



DOCUMENT NAME:	S.Ow: Main Sub 1 (MS-1) XLPE (PEX) Cables Installation Project		
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DEPARTMENT:	TSS		
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## Table of Contents

<b>1</b>	<b>PRE-QUALIFICATION.....</b>	<b>2</b>
1.1	COMMERCIAL .....	2
1.2	TECHNICAL PRE-QUALIFICATION .....	2
<b>2</b>	<b>INVITATION TO TENDER .....</b>	<b>2</b>
<b>3</b>	<b>DEFINITIONS AND ABBREVIATIONS .....</b>	<b>2</b>
<b>4</b>	<b>SCOPE BACKGROUND.....</b>	<b>3</b>
<b>5</b>	<b>COMPANY BACKGROUND.....</b>	<b>3</b>
<b>6</b>	<b>SCOPE OF WORK.....</b>	<b>3</b>
6.1	BACKGROUND DOCUMENTATION .....	3
6.2	SCOPE - EXTENT OF WORK OR SERVICE REQUIRED .....	3
6.2.1	General Scope Considerations:.....	3
6.2.2	Project costing and expenses:.....	4
6.2.3	Disposal of refuse.....	4
6.2.4	General requirements for commissioning.....	4
6.2.5	The successful or appointed service provider shall comply with the latest revisions of the following Foskor CTD's (Critical task Descriptions) (CTD's are available on request): .....	4
6.2.6	Sub-Contracting and joint ventures .....	4
6.3	SCOPE.....	4
6.3.1	Basic Requirement.....	4
6.3.2	Excavation outside the Wegsteek Substation .....	4
6.3.3	Wegsteek to MS-1 substation cables installation .....	5
6.3.4	MS-1 to PSZ substations cables installation .....	5
6.3.5	MS-1 to Drier 4&5 substations cable installation .....	5
6.3.6	MS-1 to Conveyor 101 substations cable installation .....	5
6.3.7	MS-1 to Secondary East substations cable installation .....	5
6.3.8	MS-1 to Secondary West substations cable installation .....	5
6.3.9	MS-1 to Primary East substations cable installation.....	5

6.3.10	MS-1 to Compressors RMU and transformer bay 82 cables installation .....	5
6.3.11	MS-1 to Workshops Transformer (bay 81) cables installation .....	5
6.3.12	Kwena (or equivalent) anti-theft earthing conductors for earth continuity .....	5
6.3.13	Test and Commissioning .....	5
<b>7</b>	<b>PROJECT URGENCY .....</b>	<b>6</b>
<b>8</b>	<b>DELIVERY OF MATERIALS AND EQUIPMENT .....</b>	<b>6</b>
<b>9</b>	<b>BATTERY LIMITS – INCLUSIONS AND EXCLUSIONS .....</b>	<b>6</b>
9.1	TABLE OF INCLUSIONS AND EXCLUSIONS .....	7
9.2	ADDITIONAL BOUNDARIES .....	8
<b>10</b>	<b>AS BUILT DRAWINGS .....</b>	<b>8</b>
<b>11</b>	<b>QUALITY .....</b>	<b>8</b>
11.1	QUALITY FILE INDEX .....	10
11.1.1	QUALITY FILE INDEX .....	10
11.2	ADDITIONAL QUALITY REQUIREMENTS .....	10
<b>12</b>	<b>PROJECT DELIVERABLES .....</b>	<b>10</b>
12.1	THE DELIVERABLES FOR THIS PROJECT INCLUDE: .....	10
12.2	DATA BOOKS .....	11
12.3	MANUALS AND DOCUMENTATION .....	11
12.4	FORMAT OF DOCUMENTS AND MANUALS .....	11
12.5	TRANSMITTAL OF DOCUMENTS AND MANUALS .....	11
12.6	PROJECT COMPLETION .....	11
<b>13</b>	<b>DOCUMENTS / DRAWINGS ISSUED BY FOSKOR .....</b>	<b>12</b>
<b>14</b>	<b>ON-SITE SUPERVISION REQUIREMENT .....</b>	<b>12</b>
14.1	ADDITIONAL REQUIREMENTS .....	12
<b>15</b>	<b>TENDER DELIVERABLES .....</b>	<b>12</b>
<b>16</b>	<b>SAFETY .....</b>	<b>13</b>
<b>17</b>	<b>ENVIROMENTAL .....</b>	<b>14</b>
<b>18</b>	<b>LEGISLATIVE REQUIREMENTS – SUMMARY .....</b>	<b>15</b>

