van Ryssen Dam, Return Water Dam, Silt Pond, Eighteen (18) Sumps around Selati and Southern tailings dam, Four (4) Emergency containment Ponds at Selati TSF, Thirty (30) Underground conservancy tanks, Coal ash dump, old coal stockpile yard, new coal stockpile yard, Magnetite stockpile yard, North pit waste rock stockpile and South pit waste rock stockpile.

These triggered water uses form part of the WULA currently occurring and must include civil design report and as-built drawings that are compiled and signed off by a Professional Engineer with ECSA. After the Phase 2 site visit by Department of Water and Sanitation in May 2025, additional information was requested as part of the WULA submission in terms of the civil engineering aspect that were not covered in the initial scope of work (as built drawing, civil design report, etc) hence the commissioning of this scope

3. SCOPE

The scope requires the services of a registered Professional Civil Engineer that is familiar with the requirements and guidelines of the Department of Water and Sanitation in relation to Section 21 (g) water uses and other relevant sections of the Act. The scope requires surveying and modelling the tailings storage facilities, conducting stability analyses, a stork yard and silt drying pad engineered, and pollution prevention measures designed to comply with RSA national norms (NWA Act 36/1998, GN R.704 of 1999). It should also consist of information as required for the submission of the WULA to DWS that forms part of the technical reporting phase.

The scope is split in two sections to cover the required work:

- Section 1 will concentrate on the two tailings dams for which the Engineer of Record already has comprehensive data—information that should satisfy most DWS requirements.
- Section 2 will encompass all remaining work items not covered in Section 1.

3.1 Section 1

3.1.1 Tailings Dams (Selati TSF & South TSF)

- As-Built Drawings showing the underdrainage, stormwater management around the facilities (how is the clean and dirty water separated)
- Engineering report addressing the deposition strategy, rate of rise, penstock design with associated return water system
- Integrity of the Facility i.e. stability analysis and Dam breach analysis
- Motivation to DWS to continue using the Facilitates without a liner (Interception of pollution plume shall adequately be addressed e.g. using Scavenger boreholes)

3.2 Section 2

3.2.1 Emergency containment ponds

- Engineering design report and drawings
- Sizing of the containment pond
- Designing of the Ponds to comply with containment standard prescribed in the NEMWA Regulations

3.2.2 Van Ryssen Dam

- Upgrading the liner system to comply with NEMWA Regulations
- Stability analysis of the Dam

3.2.2 Bathymetric survey for the following infrastructures

- Conduct bathymetric survey for the Van Ryssen Dam, Return Water Dam and the Emergency ponds

4. INCLUSIVE SCOPE REQUIREMENTS

- **Desktop Review and Reconnaissance** – Compile existing drawings, geotechnical reports, and operational records. Site visit to establish survey controls and inspect dam conditions.
- **Survey & 3D Modelling** – UAV photogrammetry + GNSS ground controls to create high resolution DEMs and 3D point clouds. Generate contour maps (1 m intervals), CAD/GIS files, dam volumes, crest elevations, and slope angles.
- **Stability Analysis** – Conduct limit-equilibrium or FEM analyses under static and flood conditions to verify Factors of Safety. Model phreatic surfaces and freeboard. Recommend buttressing or drainage improvements if FOS < regulatory thresholds.
- **Design – Stork Yard & Silt Drying Pad** – Civil and structural design of storage yard and drying pad, including earthworks, liners (geomembrane/compacted clay), drainage berms, sumps, and pavement details. CAD drawings with plans, sections, materials list, and construction notes.
- **Pollution Prevention Measures** – Specify impermeable liners, diversion berms, and decant systems to intercept seepage and runoff. Design settlement ponds or bioswales for water treatment. Provide schematics and specifications to meet NWA/GN R.704 requirements for water quality protection.
- **Reporting & Deliverables** – Comprehensive report with methodology, survey data, stability results, design calculations, and regulatory compliance matrix. Deliverables in DWG, PDF, GIS shapefiles, and editable DEM models.

