



## NEC3 Engineering and Construction

# Short Contract (ECSC3)

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

and (Reg No.)

for **The Partial Supply and Construction of Medium Voltage (11kV and 22kV) and Low Voltage (440V) Reticulation inclusion of Overhead Lines, Cable and Equipment for Cape Coastal Cluster for a period of three (3) years.**

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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:

**The Partial Supply and Construction of Medium Voltage (11kV and 22kV) and Low Voltage (440V) Reticulation inclusion of Overhead Lines, Cable and Equipment for Cape Coastal Cluster for a period of three (3) years.**

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	<b>as per Rates – see Pricelist</b>
Value Added Tax @ 15% is	<b>as per Rates – see Pricelist</b>
The offered total of the Prices inclusive of VAT is	<b>as per Rates – see Pricelist</b>
(in words) <b>as per Rates – see Pricelist</b>	

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)

Capacity

**for the  
Employer**

(Insert name and address of organisation)

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	_____	_____
Capacity	_____	_____
On behalf of	(Insert name and address of organisation)	Eskom Holdings SOC Ltd
Name & signature of witness	_____	_____
Date	_____	_____

## C1.2 Contract Data

### Data provided by the *Employer*

Clause	Statement	Data
<b>General</b>		
10.1	The <i>Employer</i> is (Name):	<b>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</b>
	Address	<b>Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg</b>
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 <sup>1</sup> is (Name):	<b>Mbeko Ntantala</b>
	Address	<b>PO Box 222, Brackenfell 7560</b>
	Tel No.	021 980 3865
	Fax No.	
	E-mail address	<b>ntantam@eskom.co.za</b>
11.2(11)	The <i>works</i> are	<ul style="list-style-type: none"> <li>• Reticulation projects on an as and when required basis within the Garden Route area which includes:</li> <li>• MV and LV Reticulation</li> <li>• MV &amp; LV Cabling</li> <li>• Metering Installations</li> <li>• Service Connections</li> <li>• Streetlights installations</li> <li>• School &amp; Clinic Wiring</li> <li>• Labelling</li> </ul>
11.2(13)	The Works Information is in	<b>the document called 'Works Information' in Part 3 of this contract.</b>
11.2(12)	The Site Information is in	<b>the document called 'Site Information' in Part 4 of this contract.</b>
11.2(12)	The <i>site</i> is	<b>The specific site to be indicated per works order</b>
30.1	The <i>starting date</i> is.	
11.2(2)	The <i>completion date</i> is.	
13.2	The <i>period for reply</i> is	<b>2 Working Days</b>
40	The <i>defects date</i> is	<b>52 weeks after Completion</b>
41.3	The <i>defect correction period</i> is	<b>2 weeks</b>

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

50.1	The <i>assessment day</i> is the	<b>25<sup>th</sup> of every month or as agreed with Employer's representative (per works/purchase order )</b>
50.5	The <i>delay damages</i> are	<b>R5000 per day</b>
50.6	The retention is	<b>2.5% SDL&amp;I performance retention on all projects (major and minor works included) plus; 10% retention on major works</b>  <b>Note: Free retention on Adhoc Materials and Cost Plus percentage items</b>
51.2	The interest rate on late payment is	<b>5 % per annum on the total amount overdue</b>
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	<b>the amount of the deductibles relevant to the event described in the applicable "Format A" policy available on request from Eskom Group Insurance</b>
82.1	The <i>Employer</i> provides this insurance	<b>as stated for "Format A" available on request from Eskom Group Insurance</b>
82.1	The minimum amount of cover for the third insurance stated in the Insurance Table is:	<b>whatever the <i>Contractor</i> deems necessary in addition to that provided by the <i>Employer</i>.</b>
82.1	The minimum amount of cover for the fourth insurance stated in the Insurance Table is:	<b>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) and, or as per the laws of the country in which the <i>Contractor's</i> employees are domiciled.</b>
	Does the United Kingdom Housing Grants, Construction and Regeneration Act (1996) apply?	<b>No</b>
93.1	The <i>Adjudicator</i> is	<b>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 <a href="http://www.ice-sa.org.za">www.ice-sa.org.za</a>). If the Parties do not agree on an Adjudicator the Adjudicator will be appointed by the Arbitration Foundation of Southern Africa (AFSA).</b>
	Address	<b>To be affirmed when dispute arises</b>
	Tel No.	
	Fax No.	

e-mail

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 and the London Institution of Civil Engineers. (See <a href="http://www.ice-sa.org.za">www.ice-sa.org.za</a> ) 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 of the Association of Arbitrators (Southern Africa) or its successor body.
	- if the arbitration procedure does not state who selects an arbitrator, is	

**The conditions of contract are the NEC3 Engineering and Construction Short Contract (April 2013)<sup>23</sup> and the following additional conditions Z1 to Z14 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

<sup>2</sup> If June 2005 Edition applies, delete April 2013 and insert June 2005

<sup>3</sup> 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](http://www.ecs.co.za).

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 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.

## Z12 Insurance

### Z\_12.1 Replace core clause 82 with the following:

#### Insurance cover 82

- 82.1 When requested by a Party, the other Party provides certificates from his insurer or broker stating that the insurances required by this contract are in force.
- 82.2 The *Contractor* provides the insurances stated in the Insurance Table A, from the *starting date* until the earlier of Completion and the date of the termination certificate.

**INSURANCE TABLE A**

Insurance against	Minimum amount of cover or minimum limit of indemnity	Cover provided until
Loss of or damage to the works	<p>The replacement cost where not covered by the <i>Employer's</i> insurance</p> <p>The <i>Employer's</i> policy deductible as at contract date, where covered by the <i>Employer's</i> insurance</p>	The <i>Employer's</i> certificate of Completion has been issued
Loss of or damage to Equipment, Plant and Materials	<p>The replacement cost where not covered by the <i>Employer's</i> insurance</p> <p>The <i>Employer's</i> policy deductible as at contract date, where covered by the <i>Employer's</i> insurance</p>	The Defects Certificate has been issued
The <i>Contractor's</i> liability for loss of or damage to property (except the works, Plant and Materials and Equipment) and for bodily injury to or death of a person (not an employee of the <i>Contractor</i> ) arising from or in connection with the <i>Contractor's</i>	<p><b><u>Loss of or damage to property</u></b></p> <p><b><u>Employer's property</u></b></p> <p>The replacement cost where not covered by the <i>Employer's</i> insurance</p> <p>The <i>Employer's</i> policy deductible as at contract date where covered by the <i>Employer's</i> insurance</p> <p><b><u>Other property</u></b></p> <p>The replacement cost</p> <p><b><u>Bodily injury to or death of a person</u></b></p>	

Providing the Works	The amount required by the applicable law	
Liability for death of or bodily injury to employees of the <i>Contractor</i> arising out of and in the course of their employment in connection with this contract	The amount required by the applicable law	

82.3 The *Employer* provides the insurances as stated in the Insurance Table B

**INSURANCE TABLE B**

<b>Insurance against or name of policy</b>	<b>Minimum amount of cover or minimum of indemnity</b>
Assets All Risk	Per the insurance policy document
Contract Works insurance	Per the insurance policy document
Environmental Liability	Per the insurance policy document
General and Public Liability	Per the insurance policy document
Transportation (Marine)	Per the insurance policy document
Motor Fleet and Mobile Plant	Per the insurance policy document
Terrorism	Per the insurance policy document
Cyber Liability	Per the insurance policy document
Nuclear Material Damage and Business Interruption	Per the insurance policy document
Nuclear Material Damage Terrorism	Per the insurance policy document

### **Z13 Nuclear Liability**

Z13.1 The *Employer* is the operator of the Koeberg Nuclear Power Station (KNPS), a nuclear installation, as designated by the National Nuclear Regulator of the Republic of South Africa, and is the holder of a nuclear licence in respect of the KNPS.

Z13.2 The *Employer* is solely responsible for and indemnifies the *Contractor* or any other person against any and all liabilities which the *Contractor* or any person may incur arising out of or resulting from nuclear damage, as defined in Act 47 of 1999, save to the extent that any liabilities are incurred due to the unlawful intent of the *Contractor* or any other person or the presence of the *Contractor* or that person or any property of the *Contractor* or such person at or in the KNPS or on the KNPS site, without the permission of the *Employer* or of a person acting on behalf of the *Employer*.

Z13.3 Subject to clause Z13.4 below, the *Employer* waives all rights of recourse, arising from the aforesaid, save to the extent that any claims arise or liability is incurred due or attributable to the unlawful intent of the *Contractor* or any other person, or the presence of the *Contractor* or

that person or any property of the *Contractor* or such person at or in the KNPS or on the KNPS site, without the permission of the *Employer* or of a person acting on behalf of the *Employer*.

Z13.4 The *Employer* does not waive its rights provided for in section 30 (7) of Act 47 of 1999, or any replacement section dealing with the same subject matter.

Z13.5 The protection afforded by the provisions hereof shall be in effect until the KNPS is decommissioned.

## **Z14 Asbestos**

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

<b>AAIA</b>	means approved asbestos inspection authority.
<b>ACM</b>	means asbestos containing materials.
<b>AL</b>	means action level, i.e. a level of 50% of the OEL, i.e. 0.1 regulated asbestos fibres per ml of air measured over a 4 hour period. The value at which proactive actions is required in order to control asbestos exposure to prevent exceeding the OEL.
<b>Ambient Air</b>	means breathable air in area of work with specific reference to breathing zone, which is defined to be a virtual area within a radius of approximately 30cm from the nose inlet.
<b>Compliance Monitoring</b>	means compliance sampling used to assess whether or not the personal exposure of workers to regulated asbestos fibres is in compliance with the Standard's requirements for safe processing, handling, storing, disposal and phase-out of asbestos and asbestos containing material, equipment and articles.
<b>OEL</b>	means occupational exposure limit.
<b>Parallel Measurements</b>	means measurements performed in parallel, yet separately, to existing measurements to verify validity of results.
<b>Safe Levels</b>	means airborne asbestos exposure levels conforming to the Standard's requirements for safe processing, handling, storing, disposal and phase-out of asbestos and asbestos containing material, equipment and articles.
<b>Standard</b>	means the <i>Employer's</i> Asbestos Standard 32-303: Requirements for Safe Processing, Handling, Storing, Disposal and Phase-out of Asbestos and Asbestos Containing Material, Equipment and Articles.
<b>SANAS</b>	means the South African National Accreditation System.
<b>TWA</b>	means the average exposure, within a given workplace, to airborne asbestos fibres, normalised to the baseline of a 4 hour continuous period, also applicable to short term exposures, i.e. 10-minute TWA.