18.1	MINIMUM LEGISLATIVE REQUIREMENTS:.....	15
18.2	SUMMARISED REQUIREMENTS/EXTRACTS FROM FOSKOR COP'S.....	16
18.2.1	Before entering and operating a service vehicle (Own vehicle) on the Foskor site, the appointed service provider shall:	16
18.2.2	Before entering and working on the Foskor site the appointed service provider shall ensure that his workmen are:.....	16
18.2.3	Before entering and working on the Foskor site the appointed service provider shall:.....	16
<b>19</b>	<b>PERMIT TO WORK.....</b>	<b>17</b>
<b>20</b>	<b>SAFETY FILE .....</b>	<b>18</b>
20.1	FOSKOR SAFETY FILE INDEX - TYPICAL .....	19
20.1.1	Template SHE FILE INDEX: - TYPICAL.....	19
20.2	TYPICAL CONTENTS OF SAFETY FILE: .....	22
20.3	REMINDER OF RISK IDENTIFICATION – LIFE SAVING RULES.....	23
20.4	COP 25 – CONTRACTORS LEGAL OBLIGATION AND MINIMUM REQUIREMENTS .....	24
<b>21</b>	<b>PARAMETERS .....</b>	<b>25</b>
21.1	DESIGN PARAMETERS .....	25
21.2	SPECIFICATIONS, CODES, STANDARDS AND REGULATIONS.....	25
21.3	SITE GEOGRAPHY .....	25
21.4	AMBIENT CONDITIONS.....	25
21.5	FOSKOR GENERAL ENGINEERING SPECIFICATIONS (SHOULD BE CONSULTED BEFORE FINALIZATION OF ANY DESIGN OR SPECIFICATION) .....	26
21.6	SPECIFICATION .....	27
21.7	ADDITIONAL SPECIFICATIONS IF REQUIRED .....	27
<b>22</b>	<b>PROJECT MANAGEMENT - CONTRACTOR.....</b>	<b>27</b>
22.1	ADDITIONAL PROJECT MANAGEMENT REQUIREMENTS:.....	29
<b>23</b>	<b>PLANNING AND SCHEDULING: .....</b>	<b>29</b>
23.1	TYPICAL ASPECT THAT NEEDS TO BE ADHERED TO .....	30
23.2	LIAISON AND CO-OPERATION WITH OTHERS .....	30
<b>24</b>	<b>GENERAL CONDITIONS – COMMERCIAL.....</b>	<b>30</b>
24.1	EXTENSIONS, PENALTIES AND RETENTIONS .....	30

<b>25</b>	<b>AFTER SALES SERVICE OR REQUIREMENTS.....</b>	<b>31</b>
25.1	AFTER SALES SERVICE REQUIREMENTS ARE LISTED BELOW:.....	31
<b>26</b>	<b>INVOICE DUE DATES .....</b>	<b>31</b>
<b>27</b>	<b>MANDATORY DOCUMENTS .....</b>	<b>31</b>
27.1	MANDATORY DOCUMENTS .....	32
<b>28</b>	<b>TENDER EVALUATION CRITERIA .....</b>	<b>32</b>
<b>29</b>	<b>EVALUATION CRITERIA (TECHNICAL) .....</b>	<b>33</b>
<b>30</b>	<b>COMMERCIAL EVALUATION REQUIREMENTS: .....</b>	<b>34</b>
30.1	FINANCE.....	34
<b>31</b>	<b>PRICING SCHEDULE.....</b>	<b>34</b>
31.1	UNITS OF MEASUREMENT .....	34
31.2	PRICING SCHEDULE / SCHEDULE OF QUANTITIES OR BOQ.....	ERROR! BOOKMARK NOT DEFINED.
<b>32</b>	<b>ACCEPTANCE .....</b>	<b>35</b>
<b>33</b>	<b>SUB-CONTRACTOR (PLEASE PROVIDE LIST AND FUNCTION) .....</b>	<b>35</b>
<b>34</b>	<b>DOCUMENTED INFORMATION .....</b>	<b>36</b>
<b>35</b>	<b>REFERENCES.....</b>	<b>37</b>
<b>36</b>	<b>SCOPE APPROVAL .....</b>	<b>ERROR! BOOKMARK NOT DEFINED.</b>

## SCOPE OF WORK

**Tender No.:** Txxx/25

**Description:** MAIN SUB 1 (MS-1) XLPE (PEX) Cables Installation Project

### 1 PRE-QUALIFICATION

#### 1.1 COMMERCIAL

#### 1.2 TECHNICAL PRE-QUALIFICATION

- CIDB requirement is a 4EP grading or higher
- No less than three (3) years' experience in execution of similar Medium Voltage electrical cable installation projects. Provide award letters and confirmation of delivery of a similar project older than three 3 years.
- Method Statement. Contractors to submit a method statement outlining in a logical way, how the cable installations will be completed safely and efficiently. This should include measures to be followed to reduce all project related risks.

### 2 INVITATION TO TENDER

This document prescribes the requirements for the Supply, installation, and commissioning of the Main Sub 1 (MS-1) XLPE (PEX) Cables Installation Project.

### 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

#### 4 **SCOPE BACKGROUND**

The MS-1 substation is an existing substation which Foskor lost due to a fire incident in 2019. Unfortunately, the substation could not be recovered immediately and all the loads feeding from the MS-1 substation had to be rerouted and our 11kV reticulation revised. As part of the bigger recovery project, the purpose of this project is to re-route and install the 11kV cables for the loads that will be feeding from the new MS-1 substation switchboard.

#### 5 **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.

#### 6 **SCOPE OF WORK**

##### 6.1 **BACKGROUND DOCUMENTATION**

Not Applicable

##### 6.2 **SCOPE - EXTENT OF WORK OR SERVICE REQUIRED**

###### 6.2.1 **General Scope Considerations:**

Please allow for a competent Quality Control Officer to compile and manage the contractor's quality management. In the event of quality system failures, Foskor will request the Quality Official's experience and qualifications and if this is not acceptable, it will be expected that the contractor obtains this service at its own cost.

