



NEC3 Engineering and Construction

Short Contract (ECSC3)

A contract between

Eskom Holdings SOC Ltd (Reg No. 2002/015527/30)

and

for

Civil; Building work, Terrace Extension and Access Road Establishment for Klipspruit Substation

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Compiled in accordance with CIDB Standard for Uniformity in Construction Procurement (May 2010 amendments)

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Documentation prepared by:

C1 Agreements & Contract Data

C1.1 Form of Offer and Acceptance

Offer

The Employer, identified in the Acceptance page signature block on the next page, has solicited offers to enter into a contract for the procurement of:

KLIPSPRUIT SUBSTATION TRANSFORMER UPGRADE

The tenderer, identified in the signature block below, having examined the documents listed in the Tender Data and addenda thereto as listed in the Tender Schedules, and by submitting this Offer has accepted the Conditions of Tender.

By the representative of the tenderer, deemed to be duly authorised, signing this part of this Form of Offer and Acceptance the tenderer offers to perform all of the obligations and liabilities of the Contractor under the Contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the conditions of contract identified in the Contract Data.

The offered total of the Prices exclusive of VAT is	R
Value Added Tax @ 15% is	R
The offered total of the Prices inclusive of VAT is	R
(in words)	

This Offer may be accepted by the Employer by signing the form of Acceptance overleaf and returning one copy of this document including the Schedule of Deviations (if any) to the tenderer before the end of the period of validity stated in the Tender Data, or other period as agreed, whereupon the tenderer becomes the party named as the Contractor in the conditions of contract identified in the Contract Data.

Signature(s)

Name(s)

Capacity

**For the
tenderer:**

(Insert name and address of organisation)

Name &
signature of
witness

Date

Tenderer's CIDB registration number:

Acceptance

By signing this part of this Form of Offer and Acceptance, the Employer identified below accepts the tenderer's Offer. In consideration thereof, the Employer shall pay the Contractor the amount due in accordance with the conditions of contract identified in the Contract Data. Acceptance of the tenderer's Offer shall form an Agreement between the Employer and the tenderer upon the terms and conditions contained in this Agreement and in the Contract that is the subject of this Agreement.

The terms of the Contract, are contained in:

Part 1 Agreements and Contract Data, (which includes this Form of Offer and Acceptance)

Part 2 Pricing Data

Part 3 Scope of Work: Works Information

Part 4 Site Information

and drawings and documents (or parts thereof), which may be incorporated by reference into the above listed Parts.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Tender Schedules as well as any changes to the terms of the Offer agreed by the tenderer and the Employer during this process of Offer and Acceptance, are contained in the Schedule of Deviations attached to and forming part of this Form of Offer and Acceptance. No amendments to or deviations from said documents are valid unless contained in this Schedule, which must be signed by the duly authorised representative(s) for both parties.

The tenderer shall within one week of receiving a completed copy of this Agreement, including the Schedule of Deviations (if any), contact the Employer's agent (whose details are given in the Contract Data) to arrange the delivery of any securities, bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the conditions of contract identified in the Contract Data at, or just after, the date this Agreement comes into effect. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this Agreement.

Notwithstanding anything contained herein, this Agreement comes into effect on the date when the tenderer receives one fully completed and signed copy of this document, including the Schedule of Deviations (if any) together with all the terms of the contract as listed above.

Signature(s)

Name(s)

Lee Mchunu

Capacity

Middle Manager- Programme Management

for the
Employer

25 Valley View Road, New Germany, 3620

Name &
signature of
witness

Date

Note: If a tenderer wishes to submit alternative tender offers, further copies of this document may be used for that purpose, duly endorsed, 'Alternative Tender No. _____'

Schedule of Deviations

Note:

1. To be completed by the Employer prior to award of contract. This part of the Offer & Acceptance would not be required if the contract has been developed by negotiation between the Parties and is not the result of a process of competitive tendering.
2. The extent of deviations from the tender documents issued by the Employer prior to the tender closing date is limited to those permitted in terms of the Conditions of Tender.
3. A tenderer's covering letter must not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid be the subject of agreement reached during the process of Offer and Acceptance, the outcome of such agreement shall be recorded here and the final draft of the contract documents shall be revised to incorporate the effect of it.

No.	Subject	Details
1		
2		
3		
4		
5		
6		
7		

By the duly authorised representatives signing this Schedule of Deviations below, the Employer and the tenderer agree to and accept this Schedule of Deviations as the only deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Tender Schedules, as well as any confirmation, clarification or changes to the terms of the Offer agreed by the tenderer and the Employer during this process of Offer and Acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the tenderer of a completed signed copy of this Form shall have any meaning or effect in the contract between the parties arising from this Agreement.

For the tenderer:

For the Employer

Signature _____

Name _____

Lee Mchunu

Capacity _____

Middle Manager- Programme Management

On behalf
of _____

25 Valley View Road, New Germany, 3620

Name &
signature
of witness _____

Date _____

C1.2 Contract Data

Data provided by the *Employer*

Clause	Statement	Data
General		
10.1	The <i>Employer</i> is (Name):	Eskom Holdings SOC Ltd (reg no: 2002/015527/30), a state owned company incorporated in terms of the company laws of the Republic of South Africa
	Address	Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg
10.1 & 14.4	The <i>Employer's</i> representative to whom the <i>Employer</i> in terms of clause 14.4 delegates his actions ¹ is (Name):	Vereen Reddy
	Address	25 Valley view Road New Germany
	Tel No.	33 395 3981
	Fax No.	0866684369
	E-mail address	ReddyVE@eskom.co.za
11.2(11)	The <i>works</i> are	BULK EARTWORKS, DRAINAGE AND READ- WORKS TO ESTABLISH A SUBSTATION PLATFORM
11.2(13)	The Works Information is in	the document called 'Works Information' in Part 3 of this contract.
11.2(12)	The Site Information is in	the document called 'Site Information' in Part 4 of this contract.
11.2(12)	The <i>site</i> is	Klipspruit sub-station
30.1	The <i>starting date</i> is.	TBC
11.2(2)	The <i>completion date</i> is.	TBC
13.2	The <i>period for reply</i> is	2 weeks
40	The <i>defects date</i> is	52 weeks after Completion
41.3	The <i>defect correction period</i> is	2 weeks
50.1	The <i>assessment day</i> is the	25th of each month.
50.5	The <i>delay damages</i> are	R 1 500 per day
50.6	The retention is	10%

¹ Except those actions which can only be done by the *Employer* as a Party to the contract.

51.2	The interest rate on late payment is	0.5%
80.1	The <i>Contractor</i> is not liable to the <i>Employer</i> for loss of or damage to the <i>Employer's</i> property in excess of	the amount of the deductibles relevant to the event described in the applicable "Format ECSC3" policy available on http://www.eskom.co.za/Tenders/InsurancePoliciesProcedures/Pages/EIMS_Policies_From_1_April_2014_To_31_March_2015.aspx
82.1	The <i>Employer</i> provides this insurance	as stated for "Format ECSC3" available on http://www.eskom.co.za/Tenders/InsurancePoliciesProcedures/Pages/EIMS_Policies_From_1_April_2014_To_31_March_2015.aspx (See Annexure A for basic guidance)
82.1	The minimum amount of cover for the third insurance stated in the Insurance Table is:	whatever the <i>Contractor</i> deems necessary in addition to that provided by the <i>Employer</i> .
82.1	The minimum amount of cover for the fourth insurance stated in the Insurance Table is:	As prescribed by the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993 and the <i>Contractor's</i> common law liability for people falling outside the scope of the Act with a limit of Indemnity of not less than R500 000 (Five hundred thousand Rands)
	Does the United Kingdom Housing Grants, Construction and Regeneration Act (1996) apply?	No
93.1	The <i>Adjudicator</i> is	the person selected from the ICE-SA Division (or its successor body) of the South African Institution of Civil Engineering Panel of Adjudicators by the Party intending to refer a dispute to him. (see www.ice-sa.org.za). If the Parties do not agree on an Adjudicator the Adjudicator will be appointed by the Arbitration Foundation of Southern Africa (AFSA).
93.2(2)	The <i>Adjudicator nominating body</i> is:	the Chairman of ICE-SA a joint Division of the South African Institution of Civil Engineering. (See www.ice-sa.org.za) or its successor body
93.4	The <i>tribunal</i> is:	arbitration.
	The <i>arbitration procedure</i> is	the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.
	The place where arbitration is to be held is	South Africa
	The person or organisation who will choose an arbitrator	
	- if the Parties cannot agree a choice or	the Chairman for the time being or his nominee
	- if the arbitration procedure does not state who selects an arbitrator, is	of the Association of Arbitrators (Southern Africa) or its successor body.

The conditions of contract are the NEC3 Engineering and Construction Short Contract (April 2013)²³ and the following additional conditions Z1 to Z11 which always apply:

Z1 Cession delegation and assignment

- Z1.1 The *Contractor* does not cede, delegate or assign any of its rights or obligations to any person without the written consent of the *Employer*.
- Z1.2 Notwithstanding the above, the *Employer* may on written notice to the *Contractor* cede and delegate its rights and obligations under this contract to any of its subsidiaries or any of its present divisions or operations which may be converted into separate legal entities as a result of the restructuring of the Electricity Supply Industry.