Z14.1 The *Employer* ensures that the Ambient Air in the area where the *Contractor* will Provide the Services conforms to the acceptable prescribed South African standard for asbestos, as per the regulations published in GNR 155 of 10 February 2002, under the Occupational Health and Safety Act, 1993 (Act 85 of 1993) ("Asbestos Regulations"). The OEL for asbestos is 0.2 regulated asbestos fibres per millilitre of air as a 4-hour TWA, averaged over any continuous period of four hours, and the short term exposure limit of 0.6 regulated asbestos fibres per millilitre of air as a 10-minute TWA, averaged over any 10 minutes, measured in accordance with HSG248 and monitored according to HSG173 and OESSM.

Z14.2 Upon written request by the *Contractor*, the *Employer* certifies that these conditions prevail. All measurements and reporting are effected by an independent, competent, and certified

occupational hygiene inspection body, i.e. a SANAS accredited and Department of Employment and Labour approved AAIA. The *Contractor* may perform Parallel Measurements and related control measures at the *Contractor's* expense. For the purposes of compliance the results generated from Parallel Measurements are evaluated only against South African statutory limits as detailed in clause Z14.1. Control measures conform to the requirements stipulated in the AAIA-approved asbestos work plan.

- Z14.3 The *Employer* manages asbestos and ACM according to the Standard.
- Z14.4 In the event that any asbestos is identified while Providing the Services, a risk assessment is conducted and if so required, with reference to possible exposure to an airborne concentration of above the AL for asbestos, immediate control measures are implemented and relevant air monitoring conducted in order to declare the area safe.
- Z14.5 The *Contractor's* personnel are entitled to stop working and leave the contaminated area forthwith until such time that the area of concern is declared safe by either Compliance Monitoring or an AAIA approved control measure intervention, for example, per the emergency asbestos work plan, if applicable.
- Z14.6 The *Contractor* continues to Provide the Services, without additional control measures presented, on presentation of Safe Levels. The contractually agreed dates to Provide the Services, including the Completion Date, are adjusted accordingly. The contractually agreed dates are extended by the notification periods required by regulations 3 and 21 of the Asbestos Regulations, 2001.
- Z14.7 Any removal and disposal of asbestos, asbestos containing materials and waste, is done by a registered asbestos contractor, instructed by the *Employer* at the *Employer's* expense, and conducted in line with South African legislation.

## **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.*

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 the Contract All Risk Insurance Policy available on request from Eskom Group Insurance
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 Contract All Risk Insurance Policy 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.

## 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)<sup>4</sup> 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	<b>the document called 'Price List' in Part 2 of this contract.</b>
11.2(10)	The offered total of the Prices is [Enter the total of the Prices from the Price List]:	<b>as per Rates – see Pricelist excluding VAT</b> <b>as per Rates – see Pricelist excluding VAT</b>  The rates will be fixed and firm for the first year of the contract and there will be an annual CPA increase for each respective year thereafter and will be implemented on all contractors at the same time. SEIFSA will be applied where 15% will be non-adjustable and 85% will be adjusted based on the Table C3(a) for labour rates. Transport will be adjusted by SEIFSA Table L2 for road freight costs.

I hereby acknowledge that I have access to the Eskom IARC web and will ensure that I obtain all relevant documents and standards from the web. if I do not have access, I hereby undertake to arrange to get access to the Eskom IARC web prior to construction.

Signed on behalf of the *Contractor*

Name .....

Position .....

Signature ..... Date.....

\_\_\_\_\_



## 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* where required

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 Function of the Bill of Quantities

Information in the Bill of Quantities is not Works Information or Site Information. This confirms that instructions to do work or how it is to be done are not included in the Bill, but in the Works Information.

This is further confirmed by Clause 20.1 which states, "The *Contractor* Provides the Works in accordance with the Works Information". Hence the *Contractor* does not Provide the Works in accordance with the Bill of Quantities.

The Bill of Quantities is only a pricing document.

### C2.3 General Assumptions

Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance has been made in the quantities for waste.

The Prices and rates stated for each item in the Bill of Quantities shall be treated as being fully inclusive of all work, risks, liabilities, obligations, overheads, profit and everything necessary as incurred or required by the *Contractor* in carrying out or providing that item.

An item against which no Price is entered will be treated as covered by other Prices or rates in the bill of quantities.

The quantities contained in the Bill of Quantities may not be final and do not necessarily represent the actual amount of work to be done. The quantities of work assessed and certified for payment by the Employer's representative at each assessment date will be used for determining payments due.

The short descriptions of the items of payment given in the bill of quantities are only for the purposes of identifying the items. Detail regarding the extent of the work entailed under each item is provided in the Works Information.

## C2.4 Price List

### The Contractor shall take note of the following:

- All prices to make provision for all resources (local labour rates, equipment, subsistence, petrol costs – including cranes where required)
- All material is to be purchased only upon written instruction by *Employer's Representative* and the *Contractor* is to provide proof of purchase of such material for reimbursement. (i.e. this will be reimbursed separately)
- Material will be reimbursed on a basis of actual **cost** where the *Contractor* shall hand over actual invoices of material purchased to the *Employer* on completion of the installation of the said material.
- *Contractor* to only provide a quotation for the work that they are qualified to do.
- *Contractor* to ensure that the Site Supervisor has a valid and applicable ORHVS Authorization for working on live apparatus as well as close proximity in the Western Cape Operation Unit for applicable voltage categories.
- *Contractor* to ensure that there is always an Authorised person when issued with the works.
- Actual invoices required to enable reimbursement and allowance to make provision for accommodation.
- *Contractors* will be required to execute a minimum amount of works across all reticulation within Garden Route area (eg. Reticulation, minors, major-short and strengthening)
- All overtime and weekend works must be authorised in writing by the delegated Eskom representative prior to execution.

**PLEASE USE THE ATTACHED SPREAD SHEET TO POPULATE THE RATES  
OF ALL ITEMS LISTED AND SUBMIT WITH TENDER**

### **A. SITE ESTABLISHMENT PRICE LIST**

Under the heading Preliminaries and General (P&G's), Site Establishment is to make provision for:

- Transport to and from site, on site and transport of all materials from storage / closest CNC
- Security services to safeguard the whole site inclusive of people, plant, equipment material etc.
- Provision of ablution and other facilities
- Accommodation
- Water & Electricity
- *Contractors* rates shall allow for Health and Safety as well as any other statutory requirements, including training for safety authorizations (Safety Equipment Training, First Aid, ORHVS) and other purposes
- Required handover and inspection meetings, commissioning and testing

#### **Note the following:**

- Once off site establishment per project from *Contractor's* base to closest CNC to the project, based on the total km per round trip @ km rates.
- An additional radius payment will be made, based on the distance from the applicable CNC to the Project.
- Above cost will only be paid once per project unless additional trips required are due to the *Employer*
- This activity includes: the establishment of all resources on site, within the relevant CNC area, the maintenance of facilities on site and the removal of the said facilities and refuse upon the completion of the work/project including all material to be returned to the Brackenfell Stores Yard.
- The *Contractor* shall familiarize himself with all requirements as per Details on Site Establishment outlined in this contract
- For multiple activities, i.e. LV combined with Streetlights for a project only one site establishment will be payable, which shall be the highest rate from LV or Streetlights for that specific project.



**WESTERN CAPE OPERATING  
UNIT - CAPE COASTAL CLUSTER**

**NEC3 : RETICULATION (MV & LV) TERM CONTRACT**

BILL				
ITEM NO.	DESCRIPTION	UNIT	Contractor's tendered rate	
A	PRELIMINARY AND GENERAL			
A.1	0-50km Radius (from nearest CNC to Site and back)			
A1.1.1	Establish facilities on site (include all resources required to ensure work to be fully completed)	Sum		
A1.1.2	Maintain facilities on site (include all resources required to ensure work to be fully completed)	Weeks		
A1.1.3	Security (24/7), two security guards at all times,day shift needs 2 no security officers (Grade D) with bulletproof vests and two way radios.Night shift needs 2 no security officers (Grade C) with bulletproof vests and two way radios. (All security service providers to be registered with PSIRA)_(actual cost - proof of cost e.g. invoice to be submitted when claimed)	per person/12hr shift		
A1.1.4	De-establish facilities on site (ensure all items to provide the works be removed and that site is normalised to customers satisfaction)	Sum		
A1.2	>50-100km Radius (from nearest CNC to Site and back)			
A1.2.1	Establish facilities on site (include all resources required to ensure work to be fully completed)	Sum		
A1.2.2	Maintain facilities on site (include all resources required to ensure work to be fully completed)	Weeks		
A1.2.3	Security (24/7), two security guards at all times,day shift needs 2 no security officers (Grade D) with bulletproof vests and two way radios.Night shift needs 2 no security officers (Grade C) with bulletproof vests and two way radios. (All security service providers to be registered with PSIRA)_(actual cost - proof of cost e.g. invoice to be submitted when claimed)	per person/12hr shift		
A1.2.4	De-establish facilities on site (ensure all items to provide the works be removed and that site is normalised to customers satisfaction)	Sum		
A1.3	>100-150km Radius (from nearest CNC to Site and back)			
A1.3.1	Establish facilities on site (include all resources required to ensure work to be fully completed)	Sum		

