

SCOPE OF WORK

Tender No.: FOSPHB-RFP-06-26/27

Description: Wegsteek 11 KV disconnector Design, manufacture, supply, installation & commissioning.

1 INVITATION TO TENDER

This document prescribes the requirements for **design, manufacture, supply, installation and commissioning** of the 4 numbers of 11 KV Disconnectors for the Foskor Phalaborwa Wegsteek 11 KV yard..

2 PRE-QUALIFICATION

2.1 TECHNICAL PRE-QUALIFICATION

The CIDB 4EP grading or higher is a mandatory requirement.

Vendor must submit the type test certificates of the switchgear.

3 DEFINITIONS AND ABBREVIATIONS

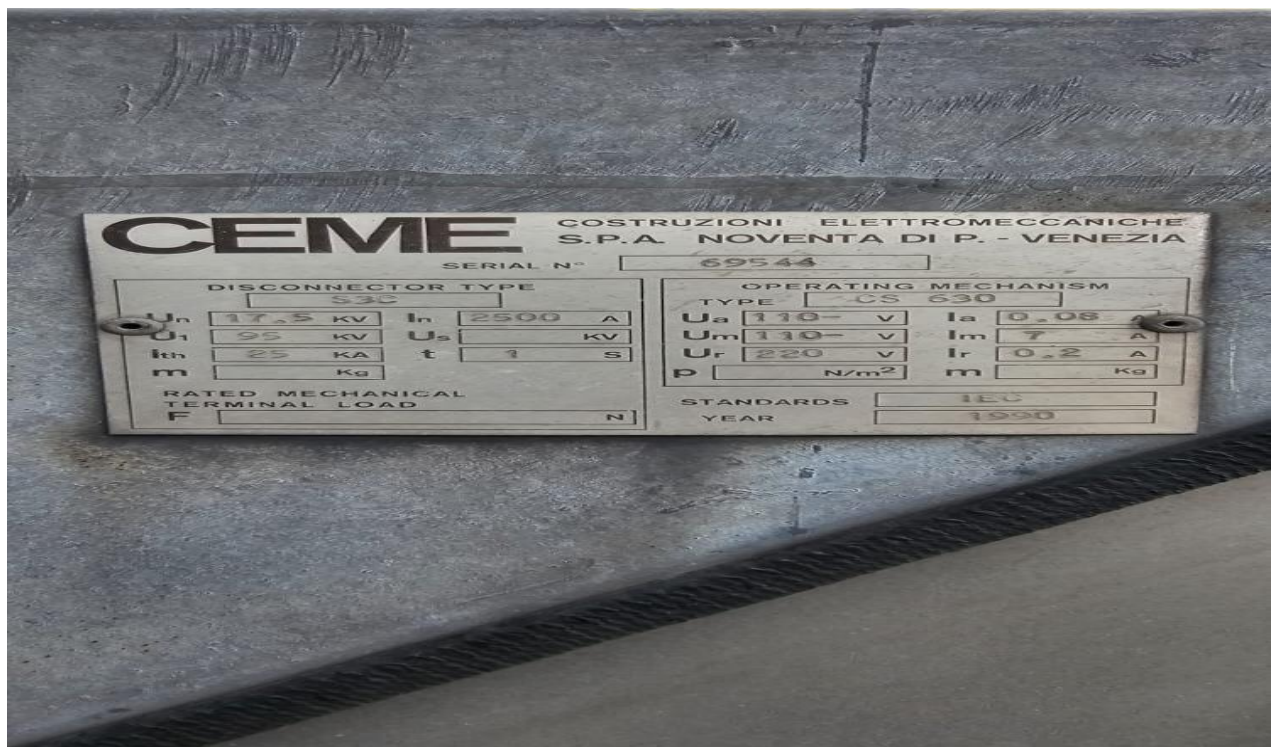
BOQ	–	Bill of Quantities	MHSA	–	Mine Health and Safety Act
BRA	–	Baseline Risk Assessment	NDT	–	Non-destructive Test
COC	–	Certificate of Compliance	OH&S	–	Occupational Health and Safety
COP	–	Code of Practice	OHC	–	Over-Head Crane
CTD	–	Critical task Descriptions	PEE	–	Portable Electrical Equipment
DAP	–	Diammonium Phosphate	PPE	–	Personal Protective Equipment
DB	–	Distribution Boards	QA	–	Quality Assurance
DWA	–	Department of water affairs	QC	–	Quality Control
DWG	–	Drawing	QCP	–	Quality control Plan
ECO	–	Engineering Change Order	QMS	–	Quality Management System
HDG	–	Hot-Dip galvanizing	RFI	–	Request for Inspection
HIRA	–	Hazard Identification and Risk Assessment	ROPS	–	Rollover Protection System
IFC	–	Issued for Construction	SANS	–	South African National Standards

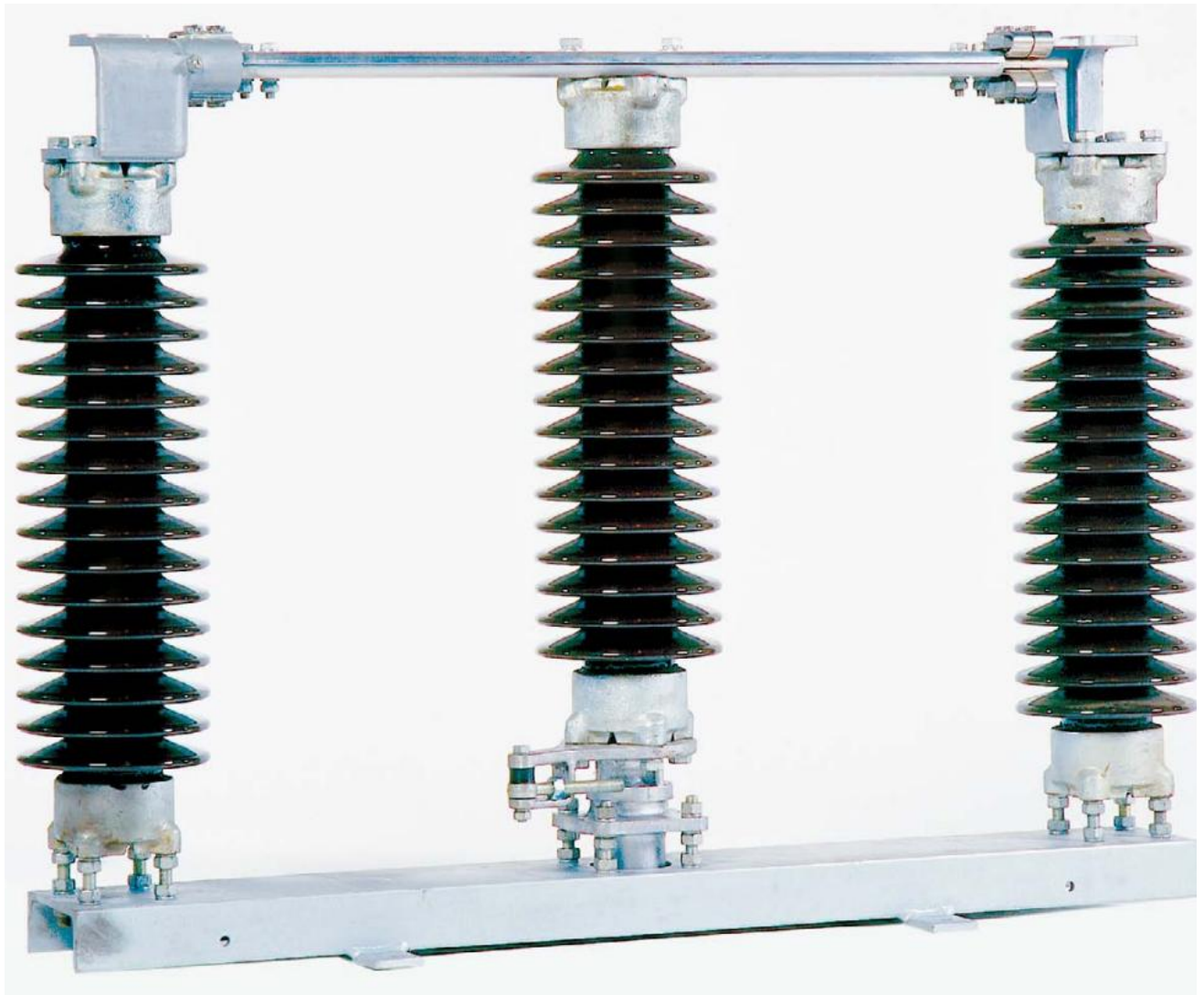
ISO	– International Organization of Standardization	SHE	– Safety, Health, Environment
LDV	– Light Delivery Vehicle	SHERQ	– Safety Health Environment Risk & Quality
MAP	– Monoammonium phosphate	TMMS	– Trackless Mobile Machines
MCOP	– Mandator Code of Practice	WBS	– Work-breakdown structure

3.1 SCOPE BACKGROUND

The Wegsteek 11 KV yard has CEME make disconnectors which are provided for visual gaps on the electrical circuits which are old and obsolete. The CEME disconnectors are not available in the market currently and the existing switchgear are more than 30 years old. The disconnectors are already showing age related problems like high ductor reading, failure of springs etc. which makes the reason for the hot connection at the disconnectors. The purpose of this project is to replace 4 numbers of the existing old disconnectors with the new disconnectors which will improve the reliability and safety of electrical infrastructure. The single line diagram (SLD) of the existing substation will be shared with this scope of works.

The existing Disconnectors details are as follows:





3.2 COMPANY BACKGROUND

Foskor is one of the world's largest producers of phosphate rock (concentrate) and phosphoric acid. It is one of the world's few vertically integrated producers of phosphoric acid and is the second-largest supplier to India, the world's largest consumer of phosphoric acid.