Z2 Change of Broad Based Black Economic Empowerment (B-BBEE) status

- Z2.1 Where a change in the *Contractor's* legal status, ownership or any other change to his business composition or business dealings results in a change to the *Contractor's* B-BBEE status, the *Contractor* notifies the *Employer* within seven days of the change.
- Z2.2 The *Contractor* is required to submit an updated verification certificate and necessary supporting documentation confirming the change in his B-BBEE status to the *Employer* within thirty days of the notification or as otherwise instructed by the *Employer*.
- Z2.3 Where, as a result, the *Contractor's* B-BBEE status has decreased since the *starting date* the *Employer* may either re-negotiate this contract or alternatively, terminate the *Contractor's* obligation to Provide the Works.
- Z2.4 Failure by the *Contractor* to notify the *Employer* of a change in its B-BBEE status may constitute a reason for termination. If the *Employer* terminates in terms of this clause, the procedures on termination are those stated in Clause 91.1 and the amount due on termination includes amounts listed in Clause 92.1 less a deduction of the forecast additional cost to the *Employer* of completing the *works*.

Z3 Confidentiality

- Z3.1 The *Contractor* does not disclose or make any information arising from or in connection with this contract available to others except where required by this contract. This undertaking does not, however, apply to information which at the time of disclosure or thereafter, without default on the part of the *Contractor*, enters the public domain or to information which was already in the possession of the *Contractor* at the time of disclosure (evidenced by written records in existence at that time). Should the *Contractor* disclose information to others where required by this contract the *Contractor* ensures that the provisions of this clause are complied with by the recipient.
- Z3.2 If the *Contractor* is uncertain about whether any such information is confidential, it is to be regarded as such until notified otherwise by the *Employer*.
- Z3.3 In the event that the *Contractor* is, at any time, required by law to disclose any such information which is required to be kept confidential, the *Contractor*, to the extent permitted by law prior to disclosure, notifies the *Employer* so that an appropriate protection order and/or any other action can be taken if possible, prior to any disclosure. In the event that such protective order is not, or cannot, be obtained, then the *Contractor* may disclose that portion of the information which it is required to be disclosed by law and uses reasonable efforts to obtain assurances that

² If June 2005 Edition applies, delete April 2013 and insert June 2005

³ State whether attached as a 'PDF' file in terms of Eskom's licence, or to be obtained from Engineering Contract Strategies Tel 011 803 3008, Fax 086 539 1902 or www.ecs.co.za.

confidential treatment will be afforded to the information so disclosed.

Z3.4 The taking of images (whether photographs, video footage or otherwise) of the *works* or any portion thereof, in the course of Providing the Works and after Completion, requires the prior written consent of the *Employer*. All rights in and to all such images vests exclusively in the *Employer*.

Z3.5 The *Contractor* ensures that all his subcontractors abide by the undertakings in this clause.

Z4 Waiver and estoppel: Add to clause 12.2:

Z4.1 Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties or their delegates or the *Adjudicator* does not constitute a waiver of rights, and does not give rise to an estoppel unless the Parties agree otherwise and confirm such agreement in writing.

Z5 Health, safety and the environment

Z5.1 The *Contractor* undertakes to take all reasonable precautions to maintain the health and safety of persons in and about the execution of the *works*. Without limitation the *Contractor*:

- accepts that the *Employer* may appoint him as the "Principal Contractor" (as defined and provided for under the Construction Regulations 2014 (promulgated under the Occupational Health & Safety Act 85 of 1993) ("the Construction Regulations") for the Site;
- warrants that the total of the Prices as at the Contract Date includes a sufficient amount for proper compliance with the Construction Regulations, all applicable health & safety laws and regulations and the health and safety rules, guidelines and procedures provided for in this contract and generally for the proper maintenance of health & safety in and about the execution of *works*; and
- undertakes, in and about the execution of the *works*, to comply with the Construction Regulations and with all applicable health & safety laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor's* direction and control, likewise observe and comply with the foregoing.

Z5.2 The *Contractor*, in and about the execution of the *works*, complies with all applicable environmental laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his subcontractors, employees and others under the *Contractor's* direction and control, likewise observe and comply with the foregoing.

Z6 Provision of a Tax Invoice and interest. Add to clause 50

Z6.1 The *Contractor* provides the *Employer* with a tax invoice in accordance with the *Employer's* procedures stated in the Works Information, showing the correctly assessed amount due for payment.

Z6.2 If the *Contractor* does not provide a tax invoice in the form and by the time required by this contract, the time by when the *Employer* is to make a payment is extended by a period equal in time to the delayed submission of the correct tax invoice. Interest due by the *Employer* in terms of clause 51.2 is then calculated from the delayed date by when payment is to be made.

Z6.3 The *Contractor* is required to comply with the requirements of the Value Added Tax Act, no 89 of 1991 (as amended) and to include the *Employer's* VAT number 4740101508 on each invoice he submits for payment.

Z7 Notifying compensation events

Z7.1 Delete from the last sentence in clause 61.1, "unless the event arises from an instruction of the *Employer*."

Z8 *Employer's* limitation of liability; Add to clause 80.1

Z8.1 The *Employer* liability to the *Contractor* for the *Contractor's* indirect or consequential loss is

limited to R0.00 (zero Rand).

Z9 Termination: Add to clause 90.2, after the words "or its equivalent":

Z9.1 or had a business rescue order granted against it.

Z10 Addition to Clause 50.5

Z10.1 If the amount due for the *Contractor's* payment of *delay damages* reaches the limits stated in this Contract Data (if any), the *Employer* may terminate the *Contractor's* obligation to Provide the Works.

If the *Employer* terminates in terms of this clause, the procedures on termination are those stated in Clause 91.1 and the amount due on termination includes amounts listed in Clause 92.1 less a deduction of the forecast additional cost to the *Employer* of completing the *works*.

Z11 Ethics

For the purposes of this Z-clause, the following definitions apply:

Affected Party	means, as the context requires, any party, irrespective of whether it is the <i>Contractor</i> or a third party, such party's employees, agents, or Subcontractors or Subcontractor's employees, or any one or more of all of these parties' relatives or friends,
Coercive Action	means to harm or threaten to harm, directly or indirectly, an Affected Party or the property of an Affected Party, or to otherwise influence or attempt to influence an Affected Party to act unlawfully or illegally,
Collusive Action	means where two or more parties co-operate to achieve an unlawful or illegal purpose, including to influence an Affected Party to act unlawfully or illegally,
Committing Party	means, as the context requires, the <i>Contractor</i> , or any member thereof in the case of a joint venture, or its employees, agents, or Subcontractors or the Subcontractor's employees,
Corrupt Action	means the offering, giving, taking, or soliciting, directly or indirectly, of a good or service to unlawfully or illegally influence the actions of an Affected Party,
Fraudulent Action	means any unlawfully or illegally intentional act or omission that misleads, or attempts to mislead, an Affected Party, in order to obtain a financial or other benefit or to avoid an obligation or incurring an obligation,
Obstructive Action	means a Committing Party unlawfully or illegally destroying, falsifying, altering or concealing information or making false statements to materially impede an investigation into allegations of Prohibited Action and
Prohibited Action	means any one or more of a Coercive Action, Collusive Action Corrupt Action, Fraudulent Action or Obstructive Action.

Z 11.1 A Committing Party may not take any Prohibited Action during the course of the procurement of this contract or in execution thereof.

Z 11.2 The *Employer* may terminate the *Contractor's* obligation to Provide the Works if a Committing Party has taken such Prohibited Action and the *Contractor* did not take timely and appropriate action to prevent or remedy the situation, without limiting any other rights or remedies the *Employer* has. It is not required that the Committing Party had to have been found guilty, in court or in any other similar process, of such Prohibited Action before the *Employer* can terminate the *Contractor's* obligation to Provide the Works for this reason.

- Z 11.3 If the *Employer* terminates the *Contractor's* obligation to Provide the Works for this reason, the amounts due on termination are those intended in core clauses 92.1 and 92.2.
- Z 11.4 A Committing Party co-operates fully with any investigation pursuant to alleged Prohibited Action. Where the *Employer* does not have a contractual bond with the Committing Party, the *Contractor* ensures that the Committing Party co-operates fully with an investigation.

Annexure A: Insurance provided by the Employer

These notes are provided as guidance to tendering contractors and the Contractor about the insurance provided by the Employer. The Contractor must obtain its own advice. Details of the insurance itself are available from the internet web link given below.

1. For the purpose of works contracts likely to be let under this contract (low value straight forward work), insurance provided by Eskom (the *Employer*) has been arranged on the basis of "**Format ECSC3**" as described on the web link given at the foot of this page.
2. Tendering contractors should note that cover provided by the *Employer* is only per the policies available on the internet web link listed below under the **Format ECSC3** and may not be the cover required by the tendering contractor or as intended by each of the listed insurances in the left hand column of the Insurance Table in clause 82.1. In terms of clause 82.1 "The *Contractor* provides the insurances stated in the Insurance Table. The *Contractor* does not provide an insurance which the *Employer* is to provide as stated in the Contract Data". Hence the *Contractor* provides insurance which the *Employer* does not provide and in cases where the *Employer* does provide insurance the *Contractor* insures for the difference between what the Insurance Table requires and what the *Employer* provides.
3. When Marine Insurance is required the *Contractor* needs to obtain a copy of the latest edition of Eskom's Marine Policies Procedures found at internet website given below.
4. **Further information and full details of all Eskom provided policies and procedures may be obtained from:**

http://www.eskom.co.za/Tenders/InsurancePoliciesProcedures/Pages/EIMS_Policies_From_1_April_2014_To_31_March_2015.aspx

Data provided by the *Contractor* (the *Contractor's Offer*)

The tendering contractor is advised to read both the NEC3 Engineering and Construction Short Contract (April 2013) and the relevant parts of its Guidance Notes (ECSC3-GN)⁴ in order to understand the implications of this Data which the tenderer is required to complete. An example of the completed Data is provided on page 31 of the ECSC3 April 2013 Guidance Notes.

Completion of the data in full is essential to create a complete contract.