<b>A1.3.2</b>	Maintain facilities on site (include all resources required to ensure work to be fully completed)	Weeks	
<b>A1.3.3</b>	Security (24/7), two security guards at all times, day shift needs 2 no security officers (Grade D) with bulletproof vests and two way radios. Night shift needs 2 no security officers (Grade C) with bulletproof vests and two way radios. (All security service providers to be registered with PSIRA)_(actual cost - proof of cost e.g. invoice to be submitted when claimed)	per person/12hr shift	
<b>A1.3.4</b>	De-establish facilities on site (ensure all items to provide the works be removed and that site is normalised to customers satisfaction)	Sum	
<b>A1.4</b>	<b>&gt;150-200km Radius (from nearest CNC to Site and back)</b>		
<b>A1.4.1</b>	Establish facilities on site (include all resources required to ensure work to be fully completed)	Sum	
<b>A1.4.2</b>	Maintain facilities on site (include all resources required to ensure work to be fully completed)	Weeks	
<b>A1.4.3</b>	Security (24/7), two security guards at all times, day shift needs 2 no security officers (Grade D) with bulletproof vests and two way radios. Night shift needs 2 no security officers (Grade C) with bulletproof vests and two way radios. (All security service providers to be registered with PSIRA)_(actual cost - proof of cost e.g. invoice to be submitted when claimed)	per person/12hr shift	
<b>A1.4.4</b>	De-establish facilities on site (ensure all items to provide the works be removed and that site is normalised to customers satisfaction)	Sum	
	<b>Travel and Accommodation</b>		
<b>A1.5</b>	Once off rate per km (for site establishment purposes including all vehicles to transport resources etc to complete the works i.e. from contractors' base to nearest CNC including return distance) - <b>Only when site is more than 50km from Contractor Base</b>	km	
<b>A1.6</b>	Accommodation (3-Star or less) - proof of cost e.g. invoice to be submitted when claimed	Cost plus Handling Fee %	5%
<b>A1.7</b>	Professionally registered Civil Engineer	hr	
	<b>COMPENSATION RATES (to be used for Compensations Events only) - Schedule of Cost Components</b>		
	<b>TRANSPORT &amp; EQUIPMENT</b>		
<b>A1.8</b>	LDV	km	
<b>A1.9</b>	Truck (2 to 4-ton)	km	
<b>A1.10</b>	Truck (8-ton)	km	
<b>A1.11</b>	Truck with Crane (8-ton)	km	
<b>A1.12</b>	Truck (22-ton) - used on approval from Eskom Representative	km	
	<b>WORKER RATES</b>		
<b>A1.13</b>	Linesman per hour (normal)	hr	
<b>A1.14</b>	Labourer per hour (normal)	hr	

<b>A1.15</b>	Supervisor per hour (normal)	hr	
<b>A1.16</b>	Cable Jointer (Skilled)	hr	
	<b>TOTAL (P&amp;Gs)</b>		
<b>B</b>	<b>GENERAL</b>		
<b>B1</b>	Prepare for outages ...correct snag list – check safety /quality	each	
<b>B2</b>	Excavation of soft soil	m <sup>3</sup>	
<b>B3</b>	Excavation of hard soil / rock	m <sup>3</sup>	
<b>B4</b>	Backfill and compact of holes - normal	m <sup>3</sup>	
<b>B5</b>	Backfill and compact of holes - with sand and cement mixture (labour only)	m <sup>3</sup>	
<b>B6</b>	Importing soil	m <sup>3</sup>	
<b>B7</b>	Rock drilling or Excavate using mechanical boring device i.e. Auger or Excavate using a jack hammer & compressor (irrespective of depth of hole, each hole to be verified by Eskom's Clerk of Works) - proof of cost e.g. invoice to be submitted when claimed	Cost plus Handling Fee %	5%
<b>B8</b>	Adhoc Material – Compensation: only on written instruction from Employer - proof of cost e.g. invoice to be submitted when claimed <b>(No retention deduction on material)</b>	Cost plus Handling Fee %	5%
<b>B9</b>	Compliance to Environmental Management Plan and maintenance thereof	each	
<b>B10</b>	Health and Safety (in compliance with OH&S Act and Construction Regulations) - specify items to verify cost	each	
<b>B11</b>	Health & Safety Plan & maintaining File ( For Minor Works & Split Metering Projects only 10% of the value to be paid)	each	
<b>B12</b>	PPE - proof of cost e.g. invoice to be submitted when claimed	Actual Cost	
<b>B13</b>	Temporary labour	hr	
<b>B14</b>	Erect goal posts: temporary structure and traffic signs to regulate traffic during construction for all road crossings/railway crossing. (This includes any loss of production during these crossings and ensuring access is maintained to roads and properties as well as any fees by Provincial Traffic Department)	each	
<b>B15</b>	Utilisation of Community Liaison Officer (Contractor to submit time sheet weekly for CLO based on attendance register)	per day	
<b>B16</b>	Cart away rubble and excavated soil to a registered dumping site	ton/km	

<b>B17</b>	Storage of material (once-off amount for the entire duration of this contract)	sum	
	<b>All “excess” material must be returned to Eskom stores within 1 week or sooner after completion. Final payment will be withheld until all material is returned.</b>		
<b>B18</b>	Scrapped material transported to Brackenfell by truck	km	
	<b>TOTAL (GENERAL)</b>		
<b>C</b>	<b>LV WORKS</b>		
	Excavate, backfill and compact as per Eskom standard and import backfill soil where required for holes and trenches for poles, stays, flying stays and earth electrodes (all material measured elsewhere)	<b>D-DT 0350, 0342</b>	
<b>C1</b>	Excavate Holes Depth:1.5 to 2.0m ...soft soil	each	
<b>C2</b>	Excavate Holes Depth: > 2.0m ...soft soil	each	
<b>C3</b>	Excavate Holes Depth:1.5 to 2.0m....hard soil	each	
<b>C4</b>	Excavate Holes Depth: > 2.0m...hard soil	each	
	Layout and fit poles fully at hole position on site to ensure ease of lifting by hand or crane when planting		
<b>C5</b>	Layout and fit poles (by crane) 4 - 7m Conc/Wood	each	
<b>C6</b>	Layout and fit pole (by crane) 7 - 13m Conc/Wood	each	
<b>C7</b>	Layout and fit poles (by hand) 4 - 7m Conc/Wood	each	
<b>C8</b>	Layout and fit pole (by hand) 7 -13m Conc/Wood	each	
	Erect (Plant) Poles	<b>D-DT 0050 to 0058</b>	
<b>C9</b>	Erect (Plant) poles (by crane) 4 - 7m Conc/Wood	each	
<b>C10</b>	Erect (Plant) pole (by crane) 7 - 13m Conc/Wood	each	
<b>C11</b>	Erect (Plant) poles (by hand) 4 - 7m Conc/Wood	each	
<b>C12</b>	Erect (Plant) pole (by hand) 7 -13m Conc/Wood	each	
<b>C13</b>	Assemble Struct. LV Insulators/ABC	each	
	Assemble and Erect Struts and Stays	<b>D-DT 0341 to 0343</b>	
<b>C14</b>	Assemble and Erect Strut (by hand)	each	
<b>C15</b>	Assemble and Erect Strut (by crane)	each	
<b>C16</b>	Stays: Make-off Conventional Stays LV	each	
<b>C17</b>	Stays: Make-off Flying Stays LV	each	
<b>C18</b>	Install Conventional Stays & Backfill LV	each	
<b>C19</b>	Install Flying Stays & Backfill LV	each	

	Run out, String, tension, regulate and bind in various conductors (inclusive of hardware and accessories)	<b>D-DT 3136</b>	
<b>C20</b>	Run out/ String/tension/regulate bind in LV Bare conductor	m	
<b>C21</b>	Run out/ String/binding conductor ABC 35mm	m	
<b>C22</b>	Run out/ String/binding conductor ABC 70mm	m	
<b>C23</b>	Run out/ String/binding conductor ABC 120mm	m	
<b>C24</b>	Making off tail ends in pole top box ABC	each	
<b>C25</b>	Making off tail ends on transformer ABC	each	
<b>C26</b>	Making off of ABC using IPC	set	
<b>C27</b>	Morsdorfer Installation	each	
<b>C28</b>	Metering LV Installation	each	
<b>C29</b>	Install LV Fuse Unit as per Eskom D-DT0030 assembly drawings. (Accessories inclusive of fuse bracket & mounting hardware, fuse holders and labels)	set	
<b>C30</b>	Repair of ABC (Heat Shrinking) remove and replace IPC's	each	
	Install on wooden and/or concrete pole a pole mounted distribution box as specified complete with pole mounting brackets(incl.sealing), cable ties, PG clamps, MCBs, neutral , phase and earth bars, insulated copper tails for connecting to LV ABC, IPCs & factory installed cable openings. Included shall be the stainless steel strapping, buckles and terminations of the tails onto LV ABC. Eskom D-DT standrad as amended will apply	<b>D-DT 3055</b>	
<b>C31</b>	BOX,POLE TOP DIST 4-WAY 50A D3055	each	
<b>C32</b>	BOX,POLE TOP DIST 8-WAY 50A D3055	each	
<b>C33</b>	BOX,POLE TOP DIST 4-WAY 120A D3055	each	
<b>C34</b>	BOX,POLE TOP DIST 2-WAY 50A D3055	each	
<b>C35</b>	BOX,POLE TOP SPLIT METER 2-WAY 50A D3055	each	
<b>C36</b>	BOX,POLE TOP SPLIT METER 4-WAY 50A D3055	each	
<b>C37</b>	BOX,POLE TOP SPLIT METER 2-WAY 120A D3055	each	
<b>C38</b>	BOX,POLE TOP SPLIT METER 8-WAY 50A D3055	each	
	Earthing at end of run and transformer points of LV line. (include trenching, backfill & compact for earthing, bonding, BIL downwire, spikes and connection thereof)		
<b>C39</b>	Trenching	m	
<b>C40</b>	Earthing complete @ structure using galvanized kicker pipes	each	
<b>C41</b>	Testing of Transformer earthing (Hoenderpoort)	each	
	Finishing of various types of structures complete for energising		