The Company owns and mines phosphate resources and beneficiates the mined material to produce a phosphate concentrate at Phalaborwa, in the Limpopo Province of South Africa. The phosphate concentrate is sold locally and also transported to the Richards Bay plant on the coast of Kwa-Zulu Natal to produce phosphoric acid, sulphuric acid and granular fertilisers MAP and DAP from phosphoric acid and is the leading supplier of fertilisers to South Africa. In all about 95% of the phosphoric acid is exported and the granular sales are divided between exports and local markets. Since 1951 Foskor has supplied more than 95% of South Africa's fertiliser requirements.

4 SCOPE OF WORK

4.1 BACKGROUND DOCUMENTATION

Not Applicable

4.2 SCOPE - EXTENT OF WORK OR SERVICE REQUIRED

4.2.1 General Scope Considerations:

1. Design, supply, install and commission of the 4 numbers of new Disconnectors(ACTOM make Double side break type disconnectors or equivalent). Design of the disconnectors should be such that the electrical connection on the disconnectors are highest throughout the life cycle which will ensure that hot connection will not be generated.
2. Removal of existing old disconnectors and transport to the vendor's workshop so that they are repaired and tested at their site. After repair and testing (FAT) & upon clearance from Foskop engineer the Switchgears to be delivered to Foskop. The repair or replacement of the different components depends on the initial testing results of the removed disconnectors.
3. Removal of existing terminated conductors on the existing disconnectors to use the same conductors on the new units.
4. Tracing of the complete protection scheme wiring on the existing disconnectors and do the same wiring on the new Disconnectors accordingly so that existing protection on the feeders are not disturbed.
5. All the existing protections on the Disconnectors (applicable circuit breaker protections) needed to be tested and proved. The testing data needed to be handed over to Foskop.
6. The earth bonding to the Disconnectors needed to be tested.

4.2.2 Project costing and expenses:

The contractor shall supply all engineering services, materials, labour, transport, supervision, and consumable materials, equipment, tools and every item of expense for the scope of work to be completed successfully unless otherwise stated taking the following into consideration.

4.2.3 Disposal of refuse

The Contractor shall be responsible for disposal of refuse and waste generated by his staff daily. The site is to be kept clean, neat, and tidy, by complying with Foskop Waste Management COP.

4.2.4 General requirements for commissioning

Commissioning or handover will be executed as per Foskop Procedures or as directed by the Engineer. Normally the Foskop Punch list and Hand over certificate will be used.

4.3 **SCOPE**

4.3.1 **General**

The scope of this work covers the design, manufacture, supply (and delivery), installation and commissioning of 4 of 11 KV disconnectors assembly according to the Switchgear Specification for the Foskop Wegsteek 11 KV disconnector replacement Project in Phalaborwa, Limpopo province.

The Works shall be designed, constructed, tested and commissioned in accordance with the applicable scope, regulations, specifications, standards and recommendations. The Contractor shall be deemed to have made an allowance in the tender to comply with the above.

There are conductors to be terminated on each Disconnector. A provision must be made for the removal and reterminating of all the existing conductors. The removal of the existing disconnectors and repairing them for reuse is still the responsibility of the vendor.

The scope of this work shall also include obtaining the Foskop permit to do work for the installation of the switchboard.

All work shall also include the supply of all tools, labour, equipment, Transportation, Supervision by a Foskop authorized 2.9.2 supervisor and 2.6.1 subordinate manager, Quality management, Project management and communication, etc

4.3.2 **References**

The following documents are referenced in the text. Users of this document must ensure that the most recent editions of the following documents referenced in the text are used.

a. Regulations

In Particular the Works shall comply with the following regulations.

- a) Mines Health & Safety Act (Act 29 of 1996, as amended)
- b) Minerals Act (Act 50 of 1991, as amended)

b. Specifications and Standards

Abbreviations

BS	British Standard
IEC	International Electrotechnical Commission

NRS National Rationalised user specification

SABS South African Bureau of Standards

- | | |
|---|-----------------------|
| a) Foskop Electrical COPs. | |
| b) Foskop's Engineering Specifications: | EE-1, GE-1, and EC-1 |
| c) High-voltage switchgear and controlgear | SANS 62271 |
| d) Low-voltage switchgear and controlgear | SANS 60947 |
| e) Low-voltage switchgear and controlgear enclosed equipment | SANS 62626-1 |
| f) Coating by powder coating Process | SANS 1274 |
| g) National colour standards for paints | SANS 1091 |
| h) Moulded case circuit breakers | SANS 156 |
| i) Insulated bushings | SANS 60137 |
| j) AC metal-enclosed switchgear for rated voltages above 1 kV and up to and including 36 kV | SANS 1885 |
| k) Busbars | SANS 1195 |
| l) Measuring relays and protection equipment | SANS 60255-127 |
| m) Instrument transformers | SANS 61869-1, -2 & -3 |
| n) The Wiring of Premises Part 2 Medium-voltage installations above 1 kV a.c. | SANS 10142-2 |

The Contractor/Manufacturer shall adhere to the specifications and standards unless the Engineer has granted prior written authority for variation.

4.3.3 Switchgear rating

- | | |
|-----------------------------|--|
| a) Nominal Voltage(U_n) | 17,500 V AC |
| b) Nominal current | 2500 A |
| c) Impulse level | 95 kVip |
| d) Frequency | 50 Hz |
| e) I_{th} | 25 kA |
| f) Disconnecter Type type | Current is S3C which needs to be replaced with DSB |
| g) Operating mechanism type | Manual operation. |

4.3.4 Design Responsibility

The Foskor Project Engineer is responsible for preparing the scope, adjudicating the tenders, directing, controlling and co-ordinating the efforts of the Contractor to achieve completion on time within acceptable levels of quality and budget. The Project Engineer is not responsible for detailed design.

The Manufacturer will be responsible for the design, manufacture, supply, delivery, off-loading, installation, testing and commissioning of MV Switchgear, including the co-ordination of associated services to provide a proven, reliable, low maintenance system.

4.3.5 Design Review

The Engineer may decide to nominate a competent organisation (or individual) to perform an independent design review.

4.3.6 Equipment Maintainability

- a) Equipment must be designed and manufactured to require minimum maintenance over its lifetime.
- b) Parts must be easily accessible and interchangeable.
- c) Finishes (external/internal) and materials selected (piping, bolting, seals) must be able to withstand the environment and/or handling conditions they are exposed to.

4.3.7 Tests & Test Certificates

All component parts of the equipment shall be subject to type tests and routine tests in accordance with the relevant SABS, BS or IEC standard specifications.

- a. Factory Acceptance Testing
 - a) Equipment type and rating check
 - b) Disconnect Ductor test
 - c) Mechanical function tests.
 - d) System pressure test.
 - e) Secondary wiring insulation resistance test.

- b. Site Acceptance Testing

The equipment shall be tested on site after erection and prior to commissioning, in the presence of the Engineer.

The following minimum tests shall be performed as required:

- a) System pressure test.
- b) Insulation Resistance tests (Ducter Tests).
- c) Primary injection tests.
- d) Earth continuity and earth resistance tests.
- e) Functional tests.
- f) Any other test, which may be required to ascertain the correct functioning of the equipment.

c. **Test Certificates**

- c) Copies of type test certificates shall be submitted.
- d) Three copies of test certificates of all other works tests and on-site tests(FAT and SAT) shall be provided.

4.3.8 Drawings and Manuals

- a. It is the responsibility of the Contractor to trace the existing schematic drawing on the existing panels so that each of the functionality of the system, protection and interconnection to the upstream switchgear can be maintained. It is also the responsibility of the contractor to produce an "as built" documentation record of design and construction.
- b. The Engineer shall endorse all "as built" documentation requirements. These records shall be presented in the form of a bound Data Book lodged with the Engineer.
- c. All drawings shall be generated on AutoCad RELEASE 14. The data storage format shall be 3.5 inch DS HD 1.44 MB stiffer computer disk DXF format, suitable for AutoCAD 14. The contractor shall be responsible for all back up procedures, and computer security and integrity. The Engineer shall verify the procedures. If reasonable systems are not in place the Engineer reserves the right to instruct the Contractor to rectify the situation at his own cost. The software package for spreadsheet work shall be MICROSOFT EXCEL.
- d. The FOSKOR drawing submitted with this tender is E 20 – 1 – 11 – 2. This drawing will act as a guide to the layout of the switchboard and the sizes of the circuit breakers and the protection and metering required by this tender.

4.3.9 Quality Assurance Requirements

For this Contract, the Manufacturer shall operate a documented Quality Assurance Programme/Management System. It is important that the system fully addresses the scope of work.

- a. For the purposes of filing and documenting the written Quality Assurance Programme, the guidelines laid down in ISO 9001 shall be used.
- b. It is the Manufacturer's responsibility to apply the appropriate requirements of ISO 9001 to any Subcontractor, to the extent necessary. The Manufacturer shall be required to verify and demonstrate that their Subcontractors are capable of meeting the quality requirements stated therein and the Manufacturer shall monitor the Subcontractors for implementation of the quality requirements.
- c. In the event that the Manufacturer considers that any of the criteria referred to in ISO 9001 are not applicable to the Manufacturer or his Sub-Contractor, the Contractor shall provide a written justification to the Engineer for consideration. If such justification is not submitted to and agreed by the Engineer, it will be assumed that all criteria are applicable.
- d. The Engineer reserves the right to verify by audits that the Manufacturer and any Sub-Contractor's have an implemented quality management system, which satisfies the requirements of ISO 9001 or approved equivalent.
- e. For this Contract, the Contractor shall submit a quality plan(s). The quality plan(s) shall be submitted to the Engineer for approval and no work shall commence until such approval is given.
- f. All Sub-Contractors working for the Manufacturer shall work in accordance with the Manufacturer quality system, procedures and documentation. Sub-Contractor's documentation shall not be accepted.
- g. The Engineer will require access to the Manufacturer facilities and the facilities of any Sub-Contractors, for the purpose of quality audit and surveillance inspection.