Please allow for a competent person to compile the method statement and the subsequent Microsoft Project plan. This person will manage and update this plan weekly and present it to the Foskor Project Engineer. It is expected that this planning and management is executed by the contractor. This service will be provided at the contractor's cost. If the contractor cannot execute this planning and report to management, it will be expected that the contractor obtains this service at his/her cost.

Scaffolding needs to be arranged by the contractor. It is expected that arrangements will be communicated to the Foskor Scaffolding company at least 3 days before the requirement. Proof of request and arrangements and actual scaffolding installation for Scaffolding to be provided to Foskor on request.

#### **6.2.2 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.

#### **6.2.3 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 Foskor Waste Management COP.

#### **6.2.4 General requirements for commissioning**

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

#### **6.2.5 The successful or appointed service provider shall comply with the latest revisions of the following Foskor CTD's (Critical task Descriptions) (CTD's are available on request):**

- i. Not applicable

#### **6.2.6 Sub-Contracting and joint ventures**

The primary aspect of the works may not be subcontracted. For subcontracting the relevant companies supporting documentation needs to support the bidder's tender.

Joint Ventures must be declared in the bidder's tender with all relevant supporting documentation.

### **6.3 SCOPE**

#### **6.3.1 Basic Requirement**

- Obtain work permit
- All work includes all tools, labour, equipment, Transport, Supervision, Quality management, Project communication and management, etc

The work of this project covers the supply (unless otherwise specified), manufacture, transport to Foskor mine in Phalaborwa, installation, testing, and commissioning of the complete electrical requirements as indicated below. The Contractor will also supply the test certificates for the installation.

#### **6.3.2 Excavation outside the Wegsteek Substation**

Excavate the area outside the Wegsteek substation as indicated in Section A of the Pricing Schedule to expose the cables currently feeding the PSZ substation



### **6.3.3 Wegsteek to MS-1 substation cables installation**

Install the cables between the Wegsteek and MS-1 substations as indicated in Sections B to D of the Pricing Schedule

### **6.3.4 MS-1 to PSZ substations cables installation**

Install the cables between the MS-1 and PSZ substations as indicated in **Section E** of the Pricing Schedule

### **6.3.5 MS-1 to Drier 4&5 substations cable installation**

Install the cable between the MS-1 and Drier 4&5 substations as indicated in **Section F** of the Pricing Schedule

### **6.3.6 MS-1 to Conveyor 101 substations cable installation**

Install the cable between the MS-1 and Conveyor 101 substations as indicated in **Section G** of the Pricing Schedule

### **6.3.7 MS-1 to Secondary East substations cable installation**

Install the cable between the MS-1 and Sec. West substations as indicated in **Section H** of the Pricing Schedule

### **6.3.8 MS-1 to Secondary West substations cable installation**

Install the cable between the MS-1 and Sec. West substations as indicated in **Section I** of the Pricing Schedule

### **6.3.9 MS-1 to Primary East substations cable installation**

Install the cable between the MS-1 and Pri. East substations as indicated in **Section J** of the Pricing Schedule

### **6.3.10 MS-1 to Compressors RMU and transformer bay 82 cables installation**

Install the cables between the MS-1 substation and the Compressors RMU and transformer bay 82 as indicated in **Section K** of the Pricing Schedule

### **6.3.11 MS-1 to Workshops Transformer (bay 81) cables installation**

Install the cables between the MS-1 substation and Transformer (bay 81) as indicated in **Section L** of the Pricing Schedule

### **6.3.12 Kwena (or equivalent) anti-theft earthing conductors for earth continuity**

Install the earthing conductors for all the installations between the MS-1 and the upstream and downstream substations as indicated in **Section M** of the Pricing Schedule

### **6.3.13 Test and Commissioning**

Test and commission the installation of all the cables above before handover to the Foskor Engineer as indicated in **Section N** of the Pricing Schedule

At the completion of all the installation, all test results will form part of the project handover.

## 7 **PROJECT URGENCY**

Project urgency is defined below:

Project urgency will be discussed after the project is awarded to the successful bidder. The project will be executed according to a pre-approved project schedule.

## 8 **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

## 9 **BATTERY LIMITS – INCLUSIONS AND EXCLUSIONS**

Not Applicable.

## 9.1 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	C	2.1 Labour	C	3.1 Plan, Management, QA, QC	C	4.1 Site Security	C	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	C	2.2 Materials	C	3.2 All quality test Civil, Paint, Mechanical, etc	C	4.2 Foskor ID Card	C	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	C				
1.4 Change rooms	C	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	F F	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		
						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

**9.2 ADDITIONAL BOUNDARIES**

Contractor to take note of allowable working times and plan accordingly. The normal work hours are from 7 am to 4 pm, the contractor may work to 6 pm upon application and granting of permission but at no point exceed gazetted allowable working hours, nor work at night

**10 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

**11 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 provider’s 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

## 11.1 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

### 11.1.1 QUALITY FILE INDEX

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

## Contents

Issued for Construction (IFC) drawings – Approved.....	1
Quality Control Plan (QCP) Approved.....	2
Competency of People – Welder Qualifications, Trade, Authorization, Certifications, etc .....	3
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
Request for inspection (RFI).....	9
As Built Drawings .....	10
Reports - Survey, etc.....	11
Punchlist/Snag list .....	12
Handover/ Occupations/ Taking over Certificates/Commissioning.....	13



## 11.2 ADDITIONAL QUALITY REQUIREMENTS

Not Applicable.