<b>C42</b>	Finishing of LV Structures Intermediate	each	
<b>C43</b>	Finishing of LV Structures Suspension	each	
<b>C44</b>	Finishing of LV Structures Strain	each	
<b>C45</b>	Finishing of LV Structures Terminal	each	
	<b>Dismantling / Removal / Demolish LV Overhead Line hardware &amp; attachments</b>		
<b>C46</b>	Loosening/slacking of conductor/Rolling up/cut-up/removal conductor	phase meter	
<b>C47</b>	Disassemble LV insulators/ABC attachment and other line hardware	each	
<b>C48</b>	Removal of Poles (backfill holes firmly and normalise site)	each	
<b>C49</b>	Transport dismantled items to nearest TSC / collection point as arranged by the Employer.	km	
	<b>Labelling</b>		
<b>C50</b>	Label wood pole number (LV Only)	each	
<b>C51</b>	Label pole mounted LV fuse/brkr	each	
<b>C52</b>	Print numbering label onto LV pole top box	each	
<b>C53</b>	Identify and label service connections in pole top box	each	
<b>C54</b>	Print label to kiosk to on kiosk/stubby door (Red circle background)	each	
<b>C55</b>	Identify and label feeder cables (Label at both ends)	each	
<b>C56</b>	Identify and label LV service connection cables	each	
<b>C57</b>	Identify and label customer meters in LV meterbox/meter room	each	
	<b>Streetlights</b>		
<b>C58</b>	Install / mount Streetlights	each	
<b>C59</b>	Install / mount Streetlight Control Box	each	
<b>C60</b>	Repair of ABC (Heat Shrinking) remove and replace IPC's (as and when required)	each	
<b>C61</b>	Install Photocell	each	
<b>C62</b>	Testing of Photocell	each	
<b>C63</b>	Making off tail ends in pole top box ABC	each	
<b>C64</b>	Making off tail ends on transformer ABC	each	
<b>C65</b>	Making off of ABC using IPC	each	
	<b>Service Connections</b>		
<b>C66</b>	Installation only of pre-paid energy dispenser units, including SPU back plate	each	



<b>C67</b>	Connect airdac to breaker (inside pole top box), string airdac to brick built house, drill access hole, fit pigtail and switch on	m	
<b>C68</b>	Modification only of Pole Top Boxes (4 way and 8 way) with stainless steel strapping	per pole top box	
<b>C69</b>	Morsdorfer Installation	set	
<b>C70</b>	Conversion (Removal of existing and replace with proposed) Prepaid Energy Dispensary Units (e.g. 20A replaced by 60A). The obsolete pre-paid ED/EC units remain the property of Eskom)	each	
<b>C71</b>	Meter shifting 0- 10 in formal house	each	
<b>C72</b>	Excavate cable trenches not exceeding 600mm wide and 1000mm deep in the pickable material. Including backfilling with excavated material and compact	m	
<b>C73</b>	Laying of conductor in excavated trenches	m	
<b>C74</b>	Upload of PCS file and completion of application form with meter number, date of installation, GPS co-ordinates of meter (brick built) or transformer (informal dwelling/shack) and other relevant technical information still outstanding on application form	per connection	
<b>C75</b>	Connect airdac to breaker (inside pole top box), string airdac to 7m pole, Fit screw-in pigtail on 7m pole, string to informal dwelling/shack, fit screw-in pigtail on informal dwelling/shack, installation of sprig (informal dwelling/shack) and switch on	m	
<b>C76</b>	Mount meterbox to 7m pole	each	
<b>C77</b>	Connect service cable to meter per dwelling	each	
<b>C78</b>	Secure backing board to the dwelling	each	
<b>C79</b>	Mount socket outlet to the backing board (as and when required)	each	
<b>C80</b>	Connect socket outlet per dwelling (as and when required)	each	
<b>C81</b>	Repair of ABC (Heat Shrinking) remove and replace IPC's (as and when required)	each	
<b>C82</b>	Test installation and provide COC	each	
<b>C83</b>	Installation of IPC	each	
<b>C84</b>	Installation of split meter complete	each	
	<b>Metering</b>		
<b>C85</b>	Assemble & Erect H-poles ≥9 meter	each	
<b>C86</b>	Install equipment metering units	each	
<b>C87</b>	Install equipment: load-break switch	each	
<b>C88</b>	Install equipment: links	each	
<b>C89</b>	Install equipment: surge arrestors	each	

<b>C90</b>	Testing of metering units	each	
<b>C91</b>	Making off tail ends in pole top box ABC	each	
<b>C92</b>	Making off tail ends on transformer ABC	each	
<b>C93</b>	Making off of ABC using IPC	each	
	<b>Schools and Clinics</b>		
<b>C94</b>	Installation of Meter Box on Transformer Pole	each	
<b>C95</b>	Distribution Board surface mounted & wired – 6 Way	each	
<b>C96</b>	Distribution Board surface mounted & wired – 8 Way	each	
<b>C97</b>	Distribution Board surface mounted & wired – 12 Way	each	
<b>C98</b>	Distribution Board surface mounted & wired – 18 Way	each	
<b>C99</b>	Distribution Board surface mounted & wired – 30 Way	each	
<b>C100</b>	Distribution Board surface mounted & wired – 36 Way	each	
<b>C101</b>	Install Pre-paid Meter provided by Eskom	each	
<b>C102</b>	Ready Board (Apple / Voltex / York)	each	
<b>C103</b>	Heineman SA15A SP 60/100A Earth Leakage Relay	each	
<b>C104</b>	Heineman SA1-63 SP MCB-10A	each	
<b>C105</b>	Heineman SA1-63 SP MCB-20A	each	
<b>C106</b>	Heineman SA1-63 SP MCB-40A	each	
<b>C107</b>	Heineman SA1-63 SP MCB-60A	each	
<b>C108</b>	Heineman SA1-63 SP MCB-80A	each	
<b>C109</b>	Heineman SA1-63 SP MCB-100A	each	
<b>C110</b>	60A Single pole isolator	each	
<b>C111</b>	1,5m 58W Single flourescent fitting + Light	each	
<b>C112</b>	1,5m 58W Double flourescent fitting + Lights	each	
<b>C113</b>	100W GLS indoor Bulkhead + Light complete	each	
<b>C114</b>	100W GLS outdoor Bulkhead + Light complete	each	
<b>C115</b>	10A , 250V National Photo-Cell	each	
<b>C116</b>	Single Lever 16A Light Switch surface mounted complete	each	
<b>C117</b>	Two Way Switch 16A Light Switch surface mounted complete	each	
<b>C118</b>	Master Switch for outside lighting	each	
<b>C119</b>	15A Double wall plug surface mounted complete	each	
<b>C120</b>	15A Double wall plug surface mounted complete (dedicated supply for computer)	each	
<b>C121</b>	2 x 1,5mm2 & earth cable for lights (Surfix)	m	

<b>C122</b>	2 x 2,5mm2 & earth cable for plugs (Surfix)	m	
<b>C123</b>	2 x 4mm2 & earth cable for geysers (Surfix)	m	
<b>C124</b>	2 x 6mm2 & earth cable for stoves (Surfix)	m	
<b>C125</b>	1,5mm2 PVC insulated Cu wire for lights (tubed buildings)	m	
<b>C126</b>	2,5mm2 PVC insulated Cu wire for plugs (tubed buildings)	m	
<b>C127</b>	4mm2 PVC insulated Cu wire for geysers (tubed buildings)	m	
<b>C128</b>	6mm2 PVC insulated Cu wire for stoves (tubed buildings)	m	
<b>C129</b>	6mm2 PVC insulated Cu earthwire	m	
<b>C130</b>	10mm2 3 core SWA cable	m	
<b>C131</b>	16mm2 4 core SWA cable	m	
<b>C132</b>	25mm2 4 core SWA cable	m	
<b>C133</b>	10mm2 3 core concentric cable	m	
<b>C134</b>	16mm2 3 core concentric cable	m	
<b>C135</b>	Trenching and laying of cable, backfill and compact	m	
<b>C136</b>	75 x 50 PVC trunking with snap on cover	m	
<b>C137</b>	Wood trusses 114 x 38mm for fixing lights	m	
<b>C138</b>	Wooden bracing 38 x 38mm for fixing surfix in roof space	m	
<b>C139</b>	P2200 Unistrut 1,5m for fixing lights onto steel trusses	m	
<b>C140</b>	Supply and install earthspike complete with copper earth	m	
<b>C141</b>	Supply and install PVC tubing	m	
<b>C142</b>	Supply and install galvanized pipes	m	
<b>C143</b>	Supply and install PVC 3 or 4 way boxes complete	m	
<b>C144</b>	Testing of the installation and provision of COC	each	
<b>C145</b>	Supply and install school siren	each	
<b>C146</b>	Completion of necessary documentation – Form 1-S, Documentation form the Employer to be completed in conjunction with COW and co-signed by the Headmaster/mistress	each	
	<b>TOTAL (LV WORKS)</b>		
<b>D</b>	<b>MV OVERHEAD LINE</b>		

	Excavate, backfill and compact as per Eskom standard and import backfill soil where required for holes and trenches for poles, stays, flying stays and earth electrodes (all material measured elsewhere)	<b>D-DT 0350, 0342</b>	
<b>D1</b>	Excavate Holes Depth:1.5 to 2.0m ...soft soil	each	
<b>D2</b>	Excavate Holes Depth: > 2.0m ...soft soil	each	
<b>D3</b>	Excavate Holes Depth:1.5 to 2.0m....hard soil	each	
<b>D4</b>	Excavate Holes Depth: > 2.0m...hard soil	each	
	Layout and fit poles fully at hole position on site to ensure ease of lifting by hand or crane when planting		
<b>D5</b>	Layout and fit poles (by crane) 4 - 7m Conc/Wood	each	
<b>D6</b>	Layout and fit pole (by crane) 7 - 13m Conc/Wood	each	
<b>D7</b>	Layout and fit poles (by crane) >13m Conc/Wood	each	
<b>D8</b>	Layout and fit poles (by crane) H-Pole Wood	each	
<b>D9</b>	Layout and fit poles (by crane) Double-Pole Structure Wood	each	
<b>D10</b>	Layout and fit poles (by hand) 4 - 7m Conc/Wood	each	
<b>D11</b>	Layout and fit pole (by hand) 7 -13m Conc/Wood	each	
<b>D12</b>	Layout and fit poles (by hand) >13m Conc/Wood	each	
<b>D13</b>	Layout and fit poles (by hand) H-Pole Wood	each	
<b>D14</b>	Layout and fit poles (by hand) Double-Pole Structure Wood	each	
	Erect (Plant) Poles	<b>D-DT 0050 to 0058</b>	
<b>D15</b>	Erect (Plant) poles (by crane) 4 - 7m Conc/Wood	each	
<b>D16</b>	Erect (Plant) pole (by crane) 7 - 13m Conc/Wood	each	
<b>D17</b>	Erect (Plant) poles (by crane) >13m Conc/Wood	each	
<b>D18</b>	Erect (Plant) pole (by crane) H-Pole Wood	each	
<b>D19</b>	Erect (Plant) poles (by crane) Double-Pole Structure Wood	each	
<b>D20</b>	Erect (Plant) poles (by hand) 4 - 7m Conc/Wood	each	
<b>D21</b>	Erect (Plant) pole (by hand) 7 -13m Conc/Wood	each	
<b>D22</b>	Erect (Plant) poles (by hand) >13m Conc/Wood	each	
<b>D23</b>	Erect (Plant) pole (by hand) H-Pole Wood	each	
<b>D24</b>	Erect (Plant) poles (by hand) Double-Pole Structure Wood	each	
	Assemble and Erect Struts and Stays	<b>D-DT 0341 to 0343</b>	
<b>D25</b>	Assemble and Erect Strut (by hand)	each	