4.3.10 PACKAGING

Packaging must be suitable for protecting equipment from damage due to handling, transportation (shipping), environmental influences and storage. Packaging details must be provided. The movement of instruments, meters and electro-mechanical relays, if used with Engineers Approval, shall be protected against vibration damage during transit.

5 PROJECT URGENCY

Project urgency is defined below:

This is a Project that impacts production and will need to be conducted as follows to mitigate production impact. The project should be installed during the annual shutdown period only.

Proper communication to be managed by contractor and reported daily to the production meeting.

6 DELIVERY OF MATERIALS AND EQUIPMENT

It is the responsibility of the Contractor to take delivery, off-load, store and move into their permanent position all equipment and materials covered under this Scope. The Contractor shall, at his own expense, be responsible for the delivery to the Site of imported plant and equipment, materials and Contractor's plant and equipment in connection with the execution of the works, including but not limited to securing of permits and customs clearances, and payment of handling costs, storage costs, releasing costs, transportation costs, and duties, taxes, imposts, excise and charges of any kind that may be imposed by the South African Government, or any of its agencies and political subdivisions relating to the supply and delivery to the site of the imported plant and equipment, materials and Contractor's plant and equipment.

TAKE NOTE - Foskor pays for material delivered to Foskor site only!

NB: The contractor/ consultant must clearly state in his tender submission if there is an exclusion on the Foskor scope (As per the site meeting procurement scope and site meeting minutes) Failure to state the exclusion will mean that the full Foskor scope is still applicable.

Lay down areas are as indicated on the drawings

7 BATTERY LIMITS – INCLUSIONS AND EXCLUSIONS

(Insert relevant text in context with the project – If applicable)

7.1 TABLE OF INCLUSIONS AND EXCLUSIONS

List the boundaries in terms of equipment (Foskor plant specific). Up to where is it Foskor's responsibility and where/what is the contractor's responsibility.

WHO WILL SUPPLY THE FOLLOWING?													
FF = FOSKOR, FREE OF CHARGE		FC = FOSKOR, AT COST TO CONTRACTOR				C = CONTRACTOR				N/A = NOT APPLICABLE			
1. Sanitary		2. Transport		3. Quality		4. Security		5. Lifting and Rigging		6. Medicals		7. Communication devices	
1.1 Water on site and toilet facilities / janitorial services	FF	2.1 Labour	C	3.1 Plan, Management, QA, QC	C	4.1 Site Security	FF	5.1 All rigging equipment (Slings, Chain blocks, turfers, etc	C	8.1 Entry and Exit	C	7.1 All communication devices like laptops, computers, networks, radios, cellphones, etc	C
1.2 Potable connection point	FF	2.2 Materials	C	3.2 All quality test Civil, Paint, Mechanical, etc	C	4.2 Foskor ID Card	FF	5.2 Rigger	C	8.2 First aid box at place of work	C		
1.3 Connection to construction water supply	C	2.3 Equipment	C	3.3 Sampling and laboratory testing	C			5.3 Mobile cranes	FF				
1.4 Change rooms	FF	2.4 All TMMS	C										
8. PPE		9. Surveying		10. Safety File		11. Training & Authorizations		12. Site Establishment		13. Waste management		14. Painting	
8.1 Supply, Issue, inspect and manage	C	9.1 Site Surveys	C	10.1 Foskor will issue template	FF	11.1 All Required Training	C	13.1 Site office/s with suitable facilities for daily “Green Area” meetings, and lunch area	C	13.1 Transport all on site to waste to Foskor designated waste sites	C	14.1 All Equipment and tools paint, labour, etc	C
				10.2 Ensure file conform/ populate to Foskor standards	C	11.2 Authorisation - As per Foskor COP	FF	13.2 Site establishment space	FF				
15. Fuel		16. Mechanical		17. Labour		18. Compressed air		19. Scaffolding		20. Tools & Equipment		21. Training	
15.1 Fuel Supply	C	16.1 Conveyor Belt	FF	17.1 All labour as per Scope of Work to execute task including management	C	18.1 Sandblasting or flash blast		19.1 Scaffolding Supply & Erect	FF	20.1 All Portable Electrical Equipment	C	21.1 All required training and training manuals as required to ensure that Foskor can train its workforce and operate the plant / equipment safely	C
15.2 Fuel storage	C	16.2 Conveyor 59 Drive Gearbox	FF			18.2 Compressor	C	19.2 Scaffolds be managed by the Contractor	C	20.2 Hot Work Equip as per Foskor COP - Welding Machines, Gas Cutting, Grinding, Gauging, etc	C		
15.3 Fuel fire protection	C	16.3 Idlers, Rollers and Frames	FF			18.3 Air for power tools - If available	FF	19.3 Cherry Picker’s – only if and when available by pre-booking	FF	20.3 Tools as required to execute task	C	21.2 All manuals and related documents to be supplied to project Eng. and Foskor Drawing office for safe keeping	C
15.4 Refuelling	C							19.4 Cherry Picker’s Driver– Trained and authorized driver	C				
22. Certificates		23. Consumables		24. Storage and inventory control		25. Electrical							
22.1 Supply All certificates as required	C	23.1 Welding rods	C	24.1 Protective coverings/tarpaulins	C	25.1 Generators	C	25.4 Temporary lighting	C	25.7 Electric panel + distributing wiring	C		
		23.2 Bolts & Nuts, etc.	C	24.2 Storage area and inventory control	C	25.2 Electrical Extensions	C	25.5 Power for tools on site from existing Foskor electrical supply point (Welding plugs and 220 v plugs	C	25.5 Electrical connection point	FF		

WHO WILL SUPPLY THE FOLLOWING?											
FF = FOSKOR, FREE OF CHARGE			FC = FOSKOR, AT COST TO CONTRACTOR			C = CONTRACTOR			N/A = NOT APPLICABLE		
						25.3 COC Site Establishment	C	25.6 Connection to Electrical supply	C	25.9 Electrical and Instrumentation Installation	C

****NOTE**

Foskor has made provision for the supply scaffolding free of charge the size and nature of the works. It is expected that arrangements will be communicated to the appointed Scaffolding contractor at least 3 days before requirement. Proof of request and arrangements and actual scaffolding installation for Scaffolding to be provided to Foskor on request

It should be noted that FOSKOR has an existing appointed and accredited scaffolding supplier who could be sub-consulted and provide part of the local company requirement of the contract.

7.2 ADDITIONAL BOUNDARIES

(Insert relevant text in context with the project – If applicable)

8 AS BUILT DRAWINGS

As built drawing requirement is defined below:

As built drawings are to be compiled after completion

Note! – All drawings to be delivered in AutoCAD electronic format. All drawing to be detail engineering drawings

9 QUALITY

- i. The service provider must provide the necessary quality management systems and plans to ensure that the quality of his work complies with the requirements of this scope of work
- ii. The service provider shall during all phases of construction comply with the Foskor approved Quality Assurance Plan
- iii. The service provider shall be responsible for all the resources required for executing the Quality Management System including but not limited to, developing the Quality Assurance Plan & performing the Quality Control measures to ensure that the deliverables comply with the specifications & standards mentioned in the scope of work
- iv. Any change requests / additional work resulting due to inadequate quality management system will be to the account of the service provider
- v. Foskor might appoint a third party for Quality Control Inspections
- vi. The Service provider will have to provide an approved quality system for all work executed.
- vii. This will include the following but is not limited to:
 - a. Quality plan
 - b. Quality compliance – Performance and reports
 - c. Quantity surveying
 - d. Quality Assurance
 - e. Quality Authorization matrix – part of the Quality plan
 - f. Quality control

- g. Quality administration. – All documents, checks, measurements, reports, variances, analysis, Corrective actions, etc. needs to be properly filed and available on request at any time. The file will require an index
- h. Includes all test work, laboratories, Filing, etc.
- i. Survey and survey verifications
- j. Construction versus design - Any Deviations from the approved “Construction Drawings”
- k. Quality communication – What needs to be reported to whom and at what frequency
- viii. FOSKOR envisage a complete quality System driven by the Service provider and this system/plan will be approved by FOSKOR and the appointed designer (if applicable) before construction/fabrication will be started.
- ix. Compliance to this plan will be measured and failure to adhere to the quality plan will result in the stopping of construction activities until concerns have been addressed. The cost for this delay will be for the service providers account.
- x. FOSKOR may appoint a third party to measure and control FOSKOR’s interest in the terms of quality in this contract and the service provider is expected to work in conjunction with this company
- xi. Hold points will be discussed and finalized with the successful service provider based on the approved Quality plan

The Quality plan will only be compiled and signed off after the Method Statement and WBS* have been compiled.

Quality on Shutdown type tasks will be included in the Scope of Works but the service provider will have to submit proof of an experienced quality assurer or relevant qualifications. IF the service provider does not have this it will be required that this service be hired in by the service provider at his cost.

- i. State any specific hold points that are not negotiable here
- ii. State any other applicable quality that is not in the “Parameters” section

Method statement – the service provider must list all steps and actions required to complete the work as per the scope of work – typically includes the items listed below:

- i. Key step and stages of the work required
- ii. Tools, Equipment, TMMS, etc
- iii. Labour requirements, etc
- iv. Spares, resources,
- v. Safety requirements

***WBS** is a hierarchical and incremental decomposition of the project into phases, deliverables and work packages. It is a tree structure, which shows a subdivision of effort required to achieve an objective; for example, a program, project, and contract.

This includes arrangements, tools, equipment labour, Tasks, Purchase, Quality, Communication, etc

9.1 **QUALITY FILE INDEX**

The quality file index listed below will be the minimum requirement.