10.1	The <i>Contractor</i> is (Name):	
	Address	
	Tel No.	
	Fax No.	
	E-mail address	
63.2	The percentage for overheads and profit added to the Defined Cost for people is	%
63.2	The percentage for overheads and profit added to other Defined Cost is	%
11.2(9)	The Price List is in	the document called 'Price List' in Part 2 of this contract.
11.2(10)	The offered total of the Prices is [Enter the total of the Prices from the Price List]:	R excluding VAT [in words] excluding VAT

⁴ Available from Engineering Contract Strategies Tel 011 803 3008, Fax 086 539 1902 or www.ecs.co.za.

C2 Pricing Data

C2.1 Pricing assumptions

Entries in the first four columns in the Price List are made either by the *Employer* or the tendering contractor

If the *Contractor* is to be paid an amount for the item which is not adjusted if the quantity of work in the item changes, the tenderer enters the amount in the Price column only; the Unit, Quantity and Rate columns being left blank.

If the *Contractor* is to be paid an amount for the item of work which is the rate for the work multiplied by the quantity completed, the tenderer enters the rate which is then multiplied by the expected quantity to produce the Price, which is also entered.

All Prices are to be shown excluding VAT unless instructed otherwise by the *Employer* in Tender Data or in an instruction the *Employer* has given before the tenderer enters his Prices.

If there is insufficient space in the Price List which follows, state in which document the Price List is contained.

C2.2 Price List

The Price List is as follows

SUMMARY OF BILL OF QUANTITIES - KLIPSPRUIT SUBSTATION		
Page No	Description	ESTIMATE
1	Bill No. 1 - Preliminary and General	Rate Only
2	Bill No. 2 - Control Building	
3	Bill No. 3 - Bulk Earthworks	
4	Bill No. 4 - Fencing	
5	Bill No. 5 - Additional Work	
TOTAL		

PRELIMINARY AND GENERAL:				Estimate		
ANNEXURE D		DESCRIPTION	UNIT	QTY	Rate	AMOUNT
A		FIXED CHARGE ITEMS				
A.1	Site Establishment:	The Contractor shall establish the site camp and maintain throughout the construction period and allow for removal of such upon completion of Works.				
A.1.1.		Office and Meeting Room complete as per P&G's Guideline	Sum	1		
A.1.2.		Stores	Unit	1		
A.1.3.		Sanitation	Sum	1		
A.1.4.		Electricity	Sum	1		
A.1.5.		Supply and Install Diamond mesh fencing at 1.8 Meters high including Lockable Gate 1.8m high x 3.6m wide	Sum	1		
A.1.6.		Supply and Install Diamond mesh Lockable Gate 1.8m high x 3.6m wide	each	1		
A.2.	Sign Board Labour					
A.2.1		Contractor shall erect on site, maintain throughout the construction duration	Sum	1		
A.4.	Health and Safety measures (In terms of 34-333)	Safety & Health, Environmental				
A.4.1		Compliance with OH&S Act & Construction Regulations.	Sum	1		
A.6.	Construction Plan					
A.6.1.		Contractors must allow for the preparation of a detailed programme reflecting the outage dates.	Note	1		
A.7.	Materials Management					
A.7.1		The Contractor shall make allowance to receive at Eskom stores, transport to site, offload and stack the free-issue materials supplied to the contractor.	Sum	1		
A.7.2		Once authorised by the Client, the unused materials shall be loaded, off-loaded , stacked and returned to the Eskom Store from where it originated.	Sum	1		
A.8.	Contractual requirements	Comply ,maintain all insurance and statutory contributions, etc.				
A.8.1		Allowance to Comply ,maintain all insurance and statutory contributions, etc. (This lump sum shall be divided and paid in accordance to the number of months allocated to the project)	Sum	1		
	Sub total					

B.		TIME RELATED ITEMS				
				8		
B.1	Site Estalishment					
B.1.1.		Maintain Site Office and Meeting Room complete as per P&G's quideline	Month	8		
B.1.3.		Water	Month	8		
B.1.4.		Sanitation (service)	Month	8		
B.1.5.		Electricity	Month	8		
B.2	Accomodation	Accomodation allowance is for the contractors staff excluding the casual labourers which are assumed to be residing in the area where the works are executed.				
B.2.1.		Staff Accommodation allowance	Month	8		
B.3	Security					
B.3.1.		Security on site - 24 Hour Unarmed Security (Must be registered with the appropriate body)	Month	8		
B.5.	Supervision					
B.5.1.		Supervision of the works, Contracts Manager and Driver where required.	Month	8		
B.6.	Storeman					
B.6.1.		Storeman is required to reconcile and quantify All material on site including Eskom supplied material using the correct material return to stores forms.The Storeman shall adhere to the implementation and maintenance plan for Materials Management System for the duration of the contract.	Month	8		
B.6.2.		Community Liason Officer	Month	8		
B.6.3.		Saftey Officer and Saftey Rep	Month	8		
Sub Total						
Grand Total						

BILL NO. 2 - CONTROL BUILDING				ESTIMATE	
ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	TOTAL PRICE (SA RANDS)
	EARTHWORKS				
	EXCAVATION, FILLING, ETC., OTHER THAN BULK EXCAVATION				
	<u>Excavation in earth not exceeding 2m deep</u>				
1	Raft foundation	m³	5,23		
	SOIL POISONING				
	<u>Approved brand of anti - termite poison applied by a Registered Pest Control company and guaranteed against termite infestation for ten:</u>				
1	To bottoms and sides of trenches, bases, etc.	m²	40,00		
	CONCRETE, FORMWORK AND REINFORCEMENT				
	UNREINFORCED CONCRETE				
	<u>Concrete Class B (1:4:5 - 19mm stone) including curing compound in</u>				
1	Steps and foundation	m³	0,09		
	<u>Concrete 30Mpa / 6mm stone including curing compound in:</u>				
2	Micro concrete topping	m³	0,84		
	REINFORCED CONCRETE				
	<u>25MPa concrete including curing compound</u>				
3	Raft foundation	m³	12,50		
4	Roof slab	m³	8,30		
	CONCRETE SUNDRIES				
	<u>Test cubes, etc.</u>				
5	Making and testing 150 x 150 x 150mm concrete strength test cube and complete with certificate. (Provisional)	No.	8,00		
	<u>Finish top of concrete smooth with a wood float :</u>				
6	Surface beds, slabs, etc.	m²	68,65		
	<u>Precast concrete</u>				
7	500 x 500 x 50mm Precast concrete slab	No.	1,00		
8	110 x 85mm Lintels in lengths not exceeding 3m over openings	m	1,60		

	SMOOTH FORMWORK (DEGREE OF ACCURACY I)				
	<u>Smooth formwork to soffits</u>				
1	Slabs propped up exceeding 1,5m and not exceeding 3,5m high	m²	42,00		
2	To edges, risers and ends not exceeding 300mm high	m	9,00		
	<u>Boxing in smooth and fair formwork to form</u>				
3	25 x 25mm Chamfer along top or bottom edge.	m	17,00		
	REINFORCEMENT				
	<u>High tensile reinforcement</u>				
1	Type ref 617 BRC weldmesh reinforcement in foundations top and bottom - 50mm cover	m²	121,00		
	<u>Mild steel reinforcement</u>				
2	Type R10 reinforcement	t	0,05		
3	Type Y12 reinforcement	t	0,25		
	MASONRY				
	BRICKWORK IN SUPERSTRUCTURE				
	<u>Brickwork of FBX Corobrik Firelight Satin facebricks in class II mortar</u>				
1	280mm Hollow walls for two half skins including galvanised 'butterfly' wall ties. Brickforce and concrete infill measured elsewhere.	m²	78,00		
	FACE BRICKWORK				
	<u>17Mpa Min firelight satin facebrick laid fairface with pointed joints finish:</u>				
3	Extra over brickwork for facing	m²	104,00		
	BRICKWORK SUNDRIES				
	<u>Brickwork sundries</u>				
4	Closing 50mm cavity of hollow wall vertically with brickwork half brick wide	m	25,00		
5	Splayed mortar fillet one course high in 50mm cavity	m	25,00		
	<u>Brick reinforcement :</u>				
6	150mm Wide reinforcement built in horizontally	m	195,00		
	<u>Bagging of 1:4 cement and sand mixture :</u>				
7	On brickwalls.	m²	78,00		
	<u>Precast concrete lintels</u>				
8	110 x 85mm Lintels in lengths not exceeding 3m over openings	No.	4,00		

WATERPROOFING					
DAMP-PROOFING TO WALLS AND FLOORS					
<u>One layer 375 microns Gunplas "Brikrip" embossed polythelene damp proof course</u>					
1	In walls	m²	17,00		
<u>One layer 375 microns "Gundle" USB Green on:</u>					
	Under surface beds	m²	3,60		
<u>One layer 250 microns "Gundle" USB Green on:</u>					
2	Under surface beds	m²	50,00		
<u>ABE "Brickseal" bitumen emulsion waterproof coating:</u>					
3	On bagged brick walls.	m²	78,00		
WATERPROOFING TO ROOF, BASEMENT, ETC.					
<u>4mm "Index Fidra MS" by ABE waterproofing:</u>					
4	On flat roofs	m²	41,45		
METALWORK					
<u>Pressed Steel Doors & Frames</u>					
1	2610 x 1595mm Galvanised steel double control room door complete with frame near lower hinges and one M12 x 30mm earth stud to each door leaf, see drawing no. XPANDA ESKOM DOORS (ES04)	No.	1,00		
2	25 x 25 x 3mm Galvanised MS angle, 1600mm long, set into floor slab for doors	No.	1,00		
PLASTERING					
<u>SCREEDS</u>					
<u>Screeds on concrete:</u>					
1	Variable thickness (50mm to 100mm) laid to falls, on roof slab to receive waterproofing membrane	m²	42,00		
INTERNAL PLASTER					
<u>15mm Thick cement plaster (1:4) on:</u>					
2	Walls	m²	78,00		
PLUMBING AND DRAINAGE					
RAINWATER GOODS					
1	Supply and install 150mm longspan aluminium gutters with 6 eaves brackets.	m	5,00		
2	Extra over for eaves gutter for outlet for 50 x 75mm downpipe	No.	1,00		
3	50 x 75mm aluminium down pipe.	m	4,00		
4	Extra over for 150 x 100mm profile eaves gutter for stoppend	No.	2,00		
5	Drip groove	m	28,00		