<b>D26</b>	Assemble and Erect Strut (by crane)	each	
<b>D27</b>	Stays: Make-off Conventional Stays	each	
<b>D28</b>	Stays: Make-off Flying Stays	each	
<b>D29</b>	Install Conventional Stays & Backfill LV	each	
<b>D30</b>	Install Flying Stays & Backfill LV	each	
	Run out, String, tension, regulate and bind in various conductors (inclusive of hardware and accessories)		
<b>D31</b>	Run out/ String/tension/regulate bind in MV Bare conductor (Squirrel, Fox, Mink, Acacia, Pine). Greased or ungreased	m	
<b>D32</b>	Run out/ String/tension/regulate bind in MV Bare conductor (Hare, Oak, 0.5Cu & 0.1Cu). Greased or ungreased	m	
<b>D33</b>	Run out/ String/tension/regulate bind in MV Bare conductor (Chickadee). Greased or ungreased	m	
<b>D34</b>	Extra-over: Installation of bird diverters	each	
<b>D35</b>	Extra-over: Installation of vibration dampers	each	
<b>D36</b>	Run out/ String/binding conductor ABC 35mm (inclusive of all attachments to complete the activity)	m	
<b>D37</b>	Run out/ String/binding conductor ABC 70mm (inclusive of all attachments to complete the activity)	m	
<b>D38</b>	Run out/ String/binding conductor ABC 120mm (inclusive of all attachments to complete the activity)	m	
<b>D39</b>	Making off tail ends in pole top box ABC	each	
<b>D40</b>	Making off of ABC using IPC	set	
<b>D41</b>	Repair of ABC (Heat Shrinking) remove and replace IPC's	each	
	<b>Transformers: (Complete installation include earthing)</b>	<b>D-DT 0420 to 0468 &amp; D-DT 1860 to 1868</b>	
<b>D42</b>	11-22kV, and 33kV : 16-100kVA Single / 3 Phase	each	
<b>D43</b>	11-22kV, and 33kV : 200kVA - 500kVA	each	
<b>D44</b>	11-22kV : 1MVA	each	
	<b>Equipment: (Complete installation include earthing where required)</b>	<b>D-DT 1821 to 1877</b>	
<b>D45</b>	Surge Arrestors	set	
<b>D46</b>	Cut-out Fuses Complete (Fused) (D-WC-6498)	set	
<b>D47</b>	Load Break Switch D-DT-1857 and D-DT-1858	each	
<b>D48</b>	Ground Mounted Regulators D-WC-6478-20-01-00	set of 2 or 3 CANS	
<b>D49</b>	Switched/Fixed Shunt Capacitors D-WC-6447-20-03-00	set	

<b>D50</b>	Voltage Regulator Cans – Elevated D-WC-7216-20-09-00	set of 2 or 3 CANS	
<b>D51</b>	Recloser (complete with control box) D-WC-7343-20-03-01	each	
<b>D52</b>	Pole mounted switch-able units	each	
	<b>Earthing</b>	<b>D-DT 1821 to 1877</b>	
<b>D53</b>	Excavate and backfill trenches 400mm wide x 1000mm deep and lay 10mm round cable and make connections complete	m	
<b>D54</b>	Installation of earth spikes.	each	
	<b>Metering and ancillary cabling from installed transformer</b>		
<b>D55</b>	16kVA ( Single Phase)	each	
<b>D56</b>	25kVA	each	
<b>D57</b>	32kVA	each	
<b>D58</b>	50kVA	each	
<b>D59</b>	100kVA	each	
<b>D60</b>	200kVA	each	
<b>D61</b>	500kVA	each	
<b>D62</b>	1MVA	each	
	<b>MV &amp; LV Testing (Allowance for complete testing and commissioning of MV Equipment. Soil resistance test for equipment to be performed as per Eskom Standard and verified by Eskom's Clerk of Works)</b>		
<b>D63</b>	MV Earth Electrode Test	each	
<b>D64</b>	Transformer LV Earth Electrode Test	each	
	<b>Labeling of MV equipment</b>		
<b>D65</b>	Label pole mounted Trfr. Number	each	
<b>D66</b>	Label mounted device number (Fuse, Switch, Link etc.)	each	
<b>D67</b>	Label wood pole	each	
<b>D68</b>	Label Voltage Regulator	each	
<b>D69</b>	Label to pole mounted recloser/sectionalizer/capacitor/switch-able unit	each	
	<b>Dismantling / Removal / Demolish MV Overhead Line and Equipment</b>		
<b>D70</b>	Demolish existing 11 & 22 kV lines complete and transport to nearest TSC / collection point as arranged by the Employer. ( This item includes loosening/slacking of all conductor/rolling-up/cut-up and removal of conductor; Detaching and removal of hardware; complete removal of poles and normalise site)	linear m (i.e. running all 3 phases)	

	<b>Removal of Pole Mounted &amp; Ground Mounted Transformers/Minisubs :</b>		
<b>D71</b>	16kVA-100kVA Pole Mounted Transformer	each	
<b>D72</b>	>100-315kVA Pole Mounted Transformer	each	
<b>D73</b>	500kVA Pole Mounted Transformer	each	
<b>D74</b>	200 to 315kVA Minisub	each	
<b>D75</b>	500kVA Minisub	each	
<b>D76</b>	1MVA Minisub or Ground Mounted transformer	each	
	<b>Removal of other equipment :</b>		
<b>D77</b>	Voltage Regulators (3-CAN)	set	
<b>D78</b>	Voltage Regulators (2-CAN)	set	
<b>D79</b>	Auto-reclosers with control box / Sectionalisers / Switched or Shunt Capacitors	each	
<b>D80</b>	LPU Metering Units	each	
<b>D81</b>	Load Break Switch	each	
<b>D82</b>	MV links / Isolators	each	
<b>D83</b>	Surge Arrestors	set of 3	
<b>D84</b>	MV Fuses	set of 3	
<b>D85</b>	Remove all types of equipment plinths and dispose thereof at a registered dumping site	each	
	<b>TOTAL (MV OVERHEAD LINE)</b>		
<b>E</b>	<b>MV UNDERGROUND CABLE</b>		
<b>E1</b>	Excavate, backfill and compact trenches 1.0m deep x 500mm wide for cables in <b>pickable materials (soft)</b> by hand (including laying of "danger tape")	m	
<b>E2</b>	Excavate, backfill and compact trenches 1.0m deep x 500mm wide for cables in <b>hard materials by hand.</b> (including laying of "danger tape")	m	
<b>E3</b>	Excavate, backfill and compact trenches 1.0m deep x 500mm wide for cables in <b>all materials by machine.</b> (including laying of "danger tape")	m	
	<b>laying of Pipes</b>		
<b>E4</b>	Supply and lay PVC Pipe (110mm)	m	
<b>E5</b>	Supply and lay PVC Pipe (160mm)	m	
<b>E6</b>	Supply and lay HDPE Pipe (110mm)	m	
<b>E7</b>	Supply and lay HDPE Pipe (160mm)	m	
	<b>Cable Laying / Termination</b>		
<b>E8</b>	Laying of 16-35mm sq LV cable	m	

<b>E9</b>	Terminate / Join 16/35mm LV cables	each	
<b>E10</b>	Laying of 70-95mm sq LV cable	m	
<b>E11</b>	Terminate / Join 70/95mm LV cables	each	
<b>E12</b>	Laying of 120mm sq LV cable	m	
<b>E13</b>	Terminate / Join 120 LV cables	each	
<b>E14</b>	Laying of 25mm sq MV Cable	m	
<b>E15</b>	Terminate / Join 25mm sq MV cables	each	
<b>E16</b>	Laying of 95mm sq MV Cable	m	
<b>E17</b>	Terminate / Join 95mm sq MV cables	each	
<b>E18</b>	Laying of 185mm sq MV Cable	m	
<b>E19</b>	Terminate / Join 185mm MV cables	each	
<b>E20</b>	Laying of 300mm sq Alu MV Cable	m	
<b>E21</b>	Terminate / Join 300mm sq Alu MV cables	each	
<b>E22</b>	Laying of 630mm sq single-core MV Cable	m	
<b>E23</b>	Terminate / Join 630mm sq single-core MV cables	each	
<b>E24</b>	MV Cable pressure test	each	
<b>E25</b>	Earthing of MV cables	each	
<b>E26</b>	Supply and install concrete slab as cable cover (as per Eskom specification)	each	
	<b>Supply and installation of plinths for:</b>		
<b>E27</b>	Ring Main Units (RMU) D-DT-0863 set 6 pages 1-6	each	
<b>E28</b>	Mini Sub Type "A" =< 500kVA D-DT-0859 set 7 pages 1-2	each	
<b>E29</b>	Mini Sub Type "A" = 1000kVA D-DT-0859 set 7 pages 3-4	each	
<b>E30</b>	Mini Sub Type "B" Front Entry Cable D-DT-0859 set 7 page 6	each	
<b>E31</b>	Mini Sub Type "B" Side Entry Cable D-DT-0859 set 7 page 5	each	
<b>E32</b>	LPU metering (CT/VT unit) D-DT-0861 Set 2 sheets 1-2	each	
<b>E33</b>	CW1 Cubical D-DT-1010 Set 2 Sheets 1-2 or similar metering kiosk	each	
<b>E34</b>	Stubby Kiosk base complete	each	
	<b>Installation of equipment:</b>		
<b>E35</b>	RMU inclusive of labeling	each	
<b>E36</b>	Mini Sub Type "A" inclusive of labeling	each	
<b>E37</b>	Mini Sub Type "B" inclusive of labeling	each	