## 12 PROJECT DELIVERABLES

### 12.1 THE DELIVERABLES FOR THIS PROJECT INCLUDE:

As stipulated in the scope of work

## 12.2 DATA BOOKS

**NB! ALL CERTIFICATES AND DOCUMENTS MUST BE CROSS-REFERENCED**

## 12.3 MANUALS AND DOCUMENTATION

The following must be supplied:

- i. Three “safety manuals” containing detailed and step-by-step task descriptions for general maintenance, major component replacements and abnormal operating conditions. Task descriptions to show identified hazards and what corrective actions must be taken. (Risk assessment and safety precautions)
- ii. Three “Workshop maintenance manuals” to be supplied. The maintenance manuals must at least contain:
- iii. Three “Workshop Electrical maintenance manuals” to be supplied.
- iv. Three “Spare parts manuals” to be supplied.

## 12.4 FORMAT OF DOCUMENTS AND MANUALS

Note! - All Manuals must be in English

## 12.5 TRANSMITTAL OF DOCUMENTS AND MANUALS

Documents and Manuals to be submitted in the flowing formats:

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

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

## 12.6 PROJECT COMPLETION

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

The handover certificate will be accompanied by the following document

1. Quality file
2. Safety File
3. Manuals
4. Single line drawings and
5. Test certificates

### 13 DOCUMENTS / DRAWINGS ISSUED BY FOSKOR

Drawing or Document No	Title	Revision
	Txxx-25_MS-1 Cables Installation Project _Scope of Work	
	MS-1 Cables Installation Project _Pricing Schedule	
EC1	Conditions for Install test & commission Electrical Equipment	Rev 4
GE-1	Design Criteria for Electrical Installations	Rev 8
<b>Note</b>	Please read your Scope of Work	

### 14 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

#### 14.1 ADDITIONAL REQUIREMENTS

None

### 15 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

**Note. Not submitting the required documentation or not completing the documentation (Pricing Schedule) correctly will lead to a disregard of the tender.**

## 16 SAFETY

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

- i. 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.
- ii. A service provider 2.9.2 to be permanently on-site.
- iii. 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 Foskor Phalaborwa site with effect from 1 April 2014. This training is not presented by the Foskor 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 Foskor 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. Assessor's signature
  - g. Training provider logo
  - h. Training provider registration number and accreditation number.
  - i. Seta logo

## 17 **ENVIROMENTAL**

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 (To be submitted by the successful applicant in line with this contract).
  - ii. Environmental Objectives and Targets (To be submitted by the successful applicant in line with this contract).
  - iii. Waste Management Plan (To be submitted by the successful applicant in line with this contract).
  - iv. FOSKOR Atmospheric Emissions License (Copy available to the successful applicant upon request)
  - v. FOSKOR Waste Management Licence (Copy available to the successful applicant upon request)
  - vi. FOSKOR Water Use Licence (Copy available to the successful applicant upon request)

## **18 LEGISLATIVE REQUIREMENTS – SUMMARY**

### **18.1 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. Foskor (Pty) Ltd. COP (Code of Practise) No. 25 for Service Provider Control (Available on request)
- v. Foskor (Pty) Ltd. COP (Code of Practise) No. 59 for Trackless Mobile Machinery (Available on request)
- vi. All Foskor (Pty) Ltd. safety, health, quality, and environmental procedures applicable to the successful application of the contract. (Available on request)
- vii. All Foskor procedures and policies apply to the successful application of the contract. (Available on request)

## **18.2 SUMMARISED REQUIREMENTS/EXTRACTS FROM FOSKOR COP'S**

### **18.2.1 Before entering and operating a service vehicle (Own vehicle) on the Foskor 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 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.

(Contact the Foskor 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 Foskor premises:
  - a. Obtain permission from the Foskor Safety & Security manager to operate his nominated service vehicle/s or trailers on the Foskor site. (Forms will be provided)
  - b. Obtain a certificate of fitness from the Foskor Light Vehicle maintenance workshop supervisor or appointed a Foskor 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 Foskor standard (COP 59) to ensure that they are safe and fit for use. (Forms will be provided)

See Foskor COP 59, Trackless Mobile Machinery for details.

### **18.2.2 Before entering and working on the Foskor 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.

### **18.2.3 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.

## 19 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:

19.1.1.1 First aid level 1 (Provide own training)

- 19.1.1.2 Working at heights (Provide own training)
- 19.1.1.3 Basic Health & Safety Principals (Provide own training)
- 19.1.1.4 HIRA (Provide own training)
- 19.1.1.5 Basic firefighting. (Provide own- or receive Foskop training, contact [trainingbookings@foskor.co.za](mailto:trainingbookings@foskor.co.za) or 015 789 2531 to book)
- 19.1.1.6 Lockout. (Provide own- or receive Foskop training, contact [trainingbookings@foskor.co.za](mailto:trainingbookings@foskor.co.za) or 015 789 2531 to book)

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 email proof of training and certificates to [johanfo@foskor.co.za](mailto: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 Foskop site induction training at the Foskop Security office.
- x. 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.
- 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 Foskop MHSA 2.13.1 appointee and signed by all of the service providers employees. Make use of Foskop'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 Foskop'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 Foskop 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.