This file must be kept up to date for the duration of the project and will be handed to the Foskor project Engineer on completion of the project

9.1.1 **QUALITY FILE INDEX**

	<p>QUALITY FILE INDEX</p> <p>FOSKOR: TSS - PROJECTS</p>	Doc. No.:	FSK-P-GEN-IX-001
		Rev. No.:	00
		Date:	12 - July - 2019

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Quality Control Plan (QCP) Approved..... 2
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Designer/Engineers Instructions, Specifications, Approvals, Concessions applied for & approved. Site instructions, Variations and ECO's 4
Method Statement of contractor– Approved 5
Material orders & Delivery notes..... 6
Certificates – Material, Data Sheets, Compliance, Certification, etc 7
Test Results – Each Discipline – Test cubes, NDT, etc..... 8
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Reports - Survey, etc..... 11
Punchlist/Snag list..... 12
Handover/ Occupations/ Taking over Certificates/Commissioning..... 13

9.2 ADDITIONAL QUALITY REQUIREMENTS

(Insert relevant text in context with the project – If applicable)

10 PROJECT DELIVERABLES

10.1 THE DELIVERABLES FOR THIS PROJECT INCLUDE:

(Insert relevant text in context with the project – If applicable)

10.2 DATA BOOKS

During the official handover of the switchgear, the service provider shall submit a detailed DATA BOOK that shall contain the following documents and information:

- a) Certificates and documents indicating the details of the switchgear.
- b) Comprehensive NDT (Non-Destructive Testing) report, including name and registration number of inspector indicating that all welds, joints and high-stress points have been examined and are free from defects and cracks.
- c) All certificates, documents and records to be cross-referenced for purposes of traceability

NB! ALL CERTIFICATES AND DOCUMENTS MUST BE CROSS-REFERENCED

10.3 MANUALS AND DOCUMENTATION

The following must be supplied:

- **Switchgear manual for operation, maintenance and repair.**
- **Single line drawing**
- **Schematic drawing.**
- **Switchgear data sheet.**
- **Test reports for both FAT and SAT**

10.4 FORMAT OF DOCUMENTS AND MANUALS

Note! - All Manuals must be in English

10.5 TRANSMITTAL OF DOCUMENTS AND MANUALS

Type of Document	Hard Copy	Electronic Format
Manuals	X	X
Drawings	X	X
Reports	X	X
Data Books	X	X

Documents and Manuals to be submitted in the flowing formats:

Hard Copy: Book or binding arch file format and must be durable and of high quality.

Soft Copy: Manuals, Reports and Data Books – Word, Excel, PDF, etc.

Storage – Compact Disk or Data traveller

Language: English

10.6 PROJECT COMPLETION

On project completion, the contractor will issue Foskor with a Handover certificate

The handover certificate will be accompanied by the following document

1. Quality file
2. Safety File
3. data book
4. **(Insert relevant text in context with the project – If applicable)**

11 DOCUMENTS / DRAWINGS ISSUED BY FOSKOR

Drawing or Document No	Title	Revision
	(Insert relevant text in context with the project – If applicable)	
Note	Please read your Scope of Work	

12 ON-SITE SUPERVISION REQUIREMENT

- A Foskor work permit before commencement of site work.
- A full time 2.9.2 appointed supervisor will be on this site for the entire duration of site work

- A 2.6.1 appointed site manager for overall site management
- Appointed SHE Rep for the entire duration of site work

12.1 ADDITIONAL REQUIREMENTS

(Insert relevant text in context with the project – If applicable)

13 TENDER DELIVERABLES

The deliverables will include: -

- Complete Foskor pricing schedule (BOQ)
- Preliminary Project Schedule
- Preliminary method statement to execute the site work
- Company training Matrix indicated minimum training requirement compliance or the tenderer should provide an undertaking to comply with Foskor Safety requirements during the tendering stage and fulfil the requirements if awarded the work. Any deviation may lead to the cancellation of the order/contract. Timeframes need to be attached
- Copy of Certificate of Passing Foskor 2.6.1 and 2.9.2 Legal Exam for the people that are intended to be used in this task /project
- Tax Clearance
- Letter of Good standing (Workman compensation)
- BEE Certificate
- Commercial documents requested by Procurement
- Not submitting the required documentation or not completing the documentation (Pricing Schedule) correctly will lead to a disregard of the tender.
- Take note of the tender evaluation documents that need to be submitted

14 SAFETY

Service provider to refer to the full and updated Foskor COP's available:

- The service provider and sub-service providers need to always comply with the Mine Health and Safety act. All Foskor COP's Policies and procedures need to be adhered to.
- A service provider 2.9.2 to be permanently on-site.
- Medical, Induction, Foskor ID Card, etc. is approximately R800 per person. Exit medicals need to be done at the termination of the contract.

- iv. The Successful tenderer will be required to compile a Foskor Work permit and at least 2 weeks should be allocated for this. The service provider must provide the following appointed persons in terms of the MHSA: 2.6.1; 2.9.2 and Section 29(1) – SHE REP for the duration of the contract
- v. All vehicles and cranes and other TMM's to be inspected before entering Foskor Premises.
- vi. All person competencies to be verified before being allowed to work on Foskor premises for a specific task.
- vii. The service provider must compile a Safety File as per Foskor standard for all service providers and sub-service providers
- viii. Site access will need to be controlled and all persons must receive site-specific induction before entering the site.
- ix. Conduct inspections as per Foskor Safety System. Analyse data and trends and recommend preventative measures where required
- x. Ensure all authorizations are in place as per the Foskor Safety System. Arrangement with Foskor training to be done by the service provider to ensure that authorization and training are conducted. Arrange timeously.
- xi. Ensure all workers competencies are available and have been validated.
- xii. Ensure proper security, signboards, fencing and barricading is in place on-site where applicable
- xiii. The service provider shall in general comply with the FOSKOR General Engineering Specifications, COP's, latest revisions and all relevant regulations
- xiv. The service provider must complete a Baseline Risk Assessment (COP 01) before a work permit can be issued for the installation.
- xv. All service providers not in possession of a valid Foskor ID card have to complete the Foskor induction course and have to undergo a medical examination at the Foskor clinic for the service provider's account
- xvi. The service provider shall be responsible for coordinating and integrating his schedule and responsibilities with other FOSKOR appointed contract manager on-site for this Scope of Work.
- xvii. All personnel operating mobile equipment including LDV's must have a Foskor driver's permit.
- xviii. An open Pit Licence is required for driving in the mining area's
- xix. All the required PPE and Safety Equipment are for the service provider's account.
- xx. All service providers must ensure that:
 - a. His workers are issued with the correct personal protective equipment free of charge.
 - b. That the workers wear the PPE per the project area's requirements or as given by the service provider Supervisor.
 - c. Training is provided in the correct use of PPE to workers.
 - d. Daily inspections are done on PPE.

- e. The registers will be complete at least monthly on findings on PPE. (All PPE must be kept in good condition)
- xxi. All providers of services need to be informed of the following minimum training applies to all service providers (irrespective of the tasks or scope of work) that will enter the Foskop Phalaborwa site with effect from 1 April 2014. This training is not presented by the Foskop Training section and service providers must ensure that the training is sourced through accredited external training companies:
 - a. Basic health and safety principles
 - b. HIRA
 - c. First Aid Training
- xxii. All other training requirements must be aligned with the baseline risk assessment. Risks identified in the baseline risk assessment will guide the requirements for training. A summary of the training must be completed as well as status on required authorization as per Foskop COP's.
- xxiii. Training certificates will be accepted if complying with the following:
 - a. Unit Standard Title
 - b. Learner Full name
 - c. Learner ID number
 - d. Competency achieved
 - e. Date of Assessment
 - f. Assessors signature
 - g. Training provider logo
 - h. Training provider registration number and accreditation number.
 - i. Seta logo

15 LEGISLATIVE REQUIREMENTS – SUMMARY

15.1 MINIMUM LEGISLATIVE REQUIREMENTS:

The successful or appointed service provider shall comply with:

- i. The Mines Health and Safety Act with Regulations (Latest revision)
- ii. The National Road Traffic Act with Regulations (Latest revision)
- iii. All applicable national and international legislative requirements and regulations.
- iv. Foskop (Pty) Ltd. COP (Code of Practise) No. 25 for Service Provider Control (Available on request)
- v. Foskop (Pty) Ltd. COP (Code of Practise) No. 59 for Trackless Mobile Machinery (Available on request)

- vi. All Foskop (Pty) Ltd. safety, health, quality and environmental procedures applicable to the successful application of the contract. (Available on request)
- vii. All Foskop procedures and policies apply to the successful application of the contract. (Available on request)

15.2 SUMMARISED REQUIREMENTS/EXTRACTS FROM FOSKOR COP'S

15.2.1 Before entering and operating a service vehicle (Own vehicle) on the Foskop site, the appointed service provider shall:

- i. Ensure that his driver/s have a valid national driver's licence for the specific class of vehicle, has been tested by the Foskop mobile equipment training centre and authorised by a Foskop MHSA (Mines Health and Safety Act) regulation 2.13.1 appointee for the class of vehicle to be used on site.

(Contact the Foskop mobile equipment training centre on 015 789 2840 to make an appointment for competence testing and authorisations)

- ii. The appointed service provider shall, before entering and operating a vehicle or trailer on the Foskop premises:
 - a. Obtain permission from the Foskop Safety & Security manager to operate his nominated service vehicle/s or trailers on the Foskop site. (Forms will be provided)
 - b. Obtain a certificate of fitness from the Foskop Light Vehicle maintenance workshop supervisor or appointed a Foskop inspector for his nominated service vehicle/s. Inspections conducted daily between 08:00 and 08:30 and between 13:30 and 14:00 (Excl. Fridays) at the Light Vehicle Maintenance workshop.
 - c. Submit the above permission and COF at the main security office for the issue of a vehicle access disk.
- iii. Ensure that his service vehicles/trailers have been inspected (Daily) by the Foskop standard (COP 59) to ensure that they are safe and fit for use. (Forms will be provided)

See Foskop COP 59, Trackless Mobile Machinery for details.