	MECHANICAL WORK				
	HEATING, VENTILATION AND AIR CONDITIONING				
	<u>The supply and installation of roof ventilators:</u>				
1	250mm diameter "supervent" roof ventilators	No.	2,00		
	ELECTRICAL WORK				
	<u>Electrical Installation</u>				
1	Electrical installation to control room; including cables, conduiting, wiring, fittings, distribution boards, etc. as per dwg no. ER00690 19-04-00	Sum	1,00		
	<u>600 x 50mm HDG GS50 'GRIDSPAN' O-line or equal wire mesh tray</u>				
2	Fixed to support arm at 800mm centres with 'Gridspan' bracket and screws	m	23,00		
3	Fixed to 41,3 x 20,6 x 2,5mm OL3300 HDG channel fixed to wall with m8 x 100mm CSK EXP bolts at 800mm centres	m	9,00		
4	50 x 3mm Flat copper bar earth strap and fixed to cable racking with gridspan brackets and screws at 1000mm centres and connect to earth mat	Item	1,00		
	PAINTWORK				
	<u>Two coats 'Wall and All' - White WAA 1 on:</u>				
1	Walls	m²	137,00		
	<u>Two coats 'Plascon Polvin' - White PVA on:</u>				
2	Concrete ceiling	m²	30,00		
	<u>Three coats high durable epoxy floor paint - grey on:</u>				
3	Floors	m²	20,00		
	Certificates				
1	Concrete work, Test Certificates, compaction	Sum	1,00		
TOTAL					

BILL NO. 3 - BULK EARTHWORKS				ESTIMATE	
ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	TOTAL PRICE (SA RANDS)
	EXTERNAL WORK <i>Contractor is to undertake site survey and quantity verification and price accordingly.</i>				
	SITE CLEARANCE, ETC <u>Site Clearance</u>				
1	Clear site of trees, shrubs, debris etc and dispose, where instructed by Environmental Compliance officer and given in writing by the Engineers Representative.	m ²	700,00		
	LANDSCAPING <u>Contouring</u>				
2	Preparation of site and stripping of topsoil and grass to a depth of 150mm and stockpile (Incl. terrace area & access road). <i>To be stockpiled in an accessible position adjacent to the site. Stockpile to be separate from the "Cut to spoil" stockpile.</i>	m ³	177,85		
3	Cut to spoil in all materials, measured in cut (provisional). <i>To be stockpiled in an accessible position adjacent to the site. Stockpile to be separate from the "Topsoil" stockpile. Stockpile to be contained to prevent erosion as per the detailed specification.</i>	m ³	80,00		
	<u>Rockery boulders</u>				
4	Supply and spread 100mm thick layer of 26mm grade granite, tillite or dolerite stone chips to the yard from commercial sources and lightly compact to set levels	m ³	70,00		

	ROADWORK & YARD PLATFORM				
	<u>Excavations, filling, base courses, etc</u>				
5	Borrow to fill G8 material compacted to 93 % of modified AASHTO maximum density	m ³	30,00		
6	G7 material sub-base layer compacted in layers to 93 - 95% Mod. AASHTO density.	m ³	138,19		
7	G4 gravel wearing course compacted to 95 - 98% Mod. AASHTO density.	m ³	138,19		
	<u>Surface finishes</u>				
8	Spreading of Topsoil stockpile over the fill banks as per the detailed specification	m ²	100,00		
	<u>Source of Materials (Including topsoil, sands, natural gravels, crushed stone, clay liners, etc)</u>				
9	Contractor to comply with the EMP in terms of providing a source statement, signed document from the supplier of natural materials and all other necessary documentation as stipulated in the EMP under "Checklist - Construction Phase"	Sum	1,00		
	<u>Extra over Earthworks for excavation of boulders and hard rock (provisional).</u> <u>All rock and boulder holes to be verified by the Project Engineer prior to excavation.</u>				
10	Hard Rock (Provisional)	m ³			
11	Soft Rock (Provisional)	m ³			
	<u>Channelling, kerbing, edging, etc</u>				
12	Figure 6 mountable precast kerbing as per Eskom Standard	m	263,00		
	<u>Equipment Foundations</u> <i>Casting of Support Foundations (incl. the supply delivery and installation of all holding down bolts, nuts and steel reinforcement).</i>				
18	Earth point foundations	No.	8,00		
	REHABILITATION				
13	Site rehabilitation	m ²	500,00		
				TOTAL	

BILL NO. 4 - Fencing				ESTIMATE	
ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	TOTAL PRICE (SA RANDS)
	ALTERATIONS				
	<u>Taking down and removing</u>				
1	Dismantle existing perimeter fence	m	251		
2	Dismantle existing palisade fence (and keep for re-use)	m	123		
	<u>Alterations to existing work</u>				
3	Install steel palisade fence obtained from existing, including one gate and gate posts	m	113		
4	Refurbish existing toilet	Sum	1		
	FENCING				
	<u>Fencing, posts, gates, etc</u>				
1	Supply and install new galvanised steel palisade fencing complete with corner posts and fence posts	m	41,00		
2	Diamond Mesh Gate (6 meter)	No.	1,00		
3	Supply and install Diamond mash fencing complete with corner posts and fence posts	m	251,00		
				TOTAL	

BILL NO. 5 - ADDITIONAL WORKS				ESTIMATE	
ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	TOTAL PRICE (SA RANDS)
	<u>Additional Works</u>				
	Personnel				
1	Engineer	hour			Rate only
2	Technician	hour			Rate only
3	Surveyor	hour			Rate only
4	Site Manager	hour			Rate only
5	Site Foreman	hour			Rate only
6	Health & Safety Officer	hour			Rate only
7	Community Liaison Officer	hour			Rate only
8	Environmental Practitioner	hour			Rate only
9	Archaeologist	hour			Rate only
10	Artisan	hour			Rate only
11	Skilled labour	hour			Rate only
12	Semi-skilled labour	hour			Rate only
	Plant and Equipment				
13	8 ton Truck	km			Rate only
14	8 ton Truck with crane	km			Rate only
15	4 ton Truck	km			Rate only
16	4x4 Bakkie	km			Rate only
17	2x4 Bakkie	km			Rate only
18	Drilling Rig	km			Rate only
19	Compressor	hour			Rate only
20	Concrete mixer	hour			Rate only
21	Backactor	hour			Rate only
22	Excavator	hour			Rate only

C3: Scope of Work

C3.1 Works Information

The purpose of this contract is to facilitate the bulk work earthworks, drainage and read works to establish a substation for the Asset Creation Section of Distribution within the KZN Operating Unit.

This contract will facilitate ease of appointment of contractors who prequalify according to the Conditions of Tender as advertised. The contract will be awarded to a contractor according to PPPFA basis.

This project shall be carried out in full accordance with this detailed scope of work, all other technical specifications referred to and the relevant drawings provided by Eskom (refer attachments). This project shall conform in all instances to the Occupational, Health and Safety Act and Regulations, No. 85 of 1993, and any amendments thereto, including the Safety Specification referred to in Regulation 4 of these statutory requirements. The contractor shall provide a Health and Safety Plan in compliance with the Occupational, Health and Safety Act and Regulations, No. 85 of 1993, based upon but not limited to the Health & Safety Specification included in this package

1. Description of the works

Scope of Work

The following is the scope of work proposed under this project:

Primary Plant: Civil Scope of work

- a) Establish a new control room building
- b) Extend the existing substation yard.
- c) Extend the earthmat.
- d) Construct access road for the mobile transformer together with the earth peaks foundations.
- e) Erect additional palisade fence.
- f) Re-erect perimeter fence.
- g) Install kerbing around the substation.

Works Information: List of Drawings

Standard Drawings

Refer to addendum 2.4 of the project package for the Civil Standard Drawings.

Project Specific Drawings

Refer to addendum 1.3 and 2.5 of the project package for the Project Specific Drawings Cover sheet. Project specific drawings will further reference standard and detail drawings. Some drawings may contain both Works Information and Site Information.

Works Information: Standards and Specifications

Refer to addendum 2.6 for the Civil Standards and Specifications Index and addendum. All Eskom Standards and Specifications are typically revised every 5 years and available on request.

Construction Program and Constraints (Constructability)

This is a existing substation the work will be done outside the live yard. Therefore, the work will be easy to complete without interrupting any supply to the customers. it is recommended that the civil work is done during the dry season. Proper barricading should be done in order to secure the identified burial sites during construction.

The staging of the works shall be as follows:

Stage 1: Civil Work

- a) Extend the existing substation yard.
- b) Extend the earthmat.
- c) Construct access road for the mobile transformer together with the earth peaks foundations.

Stage 2: Civil Work

- d) Establish a new control room building.
- e) Erect additional palisade fence.
- f) Install kerbing around the substation.
- g) Re-erect perimeter fence.

DESCRIPTION OF SITE AND ACCESS

The land consists of wet and dry patches with grass covering together with open fields around the site. The substation site is found on undeveloped land and the ground surface generally slopes down to the south with gradual slope. Access to site is via gravel road P374.