5. DELIVERABLES

The service provider must submit the following at the end of the project.

- Civil Engineering drawings (Maps, plans and diagrams) that comply with regulatory standards relevant to the application

- Section 21(g) of the NWA report and Conducted Assessment.
- All other documents and information related to the project scope of work

Note: A non-compulsory site visit can be arranged prior to submission of the quotations

6. REPORTING

- The appointed Professional Civil Engineer will report to the Environmental Management Specialist from time to time until the completion of the project (WUL receipt) which is estimated to be October 2026.
- Reporting on scheduled times during execution of the project.

7. BASIC SPECIFICATIONS, REQUIREMENTS AND RESPONSIBILITIES

The successful bidder is responsible to:

- a) Comply with all the specifications and requirements of this document.
- b) Comply to all the requirements of Foskor COP 25, Service Provider Control (Available on request).
- c) Supply and transport to site all labour, skill, expertise, and supervision.
- d) Supply required PPE (Personal Protection Equipment) and safety equipment to safely conduct the required service.

8. LEGISLATIVE- AND REGULATORY REQUIREMENTS

7.1 The successful or appointed service provider shall comply with:

- a) The Mines Health and Safety Act with Regulations (Latest revision)
- b) The National Road Traffic Act with Regulations (Latest revision)
- c) All applicable national and international legislative requirements and regulations.

7.2 The successful or appointed service provider shall comply with the latest revisions of the following Foskor COP's (Compendium of Procedures) (COP's, policies and procedures are available on request):

- a) COP 17 Mobile, Technical and Process Training
- b) COP 25 for Service provider Control
- c) COP 56 for Lifting Machinery and Lifting Tackle
- d) COP 59 for Trackless Mobile Machinery
- e) COP 96 Working at Heights
- f) Any other Foskor safety, health, quality and environmental policies and procedures deemed applicable by a Foskor representative.
- g) All other Foskor procedures and policies applicable to the successful application of this contract.

7.3 The successful or appointed service provider shall comply with the following Environmental Specifications, Policies and Procedures:

- a) COP 41 Housekeeping and workplace organisation
- b) COP 49 Waste Management

- c) COP 51 Resource conservation, energy, and materials
 - d) COP 70 Storage of petroleum products and other hazardous material
 - e) National Environmental Management Act 107 of 1998 (NEMA)
 - f) National Environmental Management Waste Act 59 of 2008 (NEMWA) as amended.
 - g) The successful service provider shall include in his/her SAFETY FILE, and comply with, the following documents:
 - i. Environmental Aspect and Impact Register (Applicable to this contract).
 - ii. Environmental Objectives and Targets (Applicable to this contract).
 - iii. Waste Management Plan (Applicable to this contract).
 - iv. FOSKOR Atmospheric Emissions License (Copy available on request)
 - v. FOSKOR Waste Management Licence (To be availed)
 - vi. FOSKOR Water Use Licence (To be availed)
- 7.4 The successful or appointed service provider shall ensure that all his/her on-site employees have been authorised by a FOSKOR regulation 2.13.1 appointee to:
- a) Perform job specific *hazard identification and risk assessments* (Foskor Annexure 1.3)
 - b) Operate trackless mobile machinery service provider employees (Foskor Annexure 59.7B)
 - c) Work at height (Foskor Annexure 96.1)
 - d) Any other Foskor activity requiring authorisation as deemed applicable by a Foskor representative.
- 7.5 Before entering and operating a service vehicle (Own vehicle) on the Foskor site, the appointed service provider shall:
- a) Ensure that:
 - i. In order to access in restricted areas, his vehicle has been fitted with an “internal safety cell” (ROPS – Roll Over Protection Structure) that has been designed, fabricated, tested and certified to comply with the requirements of ISO 3471:2008 - EARTH-MOVING MACHINERY – ROLL-OVERPROTECTIVE STRUCTURES or similar specification.
ROPS COMPLIANCE CERTIFICATES (Fabrication and Installation) TO PRESENTED DURING VEHICLE INSPECTION (See item 5.b.ii)
 - ii. His driver/s are in possession of a valid national driver's licence for the specific class of vehicle, has been tested by the Foskor mobile equipment training centre and authorised by a Foskor MHSA (Mines Health and Safety Act) regulation 2.13.1 appointee for the class of vehicle to be used on site.
 - iii. His driver/s has been tested by the Foskor mobile equipment training centre and authorised by a Foskor MHSA (Mines Health and Safety Act) regulation 2.13.1 appointee to operate a vehicle in the mine open pits (Restricted or red-flag areas)
(Contact the Foskor mobile equipment training centre on 015 789 2840 to make an appointment for competence testing and authorisations)