15.2.2 Before entering and working on the Foskop site the appointed service provider shall ensure that his workmen are:

- i. Briefed on the required task and have been informed of any abnormal conditions/situations.
- ii. Physically, emotionally, and mentally fit to perform their duty.
- iii. Issued with the necessary PPE (Personal Protective Equipment) to safely operate his service vehicles and perform the duty of maintaining, servicing, inspecting, and testing earthmoving- and mobile equipment.
- iv. Before commencement of work:
 - a. All tools and equipment shall have been inspected and tested to be in good and safe working order.

- b. 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.

15.2.3 Before entering and working on the Foskor site the appointed service provider shall:

- i. Ensure that his portable electrical equipment has been tested and declared safe to use by the Foskor electrical services workshop.

16 PERMIT TO WORK

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

- i. The PERMIT TO WORK can be obtained from- and on completion returned to the Legal Administrator, Foskor Safety department.
- ii. Obtain a contract number from the Foskor procurement or projects department.
- iii. Appoint a subordinate manager under Regulation 2.6.1 and an on-site supervisor under Regulation 2.9.2 of the Mines Health and Safety Act.

The appointed subordinate manager and -supervisor shall be required to write and pass the Foskor 2.6.1 and 2.9.2 legal examinations within 30 days after being awarded this contract.

Attend an hour-long legal exam briefing any Thursday between 08:00 and 09:00 at the Security training hall.

Write legal examination any Friday between 07:30 and 10:30 at the Security training hall. (Please book)

- iv. Appoint an on-site SHE-Rep under section 29(1) of the MHSA to assist Regulation 2.6.1 and 2.9.2 in the daily on-site management of health, safety and environmental issues.

The designated SHE Rep must have the ability to read, write and express him/herself.

The appointed SHE-Rep shall be required to attend a five-day SHE-Rep training course within 30 days after being awarded this contract (Training free of charge). Make booking on 015 789 2531

A pre-requisite for attending the SHE-Rep training course is successful completion of Basic Health & Safety Principals- and HIRA training.

See Foskor's COP 5 Health and Safety Representatives for details.

- v. Provide a name list, including ID numbers, residential and postal addresses and telephone numbers of all of the appointed service providers on-site employees.

- vi. All the appointed service providers on-site employees shall undergo a full medical examination at the Foskor on-site CLINIX Clinic. The clinic can be contacted at 015 789 2427 for an appointment. Please note:

All NEW- and employees LEAVING the service of the appointed service provider must undergo a full entry or exit medical examination

Women who are pregnant or suspect that they may be pregnant must notify the examining medical practitioner.
- vii. The appointed service providers designated on-site drivers shall receive competence testing and authorisation to operate vehicles on the Foskor site
- viii. All the appointed service providers' employees shall receive/have received training in:
 - a. First aid level 1 (Provide own training)
 - b. Working at heights (Provide own training)
 - c. Basic Health & Safety Principals (Provide own training)
 - d. HIRA (Provide own training)
 - e. Basic firefighting. (Provide own- or receive Foskor training, contact 015 789 2531 to book)
 - f. Lockout. (Provide own- or receive Foskor training, contact 015 789 2531 to book)

All training not provided by Foskor must be verified by the Foskor training superintendent Mr Johan Fouche. Please contact him on 015 7789 2525 to make an appointment or email proof of training and certificates to johanfo@foskor.co.za to confirm compliance before requesting his approval on the PERMIT TO WORK.

- ix. All the appointed service providers' on-site employees shall receive the basic Foskor site induction training at the Foskor Security office.
- x. All the appointed service providers' on-site employees shall receive site-specific induction training provided by the Foskor area Regulation 2.6.1 appointee/s.
- xi. A BRA (Baseline Risk Assessment) shall be completed for ALL "typical" tasks that will be completed under this contract. The BRA to be approved by the responsible Foskor MHSA 2.13.1 appointee and signed by all of the service providers employees. Make use of Foskor's BRA document, Annexure 1.2, contained in COP 1, Risk and Opportunities Management (Available on request)
- xii. Attach a detailed SCOPE OF WORK describing the required task and -outcome of this contract.
- xiii. All Foskor's appointed MHSA Regulation 2.9.2, 2.6.1, 2.13.1 and 3.1. a manager must undersign/approve the PERMIT TO WORK.
- xiv. Registration and proof of payment under the Compensation for Occupational Injuries and Diseases Act, no. 130 of 1993. The registration number must be provided.
- xv. SARS issued a tax clearance certificate.
- xvi. All relevant documentation and/or evidence of compliance must be attached to the PERMIT TO WORK.
- xvii. Upon successful completion and approval of the PERMIT TO WORK the security department will issue the appointed service providers' employees with access ID cards.

- xviii. 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.
- xix. The appointed service provider must allow at least three to ten working days to complete all the PERMIT TO WORK requirements.

17 **SAFETY FILE**

The appointed contractor must compile a SAFETY FILE specifically for this contract. The SAFETY FILE must always be available for inspection by a Foskor official: The following guidelines are provided to assist the appointed contractor in compiling a 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.

17.1 **FOSKOR SAFETY FILE INDEX - TYPICAL**

<u>Description of item / ISO clause</u>	<u>File divider</u>
1. Integrated Management System; Clause 5.1 Clause 4.1 Understanding the organisation and its context,	1
2. Policies Clause 5.2: OH&S Policies	2
3. FSK-MD-PRO-10: Foskor risk management Clause 6.1.2.1 & 6.1.2.2: Hazard identification, risk assessment and determining controls.	3
4. FSK-MD-MS-PRO-04: Objectives, targets and management programmes Clause 6.2.1: Planning to achieve OH&S objectives. Clause 6.2.2: Objectives and programs	4
5. FSK MD PRO-36: Compliance obligations and appointments FSK-MD-PRO-17: Health and safety representatives, Clause 5.1: Leadership and commitment Clause 6.1.3: compliance obligations/ legal and other requirements	5
6. FSK-MD-PRO-24: SHERQ Competency and awareness training	6

Clause 7.2: Competence

Clause 7.3: Training

awareness

7.	FSK-MD-PRO-33: Mobile, technical and process training	7
	Clause 7.2: Competence	
	Clause 7.3: Training and awareness	
8.	FSK-MD-PRO-18: SHERQ Committees	8
	COP 7: Communication (Mini – business communications)	
	Clause 7.4: Communication	
	Clause 5.4 participation and consultation	
9.	FSK-MD-PRO-04: Lighting: natural and artificial;	9
	FSK-MD-COP-01: MCOP Occupational health programme on thermal stress	
	FSK-MD-PRO-03: Sanitation plant hygiene amenities	
	FSK-MD-COP-05: MCOP occupational health program on personal Exposure to Air borne Pollutants	
	FSK-MD-PRO-05: Ergonomics	
	FSK-MD-COP-03: MCOP for Occupation Health Program for noise	
	Clause 8.1. Operational health program for noise	
	Clause 8.1.1. General	
10.	FSK MD PRO-36: Waste management	10
	FSK-MD-PRO-06: Hazardous chemical substances and control Hazchem and waste management	
	Clause 8.1.2 Eliminating hazards and reducing OH&S risks	
11.	COP 53: Lock out system and usage	11
	Clause 8.1.1 General	
	Clause 8.1.2 Eliminating hazards and reducing OH&S risks	
12.	COP 55: Stairs walkways handrails and Ladders	12
	Clause 8.1 Operational planning and control	
	Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	
13.	COP 56: Lifting machinery and lifting Tackle	13
	Clause 8.1 Operational planning and control	
	Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	
14.	COP 57: Boilers and vessels under pressure work forms	14
	Clause 8.1 Operational planning and control	

Clause 8.1.2 Eliminating hazards and reducing OH&S Risk

15. FSK-MD-COP-14: Mandatory code of practice for operation of the trackless mobile machinery	15
Clause 8.1 Operational planning and control	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	
16. FSK-MD-PRO-13: Portable electrical equipment checks and registers	16
Clause 8.1 Operational planning and control	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	
17. COP 61: Earth leakage Relays and checks	17
Clause 8.1 Operational planning and control	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	
18. COP 62: General Electric installations and machinery in hazardous locations	18
Clause 8.1 Operational planning and control	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	
19. FSK-MD-PRO-14: Hand tools	19
Clause 8.1 Operational planning and control	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	
20. FSK-MD-PRO-40: Personal Protective Equipment	20
FSK-MD-COP-08: MCOP Women in mining PPE	
Clause 8.1 Operational planning and control	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	
21. FSK-MD-PRO-21: Maintenance of fire equipment	21
Clause 8.1 Emergency preparedness and response	
Clause 8.1.2 Eliminating hazards and reducing OH&S	
22. FSK-MD-PRO-22: Firefighting emergency drill and instructions	22
FSK-MD-COP-09: Emergency preparedness and response	
FSK-MD-COP-17: MCOP Risk based emergency care on mine	
FSK-MD-COP-04: MCOP Prevention of fires at mine	
Clause 8.1 Operational planning and control	
Clause 8.2 Emergency Preparedness and response	
23. FSK-MD-COP-12: MCOP for the safe use of conveyors installation for the transportation	23

of minerals, material or personnel

Clause 8.1 Operational planning and control

Clause 8.1.2 Eliminating hazards and reducing OH&S Risk

24. FSK-MD-PRO-16: Hot work 24

Clause 8.1 Operational planning and control

Clause 8.1.2 Eliminating hazards and reducing OH&S Risk

25. FSK-MD-COP-13: Confined space 25

Clause 8.1 Operational planning and control

Clause 8.1.2 Eliminating hazards and reducing OH&S Risk

26. COP 96: Working on Heights 26

Clause 8.1 Operational planning and control

Clause 8.1.2 Eliminating hazards and reducing OH&S Risk

27. COP 97: Erection and use of scaffolding 27

Clause 8.1 Operational planning and control

Clause 8.1.2 Eliminating hazards and reducing OH&S Risk

28. FSK-MD-PRO-11: Water safety 28

Clause 8.1 Operational planning and control

Clause 8.1.2 Eliminating hazards and reducing OH&S Risk

29. FSK-MD-COP-16: MCOP The right to refuse dangerous work and withdraw from dangerous workplace. 29

Clause 6.1: Actions to address risks and opportunities/Hazard identification, risk assessment and determining controls.