Site Investigation/Survey

All designs and design levels were calculated based on the survey provided by Eskom's Land Development Department. All setting out data will be referenced from the survey and its control points / bench marks provided. The contractor shall submit to the engineer the method of setting-out he proposes to employ. The engineer may at any time request the contractor to submit proof that his setting-out has been satisfactorily checked. The setting out work will not be measured and paid for directly, and compensation for the work involved in setting-out will be deemed to be covered by the rates tendered and paid for the various items of work included in this contract

Services

The contractor shall make arrangements for procuring, transporting, storing, distributing and applying the water needed for construction and other purposes, except where otherwise specified. No direct payment will be made for providing water, the cost of which shall be included in the rates tendered for the various items of work for which water is needed.

Only clean water free from undesirable concentrations of deleterious salts and other materials shall be used. All water sources shall be subject to the engineer's approval.

Construction

Construct a cavity brick-walled control building with a reinforced concrete roof (Echo precast slabs) complete with storeroom and toilet, all on a reinforced concrete raft foundation supported as per drawing. The external walls shall have a face brick (25-35mpa strength) finish and internal walls a plastered common brick finish. Using a concrete screed, the roof shall be sloped toward the applicable end of the building, into a gutter and water storage tank, to facilitate maximum collection of rainwater over the whole roof area. Reference must be made to the relevant project drawings to determine all detail required in the construction of the control building.

Painting

The internal walls of the control building, ceilings and floors, shall be treated and/or painted in accordance with the paint schedule detailed in the relevant project drawings.

REHABILITATION

Rehabilitation shall be carried out in strict accordance with the EMP through all stages of construction

The standard specifications on which the civil works in this contract is based on are the **Standards South Africa's Standardized Specifications for Civil Engineering Construction SANS 1200**.

Although not bound in nor issued with this Document, the following Sections of the Standardized Specifications of SANS 1200 shall form part of this Contract:

SANS 1200 AA (1986)	- GENERAL (SMALL WORKS)
SANS 1200 C (1982)	- SITE CLEARANCE (as amended)
SANS 1200 D (1990)	- EARTHWORKS
SANS 1200 DB (1990)	- PIPE TRENCHES
SANS 1200 DM(1981)	- EARTHWORKS (ROADS, SUBGRADE)
SANS 1200 GA(1981)	- CONCRETE WORKS (MINOR)
SANS 1200 LE (1982)	- STORMWATER DRAINAGE
SANS 1200 LB (1982)	- BEDDING (PIPES)
SANS 1200 M (1996)	- ROADS (GENERAL) (First revision)
SANS 1200 ME(1981)	- SUBBASE
SANS 1200 MF(1981)	- BASE
SANS 1200 MK(1983)	- KERBING AND CHANNELLING
SANS 1200 MM(1984)	- ANCILLARY ROADWORKS

The following SANS specifications are also referred to in this document and the Contractor is advised to obtain them from Standards South Africa (a division of SABS) in Pretoria.

SANS 1921 (2004) - Construction and Management Requirements for Works Contracts
Part 1 General Engineering and Construction Works; and Part

GENERAL

QUALITY CONTROL

The latest revision of specification DISASAAQ1, 'Quality checking of Distribution Substation Construction before handing over for Commercial Operation' shall be applicable to this project and must be completed in full by the Clerk of Works and returned to the Project Engineer with all the "as - built" documentation. Reference must also be made to Annexure 1 of this document, for a schedule of all the applicable hold points that have been identified as critical to the quality control process involved in the construction of this project, which are to be observed by the contractor(s) involved and enforced accordingly.

Furthermore, contractor "check lists" have been established for all the main activities involved in the construction of this project, to assist all affected parties in achieving a final quality product on

completion of the project. Refer Part 4 'Project Management', item 4.5, of the overall Project Package.

The Contractor is further referred to SANS 1921: 2004: Construction and Management Requirements for Works Contracts, Part 1: General Engineering and Construction Works. These specifications shall be applicable to the contract under consideration and the Contractor shall comply with all requirements relevant to the project. Certain aspects however require further attention as described hereafter.

QUALITY ASSURANCE (QA) (Read with SANS 1921 – 1: 2004 clause 4.4)

The Contractor will be solely responsible for the production of work that complies with the Specifications to the satisfaction of the Engineer. To this end it will be the full responsibility of the Contractor to institute an appropriate Quality Assurance (QA) system on site. The Engineer will audit the Contractor's quality assurance (QA) system on a regular basis to verify that adequate independent checks and tests are being carried out and to ensure that the Contractor's own control is sufficient to identify any possible quality problems which could cause a delay or failure.

Upon completion and submission of each portion of the Works to the Engineer for examination, the Contractor shall furnish the Engineer with the results of relevant tests, measurements and levels, thereby indicating compliance with the Specifications.

The Contractor shall control their activities and processes in accordance with Eskom's Quality Assurance Standard QM58: Supplier contract quality requirements specification.

The Contractor shall demonstrate, provide and maintain a Quality Management System (QMS) that is ISO 9001 compliant or provide and maintain Quality Policy and Method statement or Contract Quality Plan.

The Contractor agrees to control and professionally preserve and store appropriate documents , records and recordings to guarantee the traceability of the services rendered and inspection thereof;

The delivered services shall be uniform in Quality and condition, consistent with good industry practices and adhere to requested Eskom requirements, without deviation.

Eskom shall have the right to conduct surveys and perform surveillance of the Contractor's facilities.

Eskom reserves the right to inspect any or all of the work. Verification by Eskom shall not absolve the Contractor of the responsibility to provide acceptable services, nor shall it preclude subsequent rejection by

The services must comply with the agreed specifications and the applicable directives set out in the agreement. Defects notified by Eskom shall be remedied by the Contractor upon demand by

Eskom without undue delay and at no extra cost. The Contractor shall continuously monitor and identify non-conformances, relating to the scope of work, as signals of opportunities for improvement making process and other relevant changes to prevent recurrence

The Contractor shall further identify potential problems before they occur by identifying deviations in patterns or trends in service or process performance.

Nothing contained in the Contract shall relieve in any way the Contractor from the obligation of Quality control thereof.

The Contractor guarantees that the quantity, Quality and outward appearance of the delivered services will comply with the requirements of the contract and/or relevant specifications.

Eskom reserves the right to assess and measure , in the selection process, the qualifications , capability and competence of the key staff (assigned personnel) in relation to the scope of work and to interview any / all Contractor to confirm the Quality evaluation.

The Quality of the services and the contents thereof will be in accordance with approved and acceptable standards.

“Hold Point No. 9” – Furthermore, the contractor shall implement his own quality check system throughout the duration of this project. The contractor shall provide regular feedback on all aspects of quality control on the site, which shall constitute a pre-requisite to the final hand-over / take-over stage of the project.

TESTING (Read with SANS 1921 – 1: 2004 clause 4.11)

Process control

The Contractor shall arrange for all tests required for process control to be done by a laboratory acceptable to and approved by the Engineer.

The Contractor may establish his own laboratory on site or he may employ the services of an independent commercial laboratory. Whatever method is used, the Contractor must submit the results of tests carried out on materials and workmanship when submitting work for acceptance by the Engineer. The costs for these tests shall be deemed to be included in the relevant rates and no additional payment will be made for testing as required.

Acceptance control

The process control test results submitted by the Contractor for approval of materials and workmanship may be used by the Engineer for acceptance control. However, before accepting any work, the Engineer may have further control tests carried out by a laboratory of his choice. The cost of such additional tests will be covered by a provisional sum provided in the schedule of quantities, but tests that failed to confirm compliance with the specifications, will be for the account of the Contractor.

SURVEY BEACONS (Read with SANS 1921 - 1: 2004 clause 4.15)

The Contractor shall take special precautions to protect all permanent survey beacons or pegs such as bench-marks, stand boundary pegs and trigonometrical beacons, regardless whether such beacons or pegs were placed before or during the execution of the Contract. If any such beacons or pegs have been disturbed by the Contractor or his employees, the Contractor shall have them replaced by a registered land surveyor at his own cost.

EXISTING SERVICES (Read with SANS 1921 - 1: 2004 clause 4.17)

The Contractor shall make himself acquainted with the position of all existing services before any excavation or other work likely to affect the existing services is commenced.

The Contractor will be held responsible for any damage to known existing services caused by or arising out of his operations and any damage shall be made good at his own expense. Damage to unknown services shall be repaired as soon as possible and liability shall be determined on site when such damage should occur.

MANAGEMENT OF THE ENVIRONMENT

The Contractor shall pay special attention to the following:

Natural Vegetation

The Contractor shall confine his operation to as small an area of the site as may be practical for the purpose of constructing the works.

Only those trees and shrubs directly affected by the works and such others as the Engineer may direct in writing shall be cut down and stumped. The natural vegetation, grassing and other plants shall not be disturbed other than in areas where it is essential for the execution of the work or where directed by the Engineer.

Fires

The Contractor shall comply with the statutory and local fire regulations. He shall also take all necessary precautions to prevent any fires. In the event of fire the Contractor shall take active steps to limit and extinguish the fire and shall accept full responsibility for damages and claims resulting from such fires which may have been caused by him or his employees.

FEATURES REQUIRING SPECIAL ATTENTION

Control of Water

The Contractor shall at all times and in all respects be responsible for the handling of stormwater from higher-laying areas above the Works, and for the handling of any subsurface water that may affect the Works. No separate payment shall be made in this regard, as all costs related thereto

shall be deemed to be included in the rates tendered for the various items of work that are included in the Schedule of Quantities.

Source of Material/Borrow pit

The contractor will be held responsible for locating sources of all materials complying with the relevant minimum requirements to be used in this contract. No separate payment shall be made for this, as all costs related thereto shall be deemed to be covered by the tendered rates. Where possible materials manufactured or produced locally shall be procured to promote local enterprise.