- b) The appointed service provider shall, before entering and operating a vehicle on the Foskor premises:
 - i. Obtain permission from the Foskor Safety & Security manager to operate his nominated service vehicle/s on the Foskor site. (Forms will be provided)
 - ii. Obtain a certificate of fitness from the Foskor Light Vehicle maintenance workshop supervisor or appointed Foskor inspector for his nominated service vehicle/s. Inspections conducted daily between 08:00 and 08:30 and between 13:30 and 14:00 (Excluding Fridays) at the Light Vehicle Maintenance workshop.
 - iii. Submit the above permission and COF in at the main security office for issue of a vehicle access disk.
 - c) Ensure that his service vehicles have been inspected (Daily) in accordance with the Foskor standard (COP 59) to ensure that they are safe and fit for use. (Forms will be provided)
 - d) See Foskor COP 59, Trackless Mobile Machinery for details.
- 7.6 Before entering and operating/working on the Foskor site the appointed service provider shall ensure that his driver/workmen are:
- a) Briefed on the required task and have been informed of any abnormal conditions/situations.
 - b) Physically, emotionally, and mentally fit to perform their duty.
 - c) Issued with the necessary PPE (Personal Protective Equipment) to safely operate his service vehicles and perform the required services on mine and enroute to the waste disposal sites.
 - d) Before commencement of work:
 - i. All tools and equipment shall have been inspected and tested to be in a good and safe working order.
 - ii. All workmen have participated in the completion of a standard Foskor site risk assessment (Commonly known as a HIRA or Hazard Identification and Risk Assessment) and taken appropriate actions to mitigate any identified hazards.
- 7.7 Before entering and operating/working on the Foskor site the appointed service provider shall ensure that his portable electrical equipment has been tested and declared safe to use by the Foskor electrical services workshop.
- 7.8 Before accessing overhead cranes and/or vehicle post lifts whereupon work is to be conducted, the equipment shall be locked out at the power source. The lock shall be marked and tagged. The tag shall contain the service providers business name, employee name responsible for lock and contact numbers. See Foskor COP 53, Lock-out system, and usage for details.
- 7.9 Although every effort has been made to ensure that the information contained within this document is correct, it remains the responsibility of the bidder to verify actual status and site conditions. (A site visit can be arranged).

9. PERMIT TO WORK

Before any on-site work under this contract may commence, the appointed or successful service provider shall obtain from Foskop a PERMIT TO WORK. The following guidelines are provided in order to assist the appointed service provider in obtaining a PERMIT TO WORK. (See Foskop COP 28, Permit to work and COP 25, Service provider control for details):