## 20 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 relevant area responsible safety representative as indicated by Foskor in the Kick-off Meeting

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

## 20.1 **FOSKOR SAFETY FILE INDEX - TYPICAL**

### 20.1.1 **Template SHE FILE INDEX: - TYPICAL**

<u>ISO clause / Description of item</u>	<u>File divider</u>
1. Integrated Management System. Clause 5.1 & 5.2	1
2. Policies Clause 5.2: OH&S Policies	2
3. COP 1: Foskor risk management Clause 6.1.2.1 & 6.1.2.2: Hazard identification, risk assessment and determining controls.	3
4. COP 88: Objectives, targets, and management programmes Clause 6.2: Objectives and programs	4
5. COP 2: Compliance obligations and appointments COP 5: Health and safety representatives, Clause 5.3: Legal and other requirements Clause 5.3 / 7.1: Resources, roles, responsibility, accountability and authority Clause 6.1.3: compliance obligations/ legal and other requirements	5
6. COP 15: SHERQ Competency and awareness training Clause 7.2 / 7.3: Competence, training, and awareness	6
7. COP 17: Mobile, technical and process training Clause 7.2 / 7.3: Competence, training, and awareness	7
8. COP 6: SHERQ Committees COP 7: Communication Clause 7.4: Communication, participation, and consultation	8
9. OCCUPATIONAL HYGIENE COP 42: Lighting: natural and artificial. COP 43: MCOP Occupational health programme on thermal stress COP 44: Sanitation plant hygiene amenities COP 45: MCOP occupational health program on personal Exposure to Air borne Pollutants COP 64: Ergonomics COP 86: MCOP for Occupation Health Program for noise	

Clause 8.1.2 Eliminating hazards and reducing OH&S risks	9
10. COP 49: Waste management	
COP 58: Hazardous chemical substances and control Hazchem and waste management	
Clause 8.1.2 Eliminating hazards and reducing OH&S risks	10
11. COP 53: Lock out system and usage	
Clause 8.1.1 General	
Clause 8.1.2 Eliminating hazards and reducing OH&S risks	11
12. COP 55: Stair walkways handrails and Ladders	
Clause 8.1 Operational planning and control,	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	12
13. COP 56: Lifting machinery and lifting Tackle	
Clause 8.1 Operational planning and control,	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	13
14. COP 57: Boilers and vessels under pressure work forms	
Clause 8.1 Operational planning and control,	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	14
15. COP 59: MCOP for the operation of TMM's	
Clause 8.1 Operational planning and control,	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	15
16. COP 60: Portable electrical equipment checks and registers	
Clause 8.1 Operational planning and control,	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	16
17. COP 61: Earth leakage Relays and checks	
Clause 8.1 Operational planning and control,	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	17
18. COP 62: General Electric installations and machinery in hazardous locations	
Clause 8.1 Operational planning and control,	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	18
19. COP 63: Hand tools	
Clause 8.1 Operational planning and control,	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	19
20. COP 65: Personal Protective Equipment	
COP 67: MCOP Women in mining PPE	
Clause 8.1 Operational planning and control	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	20
21. COP 69: Maintenance of fire equipment	
Clause 8.1 Emergency preparedness and response,	
Clause 8.1.2 Eliminating hazards and reducing OH&S	21



22. COP 72: Firefighting emergency drill and instructions	
COP 74 Emergency preparedness and response	
Clause 8.1 Operational planning and control,	
Clause 8.2 Emergency Preparedness and response	22
23. COP 93: MCOP for the safe use of conveyors installation for the transportation of minerals, material or personnel	
Clause 8.1 Operational planning and control,	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	23
24. COP 94: Hot work	
Clause 8.1 Operational planning and control,	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	24
25. COP 95: Confined space entry	
Clause 8.1 Operational planning and control,	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	25
26. COP 96: Working on Heights	
Clause 8.1 Operational planning and control	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	26
27. COP 97: Erection and use of scaffolding	
Clause 8.1 Operational planning and control,	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	27
28. COP 98: Water safety	
Clause 8.1 Operational planning and control,	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	28
29. COP 101: MCOP: The right to refuse dangerous work and withdraw from dangerous workplace.	
Clause 8.1 Operational planning and control	
Clause 6.1: Actions to address risks and opportunities/Hazard identification, risk assessment and determining controls.	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	29
30. COP 102: MCOP: Risk based emergency care on mine	
Clause 8.1 Operational planning and control	
Clause 8.2 Emergency preparedness and response	30
31. COP 103: Use of mobile devices on the mine premises	
Clause 6.1: Actions to address risks and opportunities/Hazard identification, risk assessment and determining controls.	
Clause 8.1 Operational planning and control	
Clause 8.2 Emergency preparedness and response	31
32. COP 22: SHEQ Inspection	
Clause 8.1 Operational planning and control	
Clause 8.2 Emergency preparedness and response	32

33. COP 23: Internal and external audit.  
 Clause 9.2 Internal audit  
 Clause 9.2.1 general and 9.2.2 internal audit programme.

33

**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
3. A FOSKOR representative may add or remove any other FOSKOR safety, health, quality, and environmental policies and/or procedures deemed applicable.
4. If a COP is not applicable to this contract/project, please complete and attach the “Not applicable” form in the space of the COP

**20.2 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 successful bidder / service provider can obtain updated Foskor COP's and Engineering Specification on request from Dinah Siska at the Projects Department on 015 789 2005 or [dinahs@foskor.co.za](mailto:dinahs@foskor.co.za).