MANAGEMENT AND DISPOSAL OF WATER (Read With SANS 1921 - 1: 2004 Clause 4.6)

The Contractor shall pay special attention to the management and disposal of water and stormwater on the site. It is essential that all completed works or parts thereof are kept dry and properly drained. Claims for delay and for repair of damage caused to the works as a result of the Contractor's failure to properly manage rain and surface water, will not be considered.

DISPOSAL OF SPOIL OR SURPLUS MATERIAL (Read with SANS 1921 - 1 : 2004 clause 4.10)

The Contractor shall dispose all surplus and unsuitable material in legal spoil areas of his own choice. He shall be responsible for all arrangements necessary to obtain such spoil sites.

Overhaul

No payment will be made for overhaul on this contract unless provision is made thereof in specific items.

REQUIREMENTS FOR ACCOMMODATION OF TRAFFIC

General

The Contractor will be responsible for the safe and easy passage of public traffic past and on sections of roads of which he has occupation or where work has to be done near traffic. The client will provide an alternative route for traffic but the contractor will be responsible for the maintenance of this road.

Accommodation of traffic, where applicable shall comply with SANS 1921-2: 2004: Construction and Management Requirements for Works Contracts, Part 2: Accommodation of Traffic on Public Roads occupied by the Contractor. The Contractor shall obtain this specification from Standards South Africa if accommodation of traffic will be involved on any part of the construction works.

Basic Requirements

The travelling public shall have the right of way on public roads, and the Contractor shall make use of approved methods to control the movement of his equipment and vehicles so as not to constitute a hazard on the road.

The Contractor shall ensure that all road signs, barricades, delineators, flagmen and speed controls are effective and that courtesy is extended to the public at all times.

Failure to maintain road signs, warning signs or flicker lights, etc, in a good condition shall constitute ample reason for the Engineer to suspend the work until the road signs, etc, have been repaired to his satisfaction.

The Contractor may not commence constructional activities affecting existing roads before adequate provision has been made to accommodate traffic in accordance with the requirements of this document and the South African Road Traffic Signs Manual.

The Contractor shall construct and maintain all temporary drainage works necessary for temporary deviations.

The Contractor shall provide and grant access to persons whose properties fall within or adjoin the area in which he is working.

Payment

The Contractor's tendered rates for the relevant items in the Bill of Quantities shall include full compensation for all possible additional costs which may arise from this, and no claims for extra payment due to inconvenience as a result of the modus operandi will be considered.

Items that may be considered for payment are specified in SANS 1200 Standardized Specifications and the related project specification

PROJECT RISK ANALYSIS

Refer to Health and Safety Specification

SAFETY SPECIFICATION

Refer to Health and Safety Specification

"AS BUILT" INFORMATION

The "as-built" drawings and associated information form a vital part of this project. Consequently this project will not be considered complete until the "as-built" package complete with all the associated civil related drawings have been submitted via the Project Co-coordinator, to the Civil Designer.

ANNEXURE 1: SCHEDULE OF HOLD POINTS		
Hold Point No.	Item Ref. No.	Hold Point Detail
1	7	At every 0.3m fill placement on the terrace and road and on completion of the Civil Engineer concerned must be given advance notice of at least a week, so that a visit to site can be arranged with the relevant people to assess terrace levels, compaction, etc. Troxler compaction test results shall be submitted to the Project Manager/

		Civil Engineer and Clerk of Works per 0.3m heights of fill. No further work shall continue in, or on the terrace, until the completed formation has been approved in its entirety.
2	8	<p>Density testing of the sand backfill will be as specified in Clause 7 of SANS 1200 DB Earthworks (Pipe Trenches).</p> <p>Before any drains, dissipaters, Stilling Basin and manholes are constructed, or drainage pipes laid, the relevant excavation depths and associated invert levels must be checked and approved by the Civil Designer involved, or his designated representative. proof of brick and joint sealant for bund wall certification is to be made available to the clerk of works</p>
3	10.2	Once it becomes evident that the completion of the road is imminent, the Project Engineer concerned must be given advance notice of at least a week, so that a visit to site can be arranged with the relevant people to assess the road formation, levels, compaction, etc. No further work shall continue in, or on the road, until the completed formation has been approved in its entirety.
4	12.1	<p>Concrete cube and slump tests shall be carried out in accordance to SANS 5860, 586-1 to 3 and SANS 586-2. The test results shall be submitted to the Clerk of Works within five days of pouring.</p> <p>Prior to any concrete being cast, the designated Clerk of Works shall be given satisfactory advance notice to inspect the setting out, excavations, foundation centres, levels, alignment, reinforcing, earth connections, etc. It is essential that this stage be observed as a critical "hold point" and no further work shall continue on this phase of construction, until the necessary inspection has taken place and the work approved. Once all foundations have been cast, but prior to any steelwork being erected, a further inspection must be undertaken by the Clerk of Works, to ensure all associated design criteria has been adhered to in the construction of all foundations. Only after completion of this inspection shall the work is accepted accordingly.</p>
5	13.1	The Local Municipality Building Control Officer is to be contacted to inspect the foundations prior to commencing with the pouring of concrete.
6	13.1	The Local Municipality Building Control Officer is to be contacted to inspect the brickwork prior to commencing with the roof.
7	13.1	Before any work is to be commenced on the control room proof of brick certification is to be made available to the clerk of works, and prior to erecting of echo precast roof an approved roof echo precast design shall be, to ensure final compliance with manufacturer's specifications.
8	15.2	Furthermore, the contractor shall implement his own quality check system throughout the duration of this project. The contractor shall provide regular feedback on all aspects of quality control on the site, which shall constitute a pre-requisite to the final hand-over / take-over stage of the project.
9	7.2	<p>Prior to spraying of weed killer, the yard is to be cleared of scrub. For pricing purposes, the spraying of weed killer includes the clearing of scrub.</p> <p>The type of weed killer to be used is Edge SC and red dye. Spray weed killer according to manufacturer's specification.</p>
NOTE	All	<p>It is essential that all "hold points" are observed as such by the contractor/s and no further work is to continue on each particular stage, until this has been inspected and approved by the Civil Engineer.</p> <p>An agreed time must be established between the contractor and the Civil Engineer and Clerk of Works for suitable notice to inspect. Failure to comply will put the contractor/s at risk of being removed from site.</p> <p>All hold points necessary for the Local Building Control Officer must be</p>

		adhered to.
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ANNEXURE 2: SPECIFICATION FOR THE CURING OF CONCRETE

GENERAL:

In general the longer the period of curing, the better will be the quality of the concrete. This applies not only to its compressive strength, but also to its durability, impermeability, resistance to wear, weathering and chemical attack, and to its freedom from shrinkage cracking.

It is desirable however to balance the requirements of quality with those of economy. For this reason the minimum period of curing should not be less than 7 days under average conditions with normal Portland cement, but better practice would call for an extension of this period to 10 days.

ACCEPTED METHODS OF CURING:

1. Retaining forms in place - If the formwork is of timber, then they should be sprinkled with water at frequent intervals to prevent their drying out.
2. Ponding of water on exposed surfaces
3. Covering of the concrete with sand, earth, straw, sawdust, or mats made of a moisture retaining material, and the keeping of the covering continuously wet.
4. Sprinkling or spraying the surface with water at frequent intervals to keep the concrete continuously moist – Care must be taken with this method of curing to avoid damage to the concrete through the use of heavy jets.
5. Covering of the concrete with a waterproof or plastic sheeting firmly anchored at the edges.
6. The use of an approved curing compound applied in accordance with the manufacturer's instructions.

ANNEXURE 3: GUIDELINES FOR STRIKING TIMES OF FORMWORK									
1	2	3	4	5	6	7	8	9	10
	Minimum Time, d								
	Type of cement used								
Type of structural member or formwork	Portland cement & Portland cement 15			Rapid hardening Portland cement & Portland cement 15			Portland blast furnace cement		
	Weather								
	normal	cool	cold	normal	cool	cold	normal	cool	cold

Beam sides, walls, and unloaded columns	0.75		1.5	0.5		1	2		4
Slabs with props left under	4		7	2		4	6		10
Beam soffits with props left under, and ribs of a ribbed floor construction	7		12	3		5	10		17
Slab props - including cantilevers	10		17	5		9	10		17
Beam props - including cantilevers	14		21	7		12	14		21

NOTES:

1. The above table serves as a guide only. The final striking times of formwork must be upon the authorization of the Engineer. This should be done in correlation with the designed concrete strengths verified from concrete cube tests at 7, 14 and 21 and / or 28 days.
2. In "normal weather", temperatures of the atmosphere adjacent to the concrete, as measured with a maximum and minimum thermometer, do not fall below 18 deg.C.
3. In 'cold weather", temperatures, measured similarly, vary between 5 and 10 deg.C.

2. Drawings-

CIVIL DRAWINGS				
D-DT	No.	SHT	REV	TITLE
ACCESS ROAD DRAWINGS				
ER00045	20	04	00	ACCESS ROAD LONG SECTION
BUILDING DRAWINGS				
ER00045	19	01	00	FLOOR PLAN

ER00045	19	02	00	SECTION AND DETAILS
ER00045	19	03	00	ELEVATIONS
ER00045	21	01	00	CONTROL ROOM SITE PLAN
ER00045	21	02	00	FLOOR PLAN ,RAFT FOUNDATION PLAN , SECTION AND DETAILS
ER00045	21	03	00	CONTROL ROOM ELEVATIONS
ER00045	21	04	00	PANEL LAYOUT, ELECTRICAL LAYOUT AND PAAINTING SCHEDULE
SITE PLAN DRAWINGS				
ER00045	17	03	01	FOUNDATION AND CABLE ROUTES PLAN
ER00045	17	01	01	SITE, LEVEL AND DRAINAGE PLAN
ER00045	17	05	00	SECURITY FENCE PLAN

Access to the Eskom Web Page

All contractors must make sure that they can access Eskom Web page at any given time to get the latest drawings and specifications before commencement of any task. Web Access applications can be done through the assistance of Brenda Morrison @ 011 629 5266 or MorrisEF@eskom.co.za

Acknowledgement of Web Access

Ido hereby acknowledge having access to the Eskom Distribution Website with all Distribution Procedures, Standards and Drawings as they will be listed in the index of the Task Order documents.