- 8.1 The PERMIT TO WORK can be obtained from- and on completion returned to the Legal Administrator, Foskop Safety department.
- 8.2 Obtain a contract or order number from the Foskop procurement department.
- 8.3 Provide a name list, including ID numbers, residential and postal addresses, and telephone numbers of all the appointed service providers' on-site employees.
- 8.4 All the appointed service providers' on-site employees shall undergo a full medical examination at the Foskop on-site Clinix Clinic. The clinic can be contacted at 015 789 2427 for an appointment.
- 8.5 (NOTE: All NEW- and Employees LEAVING the service of the appointed service provider must undergo an entry or exit medical examination)
- 8.6 The appointed service providers designated on-site drivers shall receive competence testing and authorisation to operate vehicles on the Foskop site (See item 5 under the heading LEGISLATIVE REQUIREMENTS).
- 8.7 All the appointed service providers' employees shall receive/have received training in:
 - a)
 - First aid level 1 (Provide own training)
 - Working at heights (Provide own training)
 - Basic Health & Safety Principles (Provide own training)
 - HIRA (Provide own training)
 - Basic firefighting. (Provide own- or receive Foskop training, contact 015 789 2531 to book)
 - Lock out. (Provide own- or receive Foskop training, contact 015 789 2531 to book)
 - b) All training not provided by Foskop must be verified by the Foskop training superintendent Mr. Johan Fouche. Please contact him on 015 7789 2525 to make an appointment or alternatively email proof of training and certificates to johanfo@foskor.co.za to confirm compliance before requesting his approval on the PERMIT TO WORK.
- 8.8 All the appointed service providers' on-site employees shall receive the basic Foskop site induction training at the Foskop Security office.
- 8.9 All the appointed service providers' on-site employees shall receive site specific induction training provided by the Foskop area Regulation 2.6.1 appointee/s.
- 8.10 A HIRA (Hazard Identification and Risk Assessment) shall be completed for ALL "typical" tasks that will be completed under this contract. HIRA's to be signed by all service provider employees. Make use of Foskop's own HIRA document, Annexure 1.2, contained in of COP 1, Foskop risk management (Available on request)

- 8.11 Attach a detailed SCOPE OF WORK describing the required task and -outcome of this contract.
- 8.12 All Foskor's appointed MHSA Regulation 2.9.2, 2.6.1, 2.13.1 and 3.1.a managers must undersign/approve the PERMIT TO WORK.
- 8.13 Registration and proof of payment under the Compensation for Occupational Injuries and Diseases Act, no. 130 of 1993. Registration number must be provided.
- 8.14 All relevant documentation and/or evidence of compliance must be attached to the PERMIT TO WORK.
- 8.15 Upon successful completion and approval of the PERMIT TO WORK the security department will issue the appointed service providers' employees with access ID cards valid for 12 months.
- 8.16 Any other documents, certificates or records as requested by a Foskor official deemed necessary to ensure that all safety, legislative and administrative requirements have been met must be attached to the PERMIT TO WORK.
- 8.17 The appointed service provider must allow at least three to ten working days to complete all the PERMIT TO WORK requirements.

10. SAFETY FILE

Before any work may commence, the appointed service provider must, IN CONJUNCTION WITH THE FOSKOR SAFETY DEPARTMENT, compile a SAFETY FILE specifically for THIS contract. Contact the area responsible safety representative or attend the monthly service providers meeting every 2nd Monday of the month (3rd Monday if 1st or 2nd Monday a public holiday) at 13:30 in the Foskor Plant Training Hall).

The SAFETY FILE must always be available for inspection by a Foskor official.