### 20.3 **REMINDER OF RISK IDENTIFICATION – LIFE SAVING RULES**

Adherence to the Foskor lifesaving rules is mandatory and should be communicated. The lifesaving rules are as follows:

- *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!

## 20.4 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, Foskop 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 Foskop 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 Foskop Regulation 2.9.2, Regulation 2.6.1, or legally appointed person.	Direct supervision of Foskop appointed Regulation 2.9.2. and Regulation 2.6.1	Direct supervision of Foskop 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 Foskop is required unless Specialists or Product experts. Return Permit to Security when work is complete	Permit to work at Foskop Permanent ID at security Return Permit to Security when work is complete	Permit to work at Foskop Permanent ID at security Return Permit to Security when work is complete
Induction	SHERQ Induction pamphlet only	Attend full Foskop Induction Site Specific Induction SHE Induction Pamphlet	Attend full Foskop Induction Site Specific Induction SHE Induction Pamphlet	Attend full Foskop Induction Site Specific Induction SHE Induction Pamphlet	Attend full Foskop 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

## 21 PARAMETERS

### 21.1 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

### 21.2 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 Requirements
- Occupational Health and Safety Act (Act 85 of 1993)
- Mine Health and Safety Acts and regulations (Act 29 of 1996)
- Explosive Acts and Regulations - South Africa
- DWS and the National Water Act.
- Foskor COP's and applicable General SHEQ Requirements
- Foskor Engineering Specifications
- Chamber of Mines / Mine Council SHEQ Requirements (Milestones)
- Atmospheric Emissions Licence - 13/2/AEL-02 Requirements
- 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%.**

### 21.3 SITE GEOGRAPHY

The plant is located at Phalaborwa, Limpopo, South Africa

### 21.4 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

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

DOC. No.:	DESCRIPTION:	REVISION:
	Engineering Specification Index	
GS001	General Design Information	1
GS002	Engineering drawings	0
GS003	Quality control procedures for general fabrications	0
GS004	Site work associated with civil construction works.	0
GS005	Concrete and formwork	0
GS006	Masonry and building work.	0
GS007	Plate and workshop fabrications	0
GS008	Welding standards and procedures	0
GS009	Structural fabrication and erection.	0
GS010	General Mechanical Equipment Future	0
GS011	Piping	0
GS012	Pressure vessels	0
GS013	Painting and Protective coatings	0
GS014	Rubber lining	0
GS015	Fencing	0
GS016	Roofing and side cladding	0
GS017	Fuel for use in combustion engines	0
GS018	Lubrication	0
GS019	Bund walls for liquid containment	0
GS020	General Purpose Valves	0
GS021	Gearboxes	0
GS022	Chain block and Level Hoist	0
GSI-004	Field Instrumentation Standards	0

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

## 21.6 SPECIFICATION

ELECTRICAL SPECIFICATIONS		
NUMBER	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

## 21.7 ADDITIONAL SPECIFICATIONS IF REQUIRED

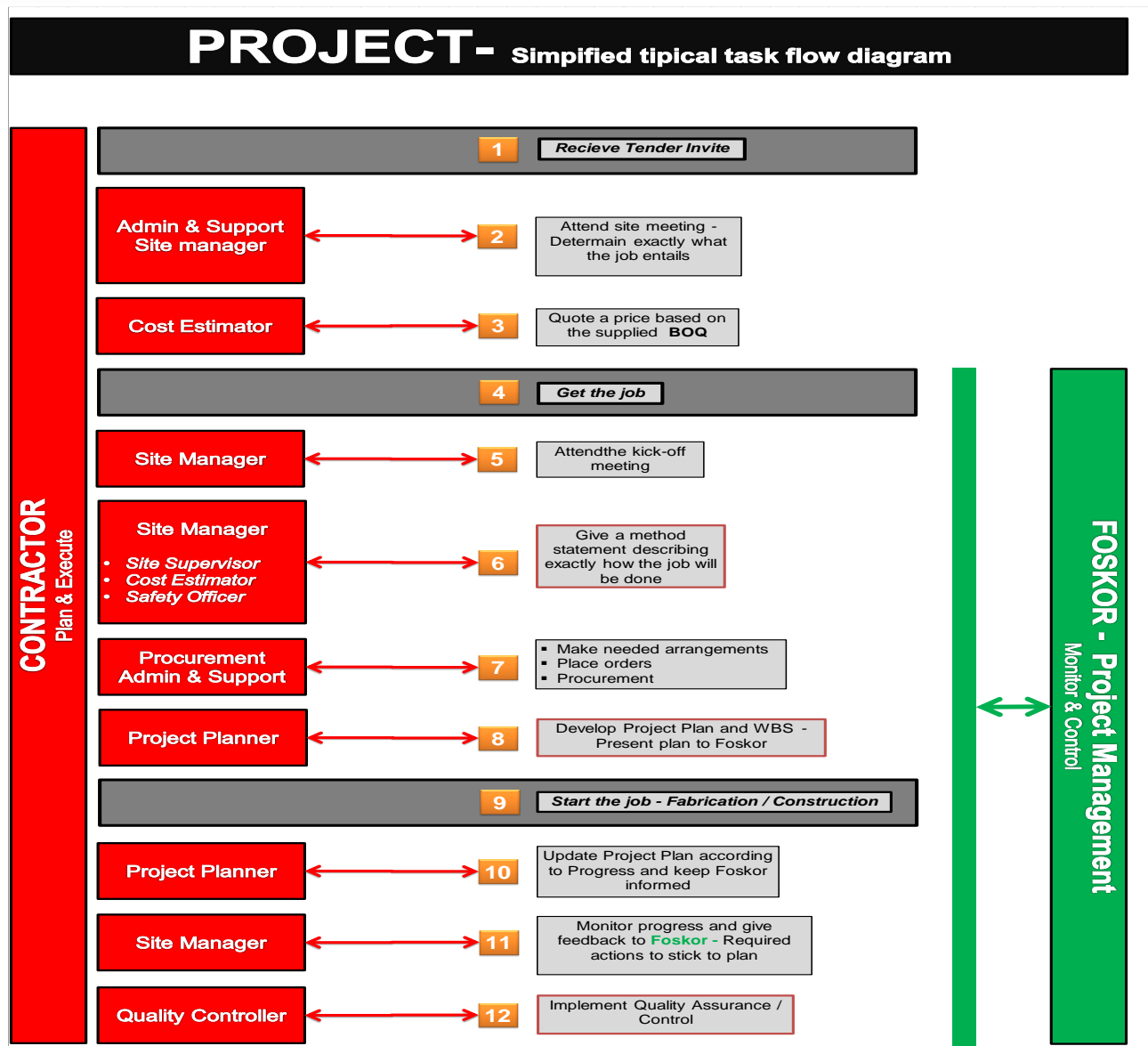
- Not Applicable.