I undertake to study and abide by these requirements at all times. If for any reason I cannot access or open any of the files on the web, I will contact the *Employer* immediately.

Signed at: on the day

of 20.....

4. Specifications-

Title	Date revision or	Tick if publicly available
<u>General Specifications:</u>		
Health and Safety requirements		
Environmental requirements		
Site regulations and access control		
<u>Technical specifications:</u>		

• MISCELLANEOUS DRAWINGS				
D-DT	No.	SHT	REV	TITLE
ER00241	16	10-11	00	2.4M STEEL PALISADE FENCE PANELS P1,P2 & P3 ASSEMBLY AND DETAILS
ER00241	17	01-04	00	2,4M STEEL PALISADE FENCE PART NUMBER 1-16 MANUFACTURING DETAILS
D-DT	5237	2B	1	SECURITY FENCE DIAMOND MESH GATE MANUFACTURING DETAILS
ES001	02			XPANDA ESKOM SUBSTATION DOORS
ER00324	17	01	01	SUBSTATION STANDARDS YARD FOUNDATIONS M30 EARTHING BOLT PART MANUFACTURING DETAILS
ER00241	16	08	00	SUBSTATION STANDARDS YARD CIVIL WORK MOBILE EARTHING POINT PLAN ,SECTION AND DETAIL

4. Constraints on how the *Contractor* Provides the Works-

Quality Plan

- The Contractor needs to submit a quality plan indicating the control points for quality to ensure that the works are done according to specification.
- The Contractor is required to employ a competent Supervisor or Foreman on site for the duration of the project to implement workmanship quality checks. .
- Eskom will do inspections and quality checks on installations completed by the Contractor prior to handover of each project.

Access to the site

- The Employer will provide the Contractor with an Access Certificate to formally provide access to the site and works implementation.
- The Contractor shall ensure that he is familiar with conditions of access roads and sites as well as subsurface conditions prior to tendering and to include this in his pricing.

Interaction with Customers / Parties affected

- The Contractor shall be responsible for negotiation with customers with regard to use of access routes on farms etc.
- The Contractor will be responsible for negotiation with land or business owners and / or the Local Authority with regard to the works.
- The Contractor will be responsible for external disputes which may occur with regard to the works.
- The Contractor is required to make all the necessary arrangements with the Local Authorities for road crossing structures and removal thereof, e.g. Removal of pavements, thrust boring under roads, way leaves, etc.

Carrying out the works

- The Scope of "Works" is an extension of the drawings, specifications and bills of quantities listed. The Contractor shall notify the Employer of any discrepancies before commencement of the works
- The onus is on the Contractor to obtain the latest revision of standards applicable.
- The Contractor is required to supply all material, labour, plant, equipment, loose tools, consumables and transport for the duration and completion of the project unless alternatively requested in the "Services Supplied - Section 5".
- Contractor to provide summary of all costs for the execution of the works of the complete project.
- The Contractor must immediately notify the Employer in writing of scope and site variations.
- The Contractor will report all obstacles on site that could impact negatively on time and cost in writing to the Employer.
- Contractor to clear and de-establish total site on completion of proposed works.
- Contractor is required to clear and cart away rubble and surplus works

Weekly reports

Contractor will submit a weekly report indicating the project status.

- The Start and Completion date must be agreed upon prior to signing the Task Order. Late completion may result in penalty clause being applied as per contract document.
- Original tax invoices must be submitted to the Programme Management Department containing all the relevant claim information.

Performance Management

- The Contractor's Performance will be assessed in accordance with a Performance Appraisal Process.

LEGAL COMPLIANCE GUIDE IN COMPLIANCE TO CONSTRUCTION REGULATION

- No task will be allocated to contractors in whose registration and good standing with the compensation commissioner is not valid and in order.
- Provided in the standard rates are costs of Health and Safety. (See the safety remuneration letter attached)

Acknowledgement by Contractor

I/WE, DO HEREBY ACKNOWLEDGE HAVING READ AND UNDERSTOOD THE ABOVE ANNEXED DOCUMENTS FROM 1 TO 25 IN SECTION 1.3.2 OF THIS CONTRACT.

I/WE UNDERTAKE TO STUDY AND ABIDE BY THESE REQUIREMENTS AT ALL TIME.

SIGNED AT: ON THE DAY OF20.....

Health and Safety Plan

I/Wewill prepare and submit Health and Safety Plan to Project Co-ordinator before the commencement of each Task and Resource Capacity Schedule, as per the following in details:-

1. Authorised Persons for High Voltage Authorisation and LV Switching providing the ID Numbers of the authorised person/s with the permit/ certification date or number and the date of expiry.
2. Safety Representatives and First Aiders names, providing their ID Numbers and details of certification.
3. Serial numbers, calibration certificates and expiry dates of the tested tools and equipment.
4. Make, model and registration number of vehicles to be used.

Contractors Signature:

Construction Safety

- The Contractor shall be responsible for ensuring that all equipment supplied and used and all work carried out under this contract shall be in accordance with the Occupational Health and Safety Act (Act 85 of 1993) and regulations remaining in force, as may be amended from time to time.
- In addition, the Contractor shall comply with other Safety application provisions of Government, Provincial, Municipal Safety Laws, Building, Construction, Electricity Regulations and Eskom Distribution Standards.

- The Contractor shall accept full responsibility for the means, methods, sequence or procedures of construction for safety precautions or programmes incident to the work of the contractor.
- The Contractor is required to submit a working methodology statement with regards to the Safety Standards while working within hazardous areas such as live substations or in close proximity of energized apparatus.
- The Contractor shall indemnify the employer and the Engineer against responsibility for safety on the site of the works.
- The Contractor shall enter into an agreement to complete the work required for the construction of the works in accordance with the provisions of all pertinent legislation and in particular with the provisions of the Occupational Health and Safety Act (Act 85 of 1993) and the regulations promulgated there under.
- Reference of the Safety Methodology Statement can be found in the Government Occupational Health and Safety Act (Act 8 of 1993) and Construction Regulations Document which is available publicly.
- The safety of the Contractors personnel and employees acquire precedence over the construction works.
- Contractor to assess and make provision for security services to protect the demolished material should the need arise.

CARDINAL Safety Rules (Refer to the attached document)

Due to the importance to safe life's and apparatus of Eskom it is recommended that if a contractor abuse any CARDINAL safety rules, all work allocated to the contractor will immediately put on hold until final outcome with investigation. Safety is the combined responsibility of the team and therefore team leader or team will be punished together. There are five cardinal rules that may not be broken by the Team Leader and his/her team.

The five Eskom Cardinal Rules are as follows:

Rule 1:*Open, isolated, tests, earth, and bond and/or insulate before touch*

Rule 2:*Hook up at height*

Rule 3:*Buckle Up*

Rule 4*Be Sober*

Rule 5:*Ensure that you have a permit to work*

ACCEPTANCE NOTE

**I/WE _____ HEREBY ACCEPT THE ABOVE TERM FOR BREACHING
OF CARDINAL SAFETY RULES.**

SIGNED BY: _____ DATE: ____ / ____ / ____

Compensation for Occupational Injury and Diseases Act

- The Contractor shall submit with his tender proof of adherence to the above act.
General Environmental Management Requirements
- The Contractor shall receive an Environmental Management Plan –EMP (normally as part of the DESD) and must adhere to all its requirements.
- Contractor to provide toilet facilities, water and electricity.
- All environmental legal Liabilities and claims arising from the negligent activities of the Contractor shall be for the Contractors expense.
- The Contractor shall have an understanding of Eskom's basic environmental principles and commitments (covered during Eskom Environmental Law Course)

4.1 Meetings

1.1 Management meetings

Regular meetings of legal and general nature may be convened and chaired by the Project Manager / Project coordinator or representative so delegated by Eskom Holdings SOC. As part of the contractor's responsibility with an objective of minimising the adverse effect of risks and surprises for both parties, meetings shall be held at reasonable times as defined OHS as follows:

Title and purpose	Approximate time & interval	Location	Attendance by:
Kick off meetings	Once access to site has been given to the contractor	On site	<i>PM, QS, Site Supervisor, Safety and Environmental Representatives and the Contractor.</i>
Risk Register and compensation events	Weekly	On site	<i>PM, QS, Site Supervisor, Safety and Environmental Representatives and the Contractor.</i>
Overall contract progress and feedback	Weekly	On site	<i>PM, QS, Site Supervisor, Safety and Environmental Representatives and the Contractor</i>
Site meetings	Monthly	On site	<i>PM, QS, Site Supervisor, Safety and Environmental Representatives and the Contractor</i>
Health and safety meetings	Monthly	On site	<i>PM, Site Supervisor, Safety and Environmental Representatives and the Contractor</i>
Community based meeting	Beginning of the project	On site	<i>PM, Site Supervisor, Safety and Environmental Representatives and the Contractor</i>
assessment	Daily before work begins.	Site	<i>Contractor and Site Supervisor.</i>
Risk register and compensation events	As necessary.	Site	<i>PM, Contractor and Site supervisor</i>
Performance appraisal meeting	At project completion	On site and office	<i>PM, QS, Site Supervisor, Safety and Environmental Representatives and the Contractor</i>
Pre- outage meeting	When there are outages	On site	<i>PM, Site Supervisor, Safety and Environmental Representatives and the Contractor</i>
Public safety meeting	Beginning of the project	On site	Project stakeholders

Meetings of a specialist nature may be convened as specified elsewhere in this Works Information or if not so specified by persons and at times and locations to suit the Parties, the nature and the progress of the works. Records of these meetings shall be submitted to the Project Manager by the person convening the meeting within five days of the meeting.