Clause 8.1 Operational planning and control

Clause 8.1.2 Eliminating hazards and reducing OH&S Risk

30. COP 103: MCOP Use of mobile devices on the mine premises 30

Clause 6.1: Actions to address risks and opportunities/Hazard identification, risk assessment and determining controls.

Clause 8.2 Emergency preparedness and response

31. FSK-MD-PRO-41: SHEQ Inspection 31

Clause 8.1 Operational planning and control

32. FSK-MD-PRO-02: Internal and external audit.	32
Clause 9.2 Internal audit	
Clause 9.2.1 general	
Clause 9.2.2 internal audit programme.	
33. FSK-MD-COP-10: Mandatory Code of Practice for Mine Residue Deposits	33
Clause 8.1 Operational planning and control	
Clause 8.2 Emergency preparedness and response	
34. FSK-MD-COP-11: Combat rock fall and slope instability accidents in surface mines.	34
Clause 8.1 Operational planning and control	
Clause 8.2 Emergency preparedness and response	

Notes:

1. If a COP is not applicable to your section, please complete and attach the “Not Applicable” form in the space of the COP.
2. Always keep your file neat and clean

17.2 TYPICAL CONTENTS OF SAFETY FILE:

- i. Title and index cover page
- ii. A copy of the PERMIT TO WORK.
- iii. A copy of the MHSA Regulation 2.6.1 and -2.9.2 and SHE Rep appointment letters.
- iv. A copy of Foskor COP 25, Service provider control.
- v. Base line risk assessment of ALL and ANY POTENTIAL tasks that may be performed on site under this contract. See Foskor COP 26, Critical Task Descriptions for details.
- vi. Copies of critical task descriptions and standard operating/maintenance procedures.
- vii. Copies of the appointed service providers safety, health, environmental, HIV and AIDS, smoking and waste management policies.
- viii. Training records of all on-site employees.
- ix. Employee records of actual time worked (Normal and overtime).
- x. Copy of on-site induction training.
- xi. Records of inspections of TMM (Trackless Mobile Machinery) and trailers. See Foskor COP 59, Trackless Mobile Machinery for details.

- xii. Records of issues and inspections of PPE (Personal Protective Equipment) and safety equipment. See Foskor COP 65, Personal Protection Equipment for details.
- xiii. Records of issues and inspections of PEE (Portable Electrical Equipment). See Foskor COP 60, Portable electrical Equipment for details.
- xiv. Records of issues and inspections of tools and equipment. See Foskor COP 63, hand tools for details
- xv. Records of daily, weekly and monthly 2.6.1 / SHE Rep safety inspections. See Foskor COP 22, SHE Inspections for details.
- xvi. Records of daily green-area and safety talks. See Foskor COP 7, Communication for details.
- xvii. 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.

Note:

The bidder / Service provider can obtain updated Foskor COP's and Engineering Specification on request

17.3 COP 25 – CONTRACTORS LEGAL OBLIGATION AND MINIMUM REQUIREMENTS

Contractor must comply to the requirements below within 4 weeks from awarding the contract unless otherwise agreed with 3.1 a and SHE Manager within 10 days from the awarding of such contract

	Visitors	Short Term Contractors (1-5 days)	Medium Term Contractors (1 days -1 month) – low risk	Long Term Contractors (>1 month) – low risk work	Medium or Term Contractors (1 days up to 12 month) – Risk work
Definition	Consultations, Salespersons, Foskor arranged and organised visitor groups, Family of injured employees	Deliveries, Consultation, Specialist, Auditors for less than 5 days and do not exceed 4 visits per year	Contractors working on the Mine premises for period more than 6 day but less than 1 month.	Duration of work is longer than 1 month	Duration of work is irrelevant (only focus on Risk exposure)
Special conditions	May perform no work on site	May perform no physical work on site that will involve tools, equipment, or machinery.	No work that relates to life saving rules e.g. Construction, Conveyors, Lifting, Electrical, Lock-out, Working at Heights, Hot work. Specialist and consultants (experts) working in teams smaller than 5 for less than 1 month on site.	No construction work or work that relates to life saving rules e.g. Conveyors, Lifting or Rigging, Electrical maintenance, Lock-out, Hot work, confined spaces, use of TMM's, Working at heights	This include all work relating to relates to <u>life saving rules</u> (risk work) and therefore must comply to relevant training and Authorisations as required in the Foskor COP's before work can start and permits signed.
Supervision	The organiser is responsible for the group. The visitors <u>must</u> be accompanied by a Foskor Regulation 2.9.2, Regulation 2.6.1, or legally appointed person.	Direct supervision of Foskor appointed Regulation 2.9.2. and Regulation 2.6.1	Direct supervision of Foskor appointed Regulation 2.9.2. and Regulation 2.6.1 appointed manager may be provided if contractor is unable to supply.	Must provide dedicated Regulation 2.9.2. with proof of competency and direct supervisor. Regulation 2.6.1 appointed manager may be provided if contractor is unable to supply.	Must provide <u>dedicated</u> Regulation 2.6.1. and Regulation 2.9.2. appointees with proof of competency. The Regulation 2.9.2 appointee must have technical competency and experience in line with scope and trained in the in all aspects as defined in Baseline risk.
Medical Surveillance	Only completed a declaration of fitness and health matters relevant to visit	Shortened medical surveillance Must declare Pregnancy and all chronic medical conditions at Mine Clinic	Full Medical Surveillance as per COP Must declare Pregnancy and all chronic medical conditions at Mine Clinic	Full Medical Surveillance as per COP Must declare Pregnancy and all chronic medical conditions at Mine Clinic	Full Medical Surveillance as per COP Must declare Pregnancy and all chronic medical conditions at Mine Clinic
Permit required	Day Permit is obtained at Security (Valid for 1 day)	Short term ID card at Security Return permit to Security when completed. (Permit each day)	Short term ID card at Security Permit to work at Foskor is required unless Specialists or Product experts. Return Permit to Security when work is complete	Permit to work at Foskor Permanent ID at security Return Permit to Security when work is complete	Permit to work at Foskor Permanent ID at security Return Permit to Security when work is complete
Induction	SHERQ Induction pamphlet only	Attend full Foskor Induction Site Specific Induction SHE Induction Pamphlet	Attend full Foskor Induction Site Specific Induction SHE Induction Pamphlet	Attend full Foskor Induction Site Specific Induction SHE Induction Pamphlet	Attend full Foskor Induction Site Specific Induction SHE Induction Pamphlet
Minimum training	None	None	First Aid Training HIRA Understanding Basic Health and Safety Principles	First Aid Training HIRA Understanding Basic Health and Safety Principles <u>PLUS</u> , all training as defined in Baseline risk assessment and Scope (COP 1)	First Aid Training HIRA Understanding Basic Health & Safety <u>PLUS</u> , all training as defined in Baseline risk assessment and Scope (COP 1). When construction or maintenance work is done – minimum 1 artisan per team.
Letter of Good standing	Not required	Not required	<u>May</u> be required (dependant on scope) and correct nature of business must reflect on the Letter of Good standing	Required and correct nature of business must reflect on the Letter of Good standing	Required and correct nature of business must reflect on the Letter of Good standing

17.4 REMINDER OF RISK IDENTIFICATION – LIFE SAVING RULES

- *Risk Assessments and clearance certificates*
- *Lifting operations*
- *Working at heights*
- *Confined space entry*
- *Positive energy Isolation and lockout*
- *Moving Machinery*
- *Personal protective equipment*

Risk assessment is applicable to all jobs and training apply to all that will do physical work!

17.5 ADDITIONAL SAFETY REQUIREMENTS

- **None**

18 PARAMETERS

18.1 DESIGN PARAMETERS

All plant and equipment will be designed to:

- Operate satisfactorily under atmospheric, ambient, and other conditions present at the site location
- Ensure interchangeability of units and/or sub-parts throughout the plant to reduce spares holding requirements – take old plant equipment into account
- Ensure reliability and maintainability. Minimum availability of 98% is required
- Operate without undue vibration, stresses (temperature and built-in) and excessive noise
- Comply with legal requirements in terms of the water license and DWA

18.2 SPECIFICATIONS, CODES, STANDARDS AND REGULATIONS

The Latest edition of the South African National Standards in effects at the date of projects design shall establish the minimum requirements for design, materials, and construction. This should be referenced with the Foskor General Engineering specifications and requirements of the Foskor SHERQ system (COP's)

No work shall be contemplated which is in breach of any legislation in South Africa – Typically:

- Water license (04/B72K/ACGIJ/962)
- Occupational Health and Safety Act
- South African Mine Health and Safety Acts and regulations (Act 29 of 1996)

- Explosive Acts and Regulations - South Africa
- DWA and the National Water Act.
- Foskor COP's
- Foskor Engineering Specifications
- The latest revisions of the SANS standardized specifications and Foskor Specifications as applicable at the time of quotation shall apply to this contract.