## 22 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.





### 22.1 ADDITIONAL PROJECT MANAGEMENT REQUIREMENTS:

- None

### 23 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 template 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.

### **23.1 TYPICAL ASPECT THAT NEEDS 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 Scheduler
- 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.

### **23.2 LIAISON AND CO-OPERATION WITH OTHERS**

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

## **24 GENERAL CONDITIONS – COMMERCIAL**

### **24.1 EXTENSIONS, PENALTIES AND RETENTIONS**

- a) 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
- b) 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	10 % of Contract value	Release after 12 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.

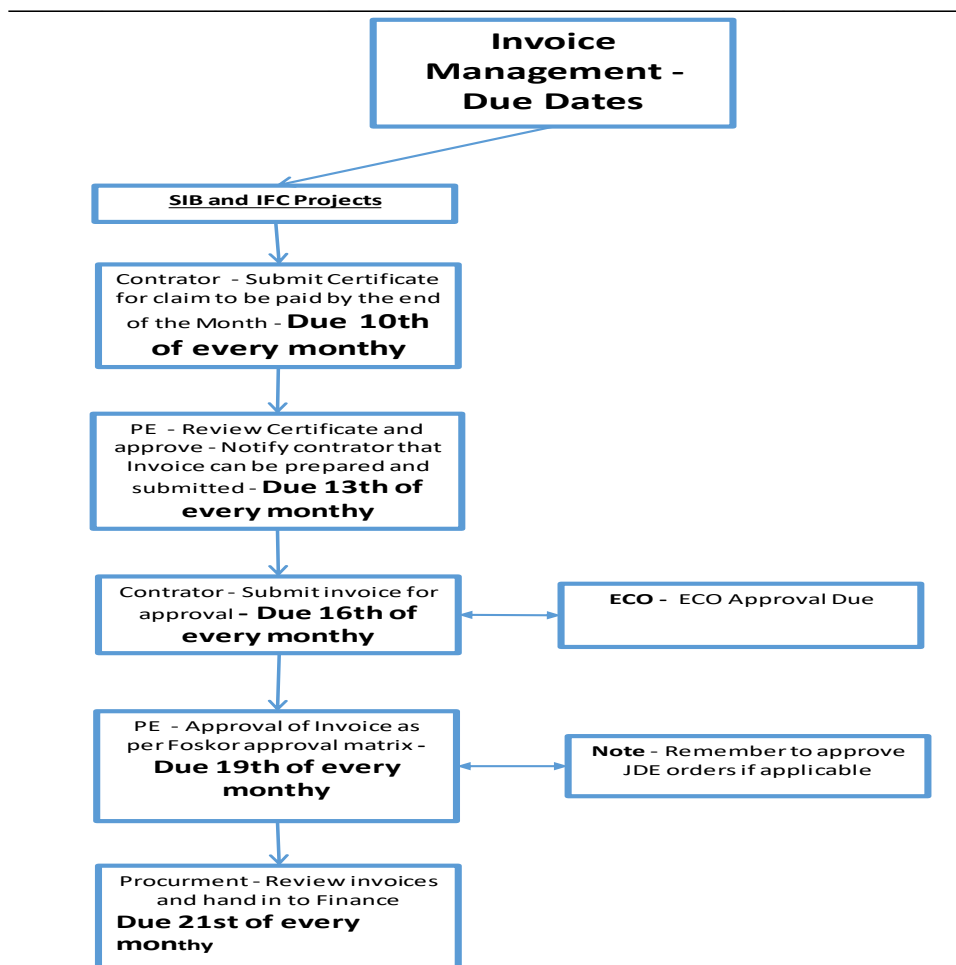
## 25 AFTER SALES SERVICE OR REQUIREMENTS

### 25.1 AFTER SALES SERVICE REQUIREMENTS ARE LISTED BELOW:

- Full description of guarantee and guarantee period to be attached to the official tender
- Full description of planned support during AND after the guarantee period to be attached to the official tender.