All meetings shall be recorded using minutes or a register prepared and circulated by the person who convened the meeting. Such minutes or register shall not be used for the purpose of confirming actions or instructions under the contract as these shall be done separately by the person identified in the conditions of contract to carry out such actions or instructions

4.2 Use of standard forms

All contractual documents must have relevant contract number and purchase order number of reference. The Contractor to ensure that all documentation relating to this contract is filed and kept on site for viewing by the Project Manager at any time. The Contractor must ensure that all documents are also kept in soft copy and backed up on a hard drive which must be handed to the Service Manager at the end of the contract. Files are to be neatly labelled and indexed.

All correspondence shall be dated and sequentially numbered and distributed in accordance with a procedure as agreed and accepted by the Project Manager.

Eskom will periodically request detailed reports from the Contractor. All contractual Documentation must have relevant contract number and Purchase Order Number as reference as per Eskom Holdings SOC Limited Standards (List). Contractual communications will be in the form of properly compiled letters, letters attached to emails, emails, NEC template and urgent contractor meetings can be in the form of sms and as outlined on core clause 13 of the NEC3 ECC.

Note: It is the contractor responsibility to acquire and familiarise themselves with the NEC3 ECSC.

4.3 Invoicing and payment

Within one week of receiving a payment certificate from the *Project Manager* in terms of core clause 51.1, the *Contractor* provides the *Employer* with a tax invoice showing the amount due for payment equal to that stated in the *Project Manager's* payment certificate.

The *Contractor* shall address the tax invoice to:

Eskom Holdings SOC Limited
KZN Operating Unit
PO Box 66
New Germany
3610

and include on each invoice the following information:

Name and address of the *Contractor* and the *Project Manager*;

The contract number and title;

Contractor's VAT registration number;

The *Employer's* VAT registration number **4740101508**;

Description of service provided for each item invoiced based on the Price List;

Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT.

Procedures for Invoice Submission and Payment (e. g. Electronic Payment Instructions) General Information
- No Pro-forma Invoice
- Check Vendor number against the Address and name on Tax invoice
- Insert the Vendor number on Tax invoice (Top right hand corner)
- Bank details must be on the invoice or on a attach sheet, but it does not require a bank stamp just a letter)
- Check banking details on invoice against SAP system. If more than one banking account check bank account against banking details on invoice. If banking details not on invoice, write the bank code next to the vendor account (bank code 0002)
- Check Vendor VAT number against the vendor master. (FK03) If VAT number not on master records, prepare a list and forward to Vendor Management to check and update the vendor master records
- No fax copies of Tax invoices allowed
No copies of Tax invoices allowed unless originally printed by the Vendor if a photocopy tax invoice, it

must be an original “certified copy” (i.e. not a copy of a “certified copy” invoice) from the vendor and check in system if not previously be paid. Put stamp “not previously paid” on invoice and sign.
- Ensure that date received stamp is clear on invoice
- Stamp all Invoices with the Vat stamp, complete and sign (only when VAT is applicable)
The stamp should not be stamped over any written information
- When scanning invoice, check the quality before linking in SAP (inboxes)
With Reference Invoices
- Goods receipt must be done (payment with reference)
- Ensure that the SAP purchase order number is clear and correct on the invoice
- GR number to be written on the Invoices
- If multiple lines on invoice write the line number of the order against the line to ensure that the processors match the correct lines (to ensure that 191100 is matched correctly)

4.4 Records of Defined Cost

In order to substantiate the Defined Cost of compensation events, the Employer may require the Contractor to keep records of amounts paid by him for people employed by the Contractor, Plant and Materials, work subcontracted by the Contractor and Equipment. [See clause 11.2(5) and 63.2].

4.5 Accelerated Shared Growth Initiative – South Africa (ASGI-SA)

The tenderer is requested to provide financial educational assistance in the form of sponsorship or bursaries to local learners.

It is deemed that a minimum of four (2) learners will be benefiting as a result of this initiative over the duration of this contract.

Skill Type	Eskom Target
Brick laying and Plastering Certificate	2
Plumbing Certificate	2
Total	4

The suppliers shall on a monthly basis submit a report to Eskom in accordance with Data Collection Template on their compliance with the SD& L obligations described above.

Eskom shall review the SD&L reports submitted by the suppliers within 60 (sixty) days of receipt of the reports and notify the suppliers in writing if their SD&L obligations have not been met.

Upon notification by Eskom that the suppliers have not met their SD&L obligations, the suppliers shall be required to implement corrective measures to meet those SD&L obligations before the commencement of the following report, failing which Retention clauses shall be invoked.

The *Contractor* shall keep accurate records and provide the *Employer* with reports on the *Contractor's* actual delivery against the above stated ASGI-SA criteria. [Elaborate on access to and format of records and frequency of submission etc.]

The *Contractor's* failure to comply with his ASGI-SA obligations constitutes substantial failure on the part of the *Contractor* to comply with his obligations under this contract.

4.6 BBBEE and preferencing scheme

Special Conditions of Contract (Application of other criteria in terms of Section 2(1)(f) of PPPFA)

The objective criteria as follow:

Transformation of this sector by the appointment of a Black Owned Firm(s) that meet the functionality requirements;
Development of Black Owned steel fabrication companies;
Appointment of companies located within the Republic of South Africa.

NB: The joint Venture may be

Black Owned and Black Owned Company;
Black Owned Company (Majority Shareholder) and Non-Black Owned Company;
Black Women Owned Company and Black Owned Company, and;
Black Women Owned (Majority Shareholder) and Non-Black Owned Company.

A 51% or more Black Owned Companies or Joint Venture where the lead company has 51% or more black ownership.

Procurement Preference Hierarchy

Preference for awarding this contract and/or subcontracting is in the following order:

Companies with more than 51% Black Ownership
Enterprises Owned by Black People Living with Disability (BPLwD)
Black Youth Owned Enterprises (BYO)
Black Women-Owned Enterprises (BWO)
Black Owned Enterprises (BO)

4.7 Facilities to be provided by the Contractor

The Contractor shall provide on Site a minimum of one well illuminated, insulated and ventilated site office for utilisation by the Employer / Project Manager or their representatives. This site office shall have as a minimum the following:

- Suitable water supply and sanitary facilities (chemical toilet).
- Telecommunication facilities (down loading of electronic communications and printing of it) e.g.: Fax, Telephone/Cell phone facilities.
- Access to Eskom website to download latest information.
- 1 x Table, 10 x chairs and drawing/filing cabinet.
- Site dairy
- The Contractor provides an area for the construction offices, stores, yards, etc. to the approval of the Employer's Agent In addition, the Contractor shall make available a desk to be used by Employer's Agent / Employer's Representative.
- The Contractor erects a 1,8m fence around his construction site and fits a lockable gate
- The Contractor provides a construction supply at their site camp and anywhere else as may be required
- The Contractor provides the necessary connecting cables and distribution board(s) from the electricity supply source to the points of demand. The Contractor provides all the necessary connection to the electricity supply and maintains and secures all cable, etc.
- The Contractor is to provide all necessary water and sewage connections
- The Contractor provides facilities and resources for first aid, firefighting and emergency repair

services in accordance with the Occupational Health and Safety Act and the local authority regulations and requirements.

4.8 Title to material from excavation and demolition

All asset surplus material to be returned to Eskom stores and disposal of material will be done as per EMP.

4.9 Design by the *Contractor*

Not Applicable

4.10 Cataloguing requirements by the *Contractor*

Not Applicable

5. Requirements for the programme

A programme is to be submitted within 14 days after access to site has been signed off. The programme shall indicate critical path activities and shall be submitted in hard copy and MS Project format or Excel.

When work under this Contract must of necessity be carried out in conjunction with the work of other contractors or with that of the Employer, it shall be co-ordinated and programmed in such a manner as to interfere as little as possible with the progress of such other work, and so as to offer every reasonable facility to other contractors and to authorised employees of the Employer. One quarter of the Price for work done to date will be retained in assessments of the amount due until the Contractor has submitted their first programme showing the information which the Works Information requires.

Contractor plan to use

- The key dates for the Employer to provide “services and other resources
- The Contractor must submit a project specific risk assessment with each quote.

Completion

The Contractual Completion Date will only be achieved when the as-built information supplied by the Contractor accepted and approved by Eskom and when all connections are energised.

The Contractor must submit marked-up drawings to the Consultant, who will compile and submit the as-built drawings to Eskom for approval.

The Contractor is to liaise with the Employer’s Agent with regards to approval of as-built.

6. Services and other things provided by the *Employer*

Item	Date by which it will be provided
Contractor to provide with all material.	

C4: Site Information

The site is at the existing Klipspruit Substation in Newcastle Area.

C4.1: Information about the *site* at time of tender which may affect the work in this contract

1. Access limitations

Substation is accessed through the gravel road P374.

2. Ground conditions in areas affected by work in this contract-

Refer to Geotechnical Report for Detailed Information.

3. Hidden and other services within the *site* -

Contractor to work within boundaries as there are electrical services in the close proximity.

4. Details of existing buildings / facilities which *Contractor* is required to work on-

The scope of work include extension of existing substation, access road for mobile transformer. Work site to be fenced out from live apparatus.