Note! The equipment to be capable of continuous operation 24 hrs/day, 365 days/year with operating availability equal to 100%.

18.3 SITE GEOGRAPHY

The plant is located at Phalaborwa, Limpopo, South Africa























18.4 AMBIENT CONDITIONS

- Ambient temperature

Summer	35 °C Avg.	50 °C Max
Winter	17 °C Avg.	2 °C Min

- Site Altitude: 380 m
- Prevailing wind direction: Generally South Easterly - Maximum design velocity 40 m/s (144 km/h)
- Very dusty conditions
- Average annual rainfall = 540 mm

18.5 FOSKOR GENERAL ENGINEERING SPECIFICATIONS (SHOULD BE CONSULTED BEFORE FINALIZATION OF ANY DESIGN OR SPECIFICATION)

	Name	Modified	Modified By
	Engineering Specification Index	... 15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS001 - General Design Information - Rev 1	... 15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS002 - Engineering Drawings - Rev 0	... 15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS003 - Quality Control Procedures - Rev 0	... 15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS005 - Concrete and Formwork - Rev 0	... 15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS007 - Plate work - Rev 0	... 15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS008 - Welding procedures - Rev 0	... 15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS009 - Structural fabrication and erection - Rev 0	... 15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS011- Piping - Rev 0	... 15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS012 - Pressure vessels - Rev 0	... 15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS013M - Painting and Protective Coatings	... 15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS014 - Rubberlining - Rev 0	... 15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS015 - Fencing - Rev 0	... 15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS016 - Roofing and side cladding - Rev 0	... 15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS017 - Fuel - Rev 0	... 15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS018 - Lubrication - Rev 0	... 15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS019 - Liquid containemt bund walls - Rev 0	... 15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS020 - General purpose valves - Rev 0	... 15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS021 - Gearboxes - Rev 0	... 15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS022 - Chainblocks and lever hoists - Rev 0	... 15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GSI-004 - Field Instrumentation Standards	... 15 April, 2016	<input type="checkbox"/> Khayelihle Pepu

Service provider /Contractor /Supplier - Please ensure that you have the latest copy of the specifications before any activity is committed.

18.6 SPECIFICATION

ELECTRICAL SPECIFICATIONS		
<u>NUMBER</u>	REVISION	TITLE
EE-1	Latest Revision	Motor Control Centre & Switchgear
EE-2	Latest Revision	Squirrel Cage Induction & Wound Rotor Motors
EE-11	Latest Revision	Power Factor Correction Equipment
GE-1	Latest Revision	Design Criteria for Electrical Installations
GA-1	Latest Revision	Procedures for Enquiries & Tenders
GD-1	Latest Revision	General Requirements for Design, Project Management & Tenders
GD-2	Latest Revision	Engineering Change Order (E.C.O) Procedure
GM-1	Latest Revision	Mechanical Equipment
GM-5	Latest Revision	Pipe Standards
GM-6	Latest Revision	Engineering Drawing & Document Requirements
GM-8	Latest Revision	Surface Protection
GM-3	Latest Revision	Painting & Surface Protection of Steel
GS-1	Latest Revision	Structural Steel work & Plate work Fabrication & Erection
GQ-1	Latest Revision	Quality Control
GI-1	Latest Revision	General specifications & Procedures
GI-2	Latest Revision	Installation & Commissioning
GI-3	Latest Revision	General Equipment Specification
GI-4	Latest Revision	Field Instrumentation Specification

18.7 ADDITIONAL SPECIFICATIONS IF REQUIRED

- None

19 PROJECT MANAGEMENT - CONTRACTOR

- a) Nominate a single window of communication to FOSKOR – Typically the appointed contractor 2.6.1
- b) Attend meetings as agreed during the project kick-off meeting
- c) Submit Progress reports (Format & interval) as defined in the Kick-off Meeting (Invoicing, Labour, Performance against the plan, Contractor purchases, Quality Management, Safety, Etc.
- d) Manage and participate in the “Daily Journal” as part of executing the project
- e) All meetings will be held at FOSKOR offices unless otherwise stated
- f) The contractor to provide updated project management plans on progress as defined by the FOSKOR Project Engineer.
- g) If the project is executed based on a shutdown approach the contractor will produce a formal Works Breakdown Structure of the works.
- h) If the contractor cannot produce a proper WBS then the contractor will be required to subcontract this function to produce the WBS and manage the WBS for the duration of the project. This cost must be included in the contractor's price
- i) **WBS - WBS** is a hierarchical and incremental decomposition of the project into phases, deliverables, and work packages. It is a tree structure, which shows a subdivision of effort required to achieve an objective, for example, a program, project, and contract.
- j) This includes arrangements, tools, equipment, labour, Tasks, Purchase, Quality, Communication, etc
- k) **Project progress updates** - If the contractor cannot produce proper updates on a WBS then the contractor will be required to subcontract this function to produce the WBS updates for the duration of the project. This cost must be included in the contractor's price

The Service provider is responsible for managing the project and this is graphically displayed below indicating where what functions lies. Graphical presentation only covers some basic aspects.

19.1 ADDITIONAL PROJECT MANAGEMENT REQUIREMENTS:

19.3 PLANNING AND SCHEDULING:

- The Project Section has a planning standard that needs to be adhered to during the execution as per the relevant order placed
- The FOSKOR scheduler can be contacted to provide schedule details input and guidelines if needed.
- Schedule must be compiled within one week after kick off meeting conducted by the FOSKOR Project Leader
- The Contractor schedule needs to be signed off by contractor 2.6.1 before approval by FOSKOR
- The FOSKOR scheduler will issue the Templates to be used - This templates must be adhered to and no changes to be made

- Progress Update is needed every once week one day before the weekly progress meeting or as requested
- The progress Updates to be submitted to Foskop Scheduler/Planner via email.
- It is the contractor's responsibility to appoint the competent person to manage the contractors schedule which that person will directly communicate with Foskop Scheduler - If the contractor's responsibility to add cost of the competent person on the project. Commercial action to be taken if the performance in planning is lacking
- Foskop requires all contractors to use MS project software which it will be fully implemented latest 1 February 2022.

Typical aspect that need to be adhered to

- It is the subcontractor's responsibility to produce a detailed schedule which tie up to the Foskop standards of requirements.
- The Schedule must not have open ended activity task.
- The schedule must be fully resourced.
- The schedule must not have constraints.
- The Calendar must be created and assigned in the schedule. Confirm the templates with the Foskop Scheduler
- It is Foskop responsibility to review the schedule before it's been approved
- A schedule must be Approved by Project scheduler/Project Manager & Project Engineer
- The approved baselined schedule must be updated by the contractor to show Planned Vs Actual
- The contractor must show S-Curve which will be constructed from the schedule.
- Project Updates Must be submitted to the Project Planner/Scheduler for review.

20 LIAISON AND CO-OPERATION WITH OTHERS

- The CONTRACTOR/ SERVICE PROVIDER shall be required to co-operate and liaise with Foskop appointed project manager
- The CONTRACTOR/ SERVICE PROVIDER must note that construction is within an operational plant.
- The CONTRACTOR/ SERVICE PROVIDER may appoint a Foskop approved sub-contractor
- The CONTRACTOR/ SERVICE PROVIDER shall be required to work in conjunction with the Foskop appointed structural-, electrical-, equipment- and instrumentation installation contractor – if applicable.

20.1 ADDITIONAL REQUIREMENTS

- **(Insert relevant text in context with the project – If applicable)**

20.2 PROJECT PLANNING/SCHEDULING

- The Project Section has a planning standard that needs to be adhered to during the execution as per the relevant order placed
- The Foskor scheduler can be contacted to provide schedule details input and guidelines if needed.
- Schedule must be compiled within one week after kick off meeting conducted by the Foskor Project Leader
- The Contractor schedule needs to be signed off by contractor 2.6.1 before approval by Foskor
- The Foskor scheduler will issue the Templates to be used - This templates must be adhered to and no changes to be made
- Progress Update is needed every once week one day before the weekly progress meeting or as requested
- The progress Updates to be submitted to Foskor Scheduler/Planner via email.
- It is the contractor's responsibility to appoint the competent person to manage the contractors schedule which that person will directly communicate with Foskor Scheduler - If the contractor's responsibility to add cost of the competent person on the project. Commercial action to be taken if the performance in planning is lacking
- Foskor requires all contractors to use MS project software which it will be fully implemented latest 1 February 2022.

Typical aspect that need to be adhered to

- It is the subcontractor's responsibility to produce a detailed schedule which tie up to the Foskor standards of requirements.
- The Schedule must not have open ended activity task.
- The schedule must be fully resourced.
- The schedule must not have constraints.

- The Calendar must be created and assigned in the schedule. Confirm the templates with the Foskor Sheduler
- It is Foskor responsibility to review the schedule before it's been approved
- A schedule must be Approved by Project scheduler/Project Manager & Project Engineer
- The approved baselined schedule must be updated by the contractor to show Planned Vs Actual
- The contractor must show S-Curve which will be constructed from the schedule.
- Project Updates Must be submitted to the Project Planner/Scheduler for review.

21 GENERAL CONDITIONS – COMMERCIAL

21.1 EXTENSIONS, PENALTIES AND RETENTIONS

- Extension on the promised completion or Milestone date may be requested but needs to be approved by Foskor. The contractor should be in possession of a formal document issued via Foskor Procurement indicating that this request was approved
- Any additional works not defined in the order needs to be approved by Foskor in writing before any work commence.

Description	Condition	Duration
Penalties	2% per week	Late Delivery after promised completion date
Performance Bond	0% of Contract Value	0 Year after completion
Retention	5 % of Contract value	Release after 3 months
Type of Contract	Foskor General condition of contract	
Tender price validity	3 months	
Escalation	None	None

All delays must be immediately brought under the attention of the section engineer and the responsible party agreed upon immediately.