<b>E38</b>	LPU metering unit inclusive of labeling	each	
<b>E39</b>	CW1 Cubical D-DT-1010 Set 2 Sheets 1-2 or similar metering kiosk (inclusive of labelling)	each	
<b>E40</b>	Stubby Kiosk base complete	each	
	<b>Dismantling / Removal / Demolish MV Cable and Equipment</b>		
	<b>Removal of Minisubs/RMUs etc :</b>		
<b>E41</b>	Ring Main Units (RMU)	each	
<b>E42</b>	Mini Sub Type "A" =< 500kVA	each	
<b>E43</b>	Mini Sub Type "A" = 1000kVA	each	
<b>E44</b>	Mini Sub Type "B" Front Entry Cable	each	
<b>E45</b>	Mini Sub Type "B" Side Entry Cable	each	
<b>E46</b>	LPU metering (CT/VT unit)	each	
<b>E47</b>	CW1 Cubical or similar metering kiosk	each	
	<b>Removal of MV Cable (inclusive of Excavations, Rolling-up of cable and backfill &amp; compact trench (normalise site))</b>		
<b>E48</b>	Removal of 4-core cable	m	
<b>E49</b>	Removal of 25 to 70mm sq 3-core MV cable	m	
<b>E50</b>	Removal of 95 to 185mm sq 3-core MV cable	m	
<b>E51</b>	Removal of =>300mm sq 3-core MV cable	m	
<b>E52</b>	Removal of 630mm sq single-core MV Cable	m	
	<b>TOTAL (MV UNDERGROUND CABLE)</b>		
<b>F</b>	<b>RE-INSTATEMENT</b>		
	<b>Trench Re-instatement</b>		
<b>F1</b>	Light duty road-way (Trench = 0.5-1m wide, 150mm base + 25mm premix)	m	
<b>F2</b>	Footway (Trench = 0.5-1m wide, 75mm base + 25mm premix)	m	
<b>F3</b>	Footway (Trench = 0.1-1.5m wide, 75mm base + 25mm premix)	m	
<b>F4</b>	Heavy duty road-way (Trench = 0.5-1m wide, 225mm base + 40mm premix)	m	
<b>F5</b>	Brick paving (labour only)	m <sup>2</sup>	
<b>F6</b>	Concrete paving (labour only)	m <sup>2</sup>	
<b>F7</b>	Kerb (labour only)	m	
<b>F8</b>	Channel (labour only)	m	
<b>F9</b>	Clear site and take away rubble to nearest dumping site	m <sup>3</sup>	

<b>F10</b>	Saw cutting	m	
<b>F11</b>	Excavate trenches for layerworks	m <sup>3</sup>	
	<b>General</b>		
<b>F12</b>	Traffic Control	per day	
	<b>TOTAL (RE-INSTATEMENT)</b>		
<b>G</b>	<b>THRUSTBORING</b>		
	(The items include all labour, plant, material and equipment required to install cable ducting by thrust-boring ducts under existing roadways and surfaced areas. Also to include transport within 100km radius from Brackenfell office)		
	<b>Soil Conditions: Normal pickable</b>		
	Install Cable Ducts - Supply, join & install the following sizes of PVC cable ducting under roads and surfaced areas by thrust-boring :		
<b>G1</b>	160mm diameter PVC duct	m	
<b>G2</b>	110mm diameter PVC duct	m	
<b>G3</b>	75mm diameter PVC duct	m	
<b>G4</b>	63mm diameter PVC duct	m	
	Install Cable Ducts - Supply, weld & install the following sizes of HDPE cable ducting under roads and surfaced areas by thrust-boring :		
<b>G5</b>	160mm diameter HDPE duct	m	
<b>G6</b>	110mm diameter HDPE duct	m	
<b>G7</b>	75mm diameter HDPE duct	m	
<b>G8</b>	63mm diameter HDPE duct	m	
	<b>Soil Conditions: Intermediate</b>		
	Install Cable Ducts - Supply, join & install the following sizes of PVC cable ducting under roads and surfaced areas by thrust-boring :		
<b>G9</b>	160mm diameter PVC duct	m	
<b>G10</b>	110mm diameter PVC duct	m	
<b>G11</b>	75mm diameter PVC duct	m	
<b>G12</b>	63mm diameter PVC duct	m	
	Install Cable Ducts - Supply, weld & install the following sizes of HDPE cable ducting under roads and surfaced areas by thrust-boring :		
<b>G13</b>	160mm diameter HDPE duct	m	
<b>G14</b>	110mm diameter HDPE duct	m	
<b>G15</b>	75mm diameter HDPE duct	m	

<b>G16</b>	63mm diameter HDPE duct	m	
	<b>Soil Conditions: Heavy/Rocky</b>		
	Install Cable Ducts - Supply, join & install the following sizes of PVC cable ducting under roads and surfaced areas by thrust-boring :		
<b>G17</b>	160mm diameter PVC duct	m	
<b>G18</b>	110mm diameter PVC duct	m	
<b>G19</b>	75mm diameter PVC duct	m	
<b>G20</b>	63mm diameter PVC duct	m	
	Install Cable Ducts - Supply, weld & install the following sizes of HDPE cable ducting under roads and surfaced areas by thrust-boring :		
<b>G21</b>	160mm diameter HDPE duct	m	
<b>G22</b>	110mm diameter HDPE duct	m	
<b>G23</b>	75mm diameter HDPE duct	m	
<b>G24</b>	63mm diameter HDPE duct	m	
	<b>Transport Rate</b>		
<b>G25</b>	Travelling Rate (from base stated in contract)	km	
	<b>TOTAL (THRUSTBORING)</b>		

## C3: Scope of Work

### C3.1 Works Information

#### 1. Description of the *works*

- a) The partial supply and construction of MV and LV reticulation inclusive of overhead lines, cable and equipment installation within the Cape Coastal Cluster.
- b) A detailed description of the scope of works will be provided with the purchase/works order in the document called "Project Specification" on a project basis which include:
  - a. Copy of the spanning sheets and drawings
  - b. Site and client's contact details
  - c. Details as indicated on the purchase/works order, including required start and completion dates etc.
- c) The works will generally include the following activities:
  - Site establishment including the provision of security services.
  - Installation of MV/LV lines and service connections
  - Layout, fit and dress all structures as specified
  - Drill/dig holes for structures and stays
  - Plant, back-fill and compact all structures and stays as specified
  - Run out, tension and regulate conductors as specified
  - Bind in conductor and finish structures as specified
  - Connect line equipment or transformer and tap onto existing 11kV line under permit conditions
  - Complete all quality documentation and mark up any changes to drawings
  - Arranging of outages dates with applicable CNC
  - General liaison with property owner's on whose property the line is situated and obtaining clearance certificates on completion of the project
  - Pegging of pole positions from spanning sheets with GPS as supplied by the *Contractor*
  - Installation of equipment as Distribution standards and specifications
  - Metering Installation
  - Streetlights Installation
  - Labelling
  - Normalise Site
  - Cable installation, jointing and terminations.

## 2. Management Meetings

Regular meetings of a general nature may be convened and chaired by the *Project Manager* /Employer's representative as follows:

Title and purpose	Approximate time & interval	Location	Attendance by:
Pre-introductory meeting	Upon request of the Project Manager at an agreed date by all parties	Site	PM, QS, Site Supervisor, Safety and Environmental Representatives and the Contractor.
Introductory meeting	After safety and environmental files have been assessed and approved.	Site	PM, QS, Site Supervisor, Safety and Environmental Representatives and the Contractor.
Toolbox talk and risk assessment	Daily before work begins.	Site	Contractor and Site Supervisor.
Risk register and compensation events	As necessary.	Site	PM, Contractor and Site Supervisor.
Overall contract progress and feedback	On a regular basis as agreed with the Project Team and the Contractor	Site	PM, QS, Contractor, Site Supervisor, and Safety and Environmental Representatives.

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.

All project instructions are to be issued by the Project Manager only.

## 3. General

- Material for the proposed projects supplied by the *Contractor* shall be in accordance with the latest revision of Eskom's Distribution Standards (Buyer's Guide), project drawings and specified Bill of Materials
- The onus is on the *Contractor* to obtain the latest revision of standards and procedures applicable
- Damage caused to Eskom or public property as a result of negligence and/or non-compliance by the *Contractor* will be for the *Contractor's* own account
- The *Contractor* should at all times inform the Employer's Representative and the Clerk of Works of any activity that he will be carrying out on site i.e. excavations etc
- Specialised Services may be required during the term of this contract. These services may be acquired via Subcontracting. The Contractor is to note the conditions for subcontracting contained in this contract.
- The *Contractor's* invoice(s) reflecting the cost of specialist services provided shall have a copy of the specialist services provider's invoice attached.
- The *Contractor's* invoice(s) shall reflect all the invoice(s) for material purchased attached.
- Proof of any cost on the *Contractor's* invoice(s) shall be submitted to the *Employer's* Representative.