11. PRICING SCHEDULE

Description	Once off
Travel and Accommodation rate per visit (with approximately _ 5 site visits)	R
Medical Surveillance	R
Induction	R
Personnel Protection Equipment (Clothing)	R
Description	Total
Surveying and modelling the tailings storage facilities, conducting stability analyses, a stork yard and silt drying pad engineered, and pollution prevention measures designed to comply with RSA national norms (NWA Act 36/1998, GN R.704 of 1999).	
<u>Desktop Review and Reconnaissance</u> – Compile existing drawings, geotechnical reports, and operational records. Site visit to establish survey controls and inspect dam conditions.	R
<u>Survey & 3D Modelling</u> – UAV photogrammetry + GNSS ground controls to create high resolution DEMs and 3D point clouds. Generate contour maps (1 m intervals), CAD/GIS files, dam volumes, crest elevations, and slope angles.	R
<u>Stability Analysis</u> – Conduct limit-equilibrium or FEM analyses under static and flood conditions to verify Factors of Safety. Model phreatic surfaces and freeboard. Recommend buttressing or drainage improvements if FOS < regulatory thresholds.	R
<u>Design – Stork Yard & Silt Drying Pad</u> – Civil and structural design of storage yard and drying pad, including earthworks, liners (geomembrane/compacted clay), drainage berms, sumps, and pavement details. CAD drawings with plans, sections, materials list, and construction notes.	R
<u>Pollution Prevention Measures</u> – Specify impermeable liners, diversion berms, and decant systems to intercept seepage and runoff. Design settlement ponds or bioswales for water treatment. Provide schematics and specifications to meet NWA/GN R.704 requirements for water quality protection.	R
<u>Reporting & Deliverables</u> – Comprehensive report with methodology, survey data, stability results, design calculations, and regulatory compliance matrix. Deliverables in DWG, PDF, GIS shapefiles, and editable DEM models.	R
Rate per hour (estimate 96 hours)	
Technical engagement (Meeting, Request for information) with Foskor and DWS until the completion of the WUL application	R
Other issues/ aspects	

a)	R
b)	R
c)	R
d)	R
e)	R

12. **MANDATORY REQUIRMENTS/ PRE-QUALIFICATION CRITERIA**

Bid submission not meeting the mandatory requirement will result in the bid being disqualified.

No	Mandatory Requirement	Comments
1	Registered Professional Civil Engineer with Engineering Council of South Africa (ECSA)	Submit proof of registration with ECSA

13. EVALUATION CRITERIA AND BID ASSESSMENT

As part of the process to assist with the evaluation of the bidder's proposal/quotation and to make an informed decision in the awarding of this contract, the following information is required:

Technical Evaluation

	MEASUREMENT CRITERIA	Criteria scoring (%)	Score (%)	Type of proof to be submitted.
1	Company Experience: Years in business of civil engineering specifically in relation to the Water Use License Application and DWS requirements	No experience = 0% 3 years combined experience = 10% >4 years combined experience = 20%	20%	Confirmation letter from the companies indicating the type of work done and the dates or duration of the contract
2	List similar/same contracts awarded in past 5 – 10 years Provide the following information/details: a) Brief description of the contract type (designs/ drawings for Department of Water and Sanitation (DWS) Water Use license application) b) Address/ site of the contract c) Name and telephone/ cell number of clear contact person	No previous projects = 0% 3- 4 Projects = 20% > 4 projects = 30%	30%	Confirmation letter from the companies indicating the type of work done and the dates or duration of the contract
3	Team Leader/ project specialist Experience: Team Leader/ project specialist individual experience in as built designs of water related infrastructure such as PCDs, TSFs, etc. in relation to DWS requirements or water use licence application.	<1year = 0% 1-2 years = 5% 3- 4 years = 10% >5 years = 20%	20%	CV indicating number of years the individual was involved with similar type of projects
4.	Project Philosophy: Understanding of the project- The proposal demonstrating understanding of Section 21(g) of the National Water Act, including examples of civil engineering drawings compliant with DWS requirements	Proposal not submitted = 0% Proposal submitted = 30%	30%	Provide detailed proposal for WULA S21(g) and design plan
For the bid to be considered for shortlisting, the bidder needs to score 70% and above and comply to all mandatory requirements				

TAKE NOTE:

- 1) Any bidder/service provider that fails to comply or to provide/include/supply requested information and/or copies of all requested supporting certificates and documents will result in a reduced evaluation score that could adversely affect the bidder/service providers chance of being awarded this contract/order.
- 2) Any MANDATORY REQUIREMENT not met will result in immediate rejection of bid/quotation.
- 3) Any bid/quotation with an evaluation score of less than 70% will not be considered.

TECHNICAL:

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BIDDER:

SIGNATURE

DESIGNATION

DATE

COMPANY STAMP