## 26 INVOICE DUE DATES

The due dates for claim certificate are the 12<sup>th</sup> of every month. Invoices are due the latest the 15<sup>th</sup> of every month.



## 27 MANDATORY DOCUMENTS

**27.1 MANDATORY DOCUMENTS**

These are the documents that needs to be submitted with the Tender

**28 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.

## 29 EVALUATION CRITERIA (TECHNICAL)

### Technical Evaluation: Txxx/25 Main Sub 1 (MS-1): XLPE (PEX) Cables Installation Project

Item	Technical Criteria Description	Proof / documents to be submitted	Annex No.	% Contribution
<b>1</b>	<b>Experience &amp; Team competence</b>			
a)	<p>Company – Previous experience in the supply, installation and commissioning of <b>Medium Voltage (MV) Projects for electrical installations</b></p> <p>Scoring:</p> <p>up to 5 MV projects = 40%</p> <p>up to 8 MV projects = 60%</p> <p>more than 8 MV projects = 100%</p>	<p>Projects <b>reference list</b> indicating the following shall be considered:</p> <p><b>1. Scope/project description</b></p> <p><b>2. Project values,</b></p> <p><b>3. contact numbers</b> for verification</p>	<u>Annexure A</u>	30%
b)	<p>Team - Capability to provide qualified team to execute the work at Foskor</p> <p>Scoring:</p> <p>Organogram meeting the requirements provided = 100%</p> <p>Organogram not meeting the requirements provided = 0%</p>	<p>Provide project team's <b>organogram</b> indicating the size of the team to execute the work in line with the delivery timeline.</p> <p><b>Highlighting</b> following:</p> <p><b>1. Job title</b></p> <p><b>2. Qualifications</b></p>	<u>Annexure B</u>	20%
<b>2</b>	<b>Company Capacity</b>			
a)	<p>Quality assurance/control plan, Quality Control</p> <p>Scoring:</p> <p>QCP provided/submitted = 100 %</p> <p>No QCP provided/submitted = 0 %</p>	Provide a generic <b>QCP for cable installation</b>	<u>Annexure C</u>	20%
b)	<p>Company - Execute construction according to a pre-approved WBS / Project Schedule</p> <p>Scoring:</p> <p>Project schedule and delivery timeline provided = 100 %</p> <p>Incomplete submission = 0%</p>	<p>Provide the following</p> <p>1. one previous (1x) <b>WBS/Project Schedule</b> from a medium voltage cable installation project</p> <p>2. Delivery timeline for this project</p>	<u>Annexure D</u>	15%
<b>3</b>	<b>Training</b>			

a)	<p>Employees qualifications and completed training</p> <p>Scoring: Training matrix meeting the requirements submitted = 100%</p> <p>Inadequate training matrix = 0%</p>	<p>Provide the <b>training matrix</b> for the team as per the Annexure B organogram indicating but not limited to the following:</p> <p>Employee qualifications (e.g. Trade), Operating Regulations (ORHVS), Cable jointing and termination certificates, etc..</p>	<u>Annexure E</u>	15%
Total Technical Score				100%

**Note: In order for the bid to be considered the bidder needs to score 70% and above, and comply to all mandatory requirements**

### 30 **COMMERCIAL EVALUATION REQUIREMENTS:**

#### 30.1 **FINANCE**

**As directed by Procurement Department – Linked to Approved Supplier database**

- a. Suppliers Account – In good standing - Supply relevant major supplier account information

**Note! Additional requirements to be defined by procurement**

### 31 **PRICING SCHEDULE**

**Tender No.:** Txxx/25

**Description:** Main Sub 1 (MS-1) : XLPE (PEX) Cables Installation Project

#### 31.1 **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	m3	–	cubic metre
hrs	–	Hours	m3.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

### 32 ACCEPTANCE

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

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

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### 33 SUB-CONTRACTOR (PLEASE PROVIDE LIST AND FUNCTION)

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**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="checkbox"/> 12 Months	<input type="checkbox"/> 24 Months
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	%

Where prices include a foreign currency rate please provide:

% of price, subject R O E  % ROE  = ZAR

ROE Base Date

**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 **T 075 -22**.

Signed at \_\_\_\_\_ on this the \_\_\_\_\_ day of \_\_\_\_\_ 2022

Signature: \_\_\_\_\_

#### Witnesses:

1. \_\_\_\_\_ Name: \_\_\_\_\_

2. \_\_\_\_\_ Name: \_\_\_\_\_

#### For and on behalf of Foskor (Pry) 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**.

#### 34 DOCUMENTED INFORMATION

DESCRIPTION	RESP.	LOCATION	FILE NAME / INDEX	RETENTION TIME (MINIMUM)
Scope of Works	Procurement	Procurement	Procurement	As per Procurement Policies and procedures



## **35 REFERENCES**

Code of Practice Foskor Risk Assessment (COP 01).

Quality Management Systems – Requirements (ISO 9001:2015).

Environmental Management Systems – Requirements with guidance for use (ISO 14001:2015).

Occupational Health and Safety Systems – (ISO 45001)