- For Works to be provided under this contract, a Response Time of Twenty Four (24) hours is required unless otherwise stated by the *Employer's Representative*. In the event of a Normal Call-Out for a Breakdown the Response Time will be Three (3) hours from the time of call.
- In the case of an Emergency, meaning a situation with life threatening consequences or a situation that will cause damage to property or equipment, the *Employer's Representative* will state clearly that this is an "Emergency situation and a 1 hour turn around response time will be required.. A written works order will follow up the phone call.
- All Tools and/or Equipment to perform all of the Works as per works order shall be supplied by the *Contractor*. The *Employer* will not supply any tools and/or equipment to provide the Works or a part of the Works. The *Contractor* will not be allowed to make use of the *Employer's* Trolleys or Ladders.
- Tools and Equipment entering the Site can be subject to an inspection by the *Employer's Representative* for conformance to safety standards. The latest tool/machinery safety checklist shall be represented at the same time. Should the *Employer's Representative* find any non-conforming item(s) on the Site, the *Employer's Representative* will request the *Contractor's Responsible Person* to remove such non-conforming item(s) from the Site immediately.
- Each task shall be performed in a safe manner at all times for the well being of the *Contractor's* staff and the *Employer's* staff.
- All personal protective clothing and equipment to safely perform all of the Works shall be available on the Site at all times. The Principal *Contractor* and all his/her subcontractors are responsible to make all personal protective clothing and equipment available to all his/her staff.
- No waste or redundant material/spares shall be dumped in the *Employer's* waste bins at the loading bay area or placed in the surrounding area at the waste bins. All waste and redundant material/spares shall be removed from the Site daily by the *Contractor* only to be disposed off at a registered dump site. A Certificate of the safe disposal shall be obtained from the registered dump site by the *Contractor* and placed on record in his/her Health and Safety File. The Site shall be neat and clean at the end of the day. On completion of each task the same shall apply.
- The *Contractor* shall ensure that the work area(s) are properly barricaded before proceeding to provide the Works. Barricading shall be firm and solid, be up at all times and be clearly visible from all angles to the staff, workers and the public. No barricading or part of the barricading shall be removed before all of the Works have been provided.
- The Principal *Contractor* and all his/her Sub Contractors shall at all times adhere to the *Employer's* lockout procedure. The *Contractor* is responsible to supply all locks, lockout mechanisms and notices to be displayed to safely lock out all sources of energy e.g. *Mechanical, Electrical, Pneumatic and Hydraulic*.
- During this contractual period, should any additions or alterations be made to any of the existing facilities or service systems "Approved As Built Drawings" must be submitted to the *Employer* on completion.
- On completion of this contract the *Contractor* shall hand over to the *Employer's Representative* his/her Health and Safety File. No final payment will be authorized until the *Employer's Representative* is in receipt of the *Contractor's* Health and Safety File.
- On request for a quotation for work via a works/purchase order, a full comprehensive break down on the men, material, machines, transport and whatever else might constitute the work to be supplied in full before commencement of any work related to that specific works/purchase order.

**The Following to be noted;**

- No Electrical *Contractor* will be allowed to perform any work on an Electrical Installation or a part of the Electrical Installation unless the installation or part of the installation is isolated and made safe. For an Electrical *Contractor* to perform work on a Live Electrical Installation will require the following: (1) LV Authorization. (2) Equipped with a complete set of 1000Volt insulated tools. (3) Equipped with the required protective clothing and equipment. (4) Written risk assessments and Safe Work Procedures shall be in place. 5) Permit to work has been issued.
- When the Principal *Contractor* or his/her Sub Contractor(s) make use of the Goods Lift(s) to take material to a floor or remove waste from a floor, the Principal *Contractor* shall ensure that the Goods Lift(s) are neat and clean on Completion of the Works. [Pertaining mainly to Bellville & Brackenfell]
- The *Employer's Representative* reserves the right to stop any task/job being performed at any time should the Principal *Contractor* or his/her Sub *Contractor(s)* not comply to the specifications for the

task/job and/or when workmanship and/or quality is not to the satisfaction of the *Employer's Representative*.

- Any Employee employed by the *Employer* has the right to stop a task/job at any time should he/she find the Principal *Contractor* or his/her Subcontractor(s) deviating from safety standards and procedures as per the *Employer* and/or the Construction Health and Safety Regulations/Occupational Health and Safety Act [Act 85-1993].
- The *Employer's Representative* reserves the right to send any Employee employed by the Principal *Contractor* or his/her Subcontractor off the Site should the Employee make himself/herself guilty of transgression of the 5 cardinal rules or any form of unsatisfactory behaviour.
- All material and/or spares that may become redundant while performing any task/job on the Site shall remain the property of the *Employer* unless otherwise stated by the *Employer's Representative*.
- All open landings, edges or openings in slabs or floors will be protected by fixed solid balustrades of 1,20m high with intermediate supports and rails. Hazard tape shall be wrapped around the full length of the barricade with signage.
- The Contractor's authorisation level shall be based on one of the following:
  - Medium Voltage authorisation as a responsible person (can receive a work permit), test dead and apply working earths in terms of the ORHVS.
  - If the responsible person needs to do work on the LV side, a separate LV authorisation is required.
  - Authorise in terms of Low Voltage, isolate, earth and work on LV network only
  - Low Voltage Live Line Authorisation as a responsible person (can receive work permit)

**The *Contractor* shall refer to the detailed drawings, specifications and works information as attached to this contract and is responsible to ensure work is completed with the latest revision of these relevant documents.**

#### **4. Works/Purchase Order Process**

- Works/purchase orders shall be issued by the *Employer* to the *Contractor* at least 5 working days prior commencement of the works.
- The Contractor is expected to review the scope in line with the works order and do the necessary amends to the works order to include the full scope to be completed the stipulated construction period.
- A works/task order is only complete once this instruction has been fully completed, signed by both parties, a purchase order number has been issued and the access certificate has been handed to the Contractor.
- The Contractor may accepts / rejects (with reason) work as per works/purchase order within the *Period for Reply*.
- Details of the *works* required will be issued as an Activity List within the works Order as per Price List attached to this contract
- The following to be completed per Works/Purchase Order.
  - Detail of the Project
  - *Start and Completion* dates
  - Purchase Order Number (i.e., 45-number)
  - WBS Number
  - SAP ID number of *Employer's Representative*
  - Construction execution checklist
- Any discrepancies picked up by the *Contractor* regarding the Works/Purchase Order must immediately be brought to the attention of the *Employer*.
- Should any changes be required during the construction period, the Contractor should bring this to the attention of the Employer/Project Manager. Only once approval has been granted via a written instruction, can the Contractor proceed with these changes.
- Work can only commence once the Contractor is given a valid 45 number.

## 5. Compensation Events and Overtime

- Compensation events and overtime will only be applicable when a written approval was issued by the *Employer's representative*. The *Employer* will instruct the *Contractor* to provide a quotation for a valid compensation.
- The *Employer* will accept (as per Event Register) or reject the compensation event.
- Compensation rates shall not be used for *works* that are already listed and priced for in the Activity Price List
- Overtime will be applied as a compensation only when instructed and agreed by the *Employer*

The following where stated in the Pricelist, will only be reimbursed when proof of payment is provided;

- Re –imbursement for Accommodation shall be based on actual cost
- Re –imbursement for material shall be based on actual cost
- Re –imbursement for PPE shall be based on actual cost

## 6. Inspection and commissioning

- The *Contractor* shall complete the standard Eskom quality check sheets for Reticulation in conjunction with the *Employer*, Clerk of Works and Project Engineer and ensure compliance prior to requesting the *Employer*, Clerk of Works and Project Engineer to inspect.
- All additional costs for non-compliance requiring additional inspections will be borne by the *Contractor*.
- The *Contractor* shall notify the *Employer* and Clerk of Works at least 5 working days prior to requiring an inspection. A date and time will be arranged to meet on site and conduct such an inspection. The *Employer* and Clerk of Works will keep a formal signed off checklist of the inspection on record.
- The *Contractor* shall ensure that no network shall be energized without the written permission of the *Employer* or the *Employer's Representative* (Clerk of Works).
- Ensure that copies of the Certificates of Compliance are kept on file in terms of the ORHVS and that the original Certificates of Compliance are handed over to the *Employer*. Copies of the COC to be distributed as follows:
  - Client to get one copy
  - Applicable CNC to get one copy
  - Project Management, Project Co-ordinator to get the original with issue of invoice by *Contractor*)

## 5. Drawings

***Note: For access to Technical drawings please contact Brenda Morrison at 011 629 5266 /Brenda.morrison@eskom.co.za for access to the PDE Scot Website. The Contractor shall acquaint himself with latest available standards.***

Drawing Listed for MV Structures	Category
NEW WORKS	
SV Ph-Ph	General Arrangement-staggered vertical ph-ph
SV 3Ph	General Arrangement – staggered vertical 3ph
T 3Ph	General Arrangement – T-frame 3ph
H 3Ph	General Arrangement – H-pole 3ph
Aux Struct	General Arrangement – auxiliary structures
Assembly	General Arrangement – assembly drawings
Equipment	General Arrangement – equipment installation drawings
EXISTING WORKS	
A-frame	General Arrangement – A-frame structures
Assembly Drawing	General Arrangement – Assembly drawing



### **Earthing Drawings**

Drawing number	Revision	Title
D-DT-0630	Latest revision	Protection / Earthing
D-DT-0637	Latest revision	LV ABC Reticulation Earthing
D-DT-0642	Latest revision	MV and LV Earth Electrodes details
D-DT-1860	Latest revision	MV Reticulation Transformer Earthing details

### **Metering Drawings**

Drawing number	Revision	Title
D-DT-0355	Latest revision	LV Services CT/VT Metering Structure

### **Streetlights Drawings**

Drawing number	Revision	Title
D-DT-0354	Latest revision	LV/Services Reticulation Overhead Streetlight Connection Details
D-DT-0394	Latest revision	Street Light Controller Box Connection Details
D-DT-0395	Latest revision	Street Lighting ABC / Concentric Cable Direct Connection Details
D-DT-0396	Latest revision	Area Lighting Intermediate Assembly

### **Service Connections**

Drawing number	Revision	Title
D-DT-0180	Latest revision	LV/Service Reticulation Service Distribution Box (A.B.C. System)
D-DT-0183	Latest revision	LV/Service Reticulation Service Distribution Box (Bare Wire System)
D-DT-0305	Latest revision	LV/Service Reticulation Bare Neutral ABC Intermediate/Suspension
D-DT-0332	Latest revision	MV & LV Reticulation Pole Planting Depth Details
D-DT-0347	Latest revision	Service Reticulation Standard Passive Unit
D-DT-0360	Latest revision	LV/Service Reticulation Service Connection to House
D-DT-0361	Latest revision	LV/Service Reticulation Service Connection with Service Pole
D-DT-0363	Latest revision	LV/Service Reticulation Four Way Pole Top Distribution Box Connection Diagram
D-DT-0366	Latest revision	Service Reticulation Service Connection for Concentric Suspension Assembly
D-DT-0368	Latest	LV/Service Reticulation Service Connection with Splitter Box

	revision	
D-DT-0369	Latest revision	LV/Service Reticulation Eskom and Telkom Service Connection with 5m Service Pole