21.2 AFTER SALES SERVICE OR REQUIREMENTS

21.2.1 After sales service requirements are listed below:

- The workmanship will have a warrantee for a period of 12 months from the handover of the commissioned panel.**

2. **The partial discharge on the cables needed to be checked after running the switchgear for a minimum period of 6 months. If any partial discharge is found, then it needed to be also repaired at no additional cost to Foskor.**
3. **Recommended spares required for the switchgear to be supplied.**

21.3 INVOICE DUE DATES

The due dates for claim certificate are the 15th of every month. Invoices are due the latest the 23th of every month.

22 TENDER EVALUATION CRITERIA

- 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 tender, the following information is required
- The following tender evaluation criteria will be used for adjudicating the Contractor submitted tender.
- Please provide the required documentation as requested in the "Proof/documents to be submitted" column. Please be specific when submitting documents by ensuring that they answer the item specified.
- Please use the annexure number as indicated to identify the proof submitted.
- Failure to submit the relevant documentation as requested in the Evaluation criteria document may lead to a disregard of the submitted tender.

22.1 MANDATORY REQUIREMENTS

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

No	Mandatory Requirements	Comments
1	The CIDB 4EP grading or higher is a mandatory requirement.	Submit CIDB rating of the organisation.
2	Type tested switchgear	Submit certificate

23 EVALUATION CRITERIA (TECHNICAL)

Evaluation Criteria (Technical)				
WEGSTEEK 11 kV Dogbox replacement				
No	Technical Criteria Description	% Contribution	Proof / documents to be submitted	Notes
1	Technical Compliance, Team experience & competence - <u>Section Weight not to be less than 25%</u>			
a)	Contractor need to be an OEM(ABB, SIEMENS, ACTOM or SCHNEIDER only) or trained by the OEM. Scoring: OEM or OEM training certificates submitted 100% No OEM/ OEM training certificates 0%	20%	Submit OEM certificates or Training certificate for installation and commissioning of the switchgear by the OEM.	<u>Annexure A</u>
b)	Proposed Switchgear specification sheet with GA drawings Scoring: submitted the specifications, manuals with GA drawing 100% Either GA or specification submitted 50% Not submitted any documents 0%	10%	Submit a Switchgear specification manuals and data sheet with GA drawings including dimensions	<u>Annexure B</u>
c)	Company - Previous experience in the manufacturing, installation, and commissioning of medium voltage switchgear Scoring: More than 5 years experience 100% 3 years to 4 years experience 50% Less than 3 years experience 0%	15%	Give reference list of projects with order date, values and contact numbers for verification	<u>Annexure C</u>
d)	Quality assurance/control plan, Quality Control Scoring: None provided 0 % One provided 50 % Both provided 100%	15%	Provide 1. a generic QCP for the construction of the medium voltage switchgear 2. the QCP for this project needed to be submitted.	<u>Annexure D</u>
2	Company Capacity – <u>Weight not to be less than 25%</u>			
a)	Company - Execute construction according to a pre-approved WBS / Project Schedule Scoring: Project schedule submitted 100 % Project schedule not submitted 0%	10%	Provide one (1) previous WBS/Project Schedule of a medium voltage switchgear manufacturing, installation, and commissioning project	<u>Annexure E</u>
b)	Delivery time – Ability to deliver the switchgear in a quicker/shorter duration Scoring: More than 22 weeks 20 % Between 18 and 22 weeks 40%	10%	Provide the medium voltage switchgear delivery lead time	<u>Annexure F</u>

Evaluation Criteria (Technical)				
WEGSTEEK 11 kV Dogbox replacement				
No	Technical Criteria Description	% Contribution	Proof / documents to be submitted	Notes
	Between 12 to 17 Weeks 60 % Less than 12 weeks 100 %;			
c)	Project team Organogram indicating names, positions, trades for this project Scoring: No Organogramn or CVs 0 % CVs or Organogram submitted 50% Organogram & CVs submitted 100%	20%	Submit comprehensive organogram with names, position, CVs and qualification(s) for the project team	Annexure G
	Total Technical Score	100.00%		
Note: In order for the bid to be considered the bidder needs to score 70% and above, and comply to all mandatory requirements				

24 PRICING SCHEDULE

Tender No.: FOSPHB-RFP-06-26/27

Description: **WEGSTEEK 11 KV Disconnectors replacement**

24.1 MEASUREMENT AND PAYMENT CLAUSES:

Measurement and payment clauses of the COLTO (1998) Standardised Specifications, as well as the Particular Specifications, shall be deemed to form part of and included in the pricing instructions.

24.2 UNITS OF MEASUREMENT

The units of measurement described in the Bill of Quantities are metric units. Abbreviations used in the Bill of Quantities are as follows:

%	–	Percent	m ³	–	cubic metre
h	–	Hour	m ³ .km	–	cubic metre-kilometre
ha	–	hectare	mm	–	millimetre
kg	–	kilogram	MN	–	meganewton
kℓ	–	kilolitre	MN.m	–	meganewton-metre
km	–	kilometre	MPa	–	megapascal
km-pass	–	kilometre-pass	No.	–	number
kPa	–	kilopascal	P C sum	–	Prime Cost sum

kW	–	kilowatt	Prov. sum.	–	Provisional sum
ℓ	–	litre	sum	–	lump sum
m	–	metre	t	–	ton (1 000 kg)
m²	–	square metre	W/day	–	Workday
m².pass	–	Square Metre-Pass			

24.3 PRICING SCHEDULE

Item No	Description	UOM	Qty	Unit Price	Total Price
1	Design, Manufacture, FAT and SAT off 4 numbers of 11 kV MV Disconnectors with wiring as per the scope.	Each	4		
2	Delivery, off-loading and placing of the disconnectors inside the Foskor substation.	Each	4		
3	Installation and commissioning of the switchgear assembly and the complete protection scheme with all the wiring between the switchgear assembly and the BTU.	Each	4		
4	Removal of the existing disconnectors from the yard. Repair and testing of the 4 removed Disconnectors for reuse as spares.	Each	4		
5	Delivery of the repaired disconnectors at Foskor Phalaborwa	Each	4		
6	Compile a safety file, FOSKOR work permit(The process may take atleast 3 days)	SUM	1		
7	Contractor travel and accommodation	Each	1		
8	Tracing of the schematic and producing the schematic drawings for the whole Wegsteek 132 KV/ 11 KV yard	Each	1		
9	Other (please specify)				
Total Project Value (Excl. Vat)				0.00	

24.4 SCHEDULE SUMMARY:

Description	Amount R
SECTION 1200: GENERAL REQUIREMENTS AND PROVISIONS	
(Insert relevant text in context with the project – If applicable)	
TOTAL excl. VAT	
VAT @ 15%	
TOTAL incl. VAT	

All price alterations must be signed for by the bidder confirming that such changes were made by the Bidder. **PLEASE NOTE THAT PRICE CHANGES WITHOUT A SIGNATURE WILL LEAD TO THE DISQUALIFICATION OF THE BID SUBMITTED.**

NOTE: The onus lies with the tenderer to make sure that all formulas and calculations are correct. Calculation errors discovered during the evaluation process will be logged as a non-conformance and the tender/quotation will therefore be disregarded

25 ACCEPTANCE

The conditions and requirements as stated in this “Scope of Work” are accepted with the following **exceptions/exclusions**: -

The conditions and requirements as stated in this “Scope of Work” are accepted with the following **inclusions**: -

26 SUB-CONTRACTOR (PLEASE PROVIDE LIST AND FUNCTION)

Failure to complete this form will lead to disqualification – Please do not leave blanks!

BBBEE Level	<input type="text"/>	Black Ownership	<input type="text"/> %	Black Woman Ownership	<input type="text"/> %
Tender Validity	<input type="text"/> Days	Manufacturing Period	<input type="text"/> Days	Installation Period	<input type="text"/> Days
Guarantee	<input type="text"/> Months	Commencement after receipt of official purchase order		<input type="text"/> Days	
Payment terms	<input type="text"/>				

Price Basis for the duration of the contract/till supply of goods (Please tick):

Fixed	<input type="checkbox"/>	Duration of fixed price	<input type="text"/> 12 Months <input type="checkbox"/>	<input type="text"/> 24 Months <input type="checkbox"/>
Variable	<input type="checkbox"/>	Price Base Date	<input type="text"/>	

If variable provides price variation factors, percentages and formula in the cover letter. (Please specify indices to be used)

Price variation factors & percentages (e.g. material, labour, fuel, overheads, admin etc)

Factor	%	Factor	%	Factor	%	Factor	%	Factor	%
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Where prices include a foreign currency rate please provide:

% of price, subject R O E	<input type="text"/> %	ROE	<input type="text"/> = ZAR
ROE Base Date	<input type="text"/>		

Note: If the above fields are not completed, it is confirmed that the quoted price/s are valid for the entire contract period mentioned and no escalation in the price is allowed under any circumstances.

I, _____ in my capacity as _____ for and on behalf of _____ hereby acknowledge that I have read and understand the Instruction to Tender and the Scope of Work as detailed in this document and accept all the Terms and Conditions of Tender **FOSPHB-RFP-06-26/27**

Signed at _____ on this the _____ day of _____ 2024

Signature: _____

Witnesses:

1. _____ Name: _____

2. _____ Name: _____

For and on behalf of Foskor (Pty) Limited

Name: _____ Signature: _____

Designation: _____ Date: _____

Note: It is imperative to complete this schedule in full where applicable, marked "N/A" where not applicable and signed off in full, **unsigned bids will not be accepted**. All the supporting documentation requested with the tender document, scope of work and evaluation criteria need to be submitted with the tender. Tenders received without supporting documentation requested for the tender evaluation **will not be considered**.