### **LV Structures**

Drawing number	Revision	Title
D-DT-0330	Latest revision	MV and LV Reticulation Pole Foundation Arrangement
D-DT-1122	Latest revision	LV Reticulation Three Phase Bare Neutral ABC Strain Assembly (60-90 deg) Wood Pole
D-DT-0982	Latest revision	LV Bare Wire Systems Eye Nut Assembly
D-DT-0363 Sheet 1	Latest revision	LV / Service Reticulation Four Way Pole Top Distribution Box Connection Diagram
D-DT-0363 Sheet 2	Latest revision	LV / Service Reticulation Pole Top Box 63 Amp Customer Connection
D-DT-1143	Latest revision	LV Reticulation Three Phase Bare Neutral ABC Cross Intermediate Strain Assembly Wood Pole
D-DT-1101	Latest revision	Telecommunications Authority Installation on an Eskom LV Structure Layout
D-DT-1100	Latest revision	LV Reticulation Three Phase Bare Neutral ABC Suspension Assembly (0-30 Deg) Wood Pole
D-DT-1148	Latest revision	LV Reticulation Dual Phase Bare Neutral ABC Strain Assembly (60-90 Deg) Wood Pole
D-DT-1145	Latest revision	LV Reticulation Dual Phase Bare Neutral ABC Suspension Assembly (0-30 Deg) Wood Pole
D-DT-0341 Sheet 1	Latest revision	Stay Assembly (LV 34 kN) Wood / Concrete Poles
D-DT-0341 Sheet 2	Latest revision	Stay Assembly (MV 97kN) Wood Poles
D-DT-0341 Sheet 3	Latest revision	Stay Assembly (MV – 97kN) Concrete Poles
D-DT-1142	Latest revision	LV Reticulation Three Phase ABC Bare Neutral T-off Ass. From Strain Wood Pole
D-DT-1141	Latest revision	LV Reticulation Three Phase Bare Neutral ABC Cross Intermediate – Intermediate Assembly Wood Pole
D-DT-1147	Latest revision	LV Reticulation Dual Phase Bare Neutral ABC Strain Assembly (0-60 Deg) Wood Pole
D-DT-0349	Latest revision	LV Reticulation ABC and Telkom Shared Structures
D-DT-1150	Latest revision	LV Reticulation Dual Phase Bare Neutral ABC Cross Intermediate – Intermediate Assembly Wood Pole
D-DT-1149	Latest revision	LV Reticulation Dual Phase Bare Neutral ABC T-off Assembly from intermediate Wood Pole
D-DT-0348 Sheet 1	Latest revision	MV and LV Reticulation Shared Structure Clearances Bare MV / ABC / Telkom
D-DT-0348 Sheet 2	Latest revision	MV Swer Reticulation Shared structure clearances bare MV / ABC / Telkom
D-DT-0348 Sheet 3	Latest revision	MV Swer Reticulation Shared Structure Clearances Bare MV / Understrung Earth Wire / ABC / Telkom
D-DT-1146	Latest revision	LV Reticulation Dual Phase Bare Neutral ABC Terminal Assembly Wood Pole

D-DT-1140	Latest revision	LV Reticulation Three Phase Bare Neutral ABC T-off Assembly from Intermediate Wood Pole
D-DT-0309 Sheet 1	Latest revision	LV Reticulation Three Phase SABS 780 Transformer and LV Fuseholder Connections
D-DT-0309 Sheet 2	Latest revision	LV Reticulation Dual Phase SABS 780 Transformer and LV Fuseholder Connections
D-DT-0309 Sheet 3	Latest revision	LV Reticulation Single Phase SABS 780 Transformer and LV Fuseholder Connections
D-DT-0309 Sheet 4	Latest revision	LV Reticulation LV Bare Wire Fuse Holder Connections

### 3. Specifications

Title	Date or revision	Tick if publicly available
<b>Health &amp; Safety</b>		
Occupational health and safety standard for <i>contractors</i> and subcontractors employed by Eskom <b>34-333</b>	Latest revision	Attached
<b>Construction Safety, Health and Environmental Management</b> <b>32-136</b>	Latest revision	Refer to IARC
<b>Assessment Procedure for Authorisation</b> <b>34-145</b>		Refer to IARC
<b>Authorisation Standard for operating on HV Systems</b> <b>34-146</b>		Refer to IARC
Latest revision	Latest revision	Refer to IARC
Procedure for refusal to work on the grounds of Health, Safety and Environmental concerns <b>SCSPVABP6</b>	Latest revision	Refer to IARC
Working Clearances at MV structures with pole-mounted auxiliary equipment <b>DISREAAH3</b>	Latest revision	Refer to IARC
Particular Requirement for Prepayment meters <b>DISSCAA9</b>	Latest revision	Attached
Working at Height <b>32-418</b>	Latest revision	Attached
Standard for a Fall Arrest System <b>DISASABW3</b>	Latest revision	Refer to IARC
Standard for selection, care, use, inspection and maintenance of ladders <b>DST 0051</b>	Latest revision	Refer to IARC
Securing of ladders <b>06TI-012</b>	Latest revision	Refer to IARC
Barricading Procedure <b>SCSPVABF4</b>	Latest revision	Refer to IARC
Standard for the use of Equipotent Footplates <b>SCSASAAU5</b>		Refer to IARC
Training, Testing and Authorization of persons for the Operations and Maintenance of Power Systems <b>DISPVABN2</b>		Refer to IARC
Government Occupational Health and Safety Act – Construction Regulations 2003	N/A	Refer to IARC
Reporting, Recording, Investigating Costing and Following up of incidents or accidents <b>SCSPVAB06</b>	Latest revision	Refer to IARC
Safety Procedure for Planned Refurbishment/Dismantling of Medium & Low Voltage Overhead Wood Pole Power lines <b>SCSPVACP8</b>	Latest revision	Refer to IARC
Standard applicable to <i>Contractors</i> working in close proximity to live apparatus		Refer to IARC

	<b>SCSASAAW8</b>	Latest revision	
PROVISION AND USE OF PERSONAL PROTECTIVE EQUIPMENT	<b>DISASAAT8</b>	Latest revision	Refer to IARC
HEALTH AND SAFETY SPECIFICATION FOR ELECTRIFICATION/RETICULATION WORK			ATTACHED
INSPECTION CHECKLIST			ATTACHED
<b>Cordaptix (PCS) Specification</b>			
PCS37Master		N/A	
<b>Schools</b>			
National Schools and Clinics Guideline		N/A	
Eskom National Standard for Wiring of Schools	<b>SCSASAAQ5</b>	Latest revision	Refer to IARC
Schools and Clinics Survey Forms		N/A	
<b>General</b>			
Generic Environmental Management Plan		N/A	Attached
Pre-task planning and feedback process	<b>SCSPVACU1</b>	Latest revision	Refer to IARC
Contractor's Performance Appraisal Process		N/A	Attached
NEC Payment Certificate		N/A	Attached
Procedure for the handling of non-conformance	<b>SCSPVABX4</b>	Latest revision	Refer to IARC
Handing over documentation: Major Reticulation, Minor Reticulation, Electrification	<b>SCSASABZ1</b>	Latest revision	Refer to IARC
Distribution Standard Part 2: Earthing. Section 1: MV and LV Reticulation Earthing	<b>SCSASAAL9</b>	Latest revision	Refer to IARC
Access to Farms	<b>DISADABQ9</b>	Sept 2003	Refer to IARC
Construction Regulation & Evaluation Report Applicable to Principle Contractors		Latest revision	Refer to IARC
	<b>WR-F4-05</b>		
Technical Instruction – Prohibition Notice: Ref. No. IOSS 2074-003		Latest revision	Refer to IARC
<b>03 TI – 016</b>			
Framework for the Implementation of Labour Intensive Projects under the Expanded Public Works Programme (EPWP)			Publicly Available

## 4.1 Constraints on how the *Contractor* Provides the Works

### 1. Insurances

The contractor shall ensure that they submit a copy of their company Insurances at tender stage, this should include, Contractor All risk, public liability and third party insurances.

### 2. Authorisations

The nature of this contract scope requires authorisation as works will be performed within or close proximity of "live" conditions. It is therefore the responsibility of the Contractor to ensure that he maintains his Western Cape Authorisation for the full duration of this Contract. There are limited projects that does NOT require authorisation and as a result, should you not have authorisation, we cannot guarantee that works/purchase order request will be issued.

### 3. Quality Assurance and Quality Plan

- "Quality Assurance Requirements: The *Contractor* shall comply with all quality requirements as set out in the document QM-58 i.e. Eskom Contract Quality Requirements Specification.
- The Contractor shall comply with ISO9001:2008 Quality Management System Requirements.
- The *Contractor* shall comply with all other regulatory and statutory requirements applicable to the *works*. "
- The *Contractor* needs to submit a quality plan indicating the control points for quality to ensure that the *works* are done according to specification.

### 4. 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.
- The *Contractor* will adhere to all the requirements as per the specification **Access to Farms** which includes, but is not restricted to:
  - Identity cards with photographs
  - Clearly marked vehicles NB: All contractor vehicles need to be marked with a sticker stating "Eskom Contractor" but should be on Eskom Standard. All Contractor staff should be identifiable by the use of PPE and gubbons reflecting company's name.
  - Cooperation in order to help Eskom provide the customer with a project schedule reflecting the period during which the construction and commissioning activities will take place.
  - The *Contractor* shall be responsible for negotiation with customers/landowners 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, wayleaves, etc.

**NOTE: releasing Eskom, its contractors and agents from any and all liability in respect of damages caused by the construction of the said *works* after resolution by the contractor of similar issues at completion of *works*:**

- The *Contractor* to ensure after completion of the *works*, that the attached "Final Release" form is fully completed by the affected landowners. The fully signed form(s) to be submitted to the Eskom Representative. Final Payment will not be released unless this fully completed/signed form(s) is received by the Eskom Representative

## **5. Material and Bill of Quantities**

- The *Employer* shall supply all required materials to complete the *works* and deliver it to site or *Contractor's* store unless otherwise agreed.
- All dismantled and unused material, unless otherwise instructed by the *Employer*, are to be returned to the Brackenfell stores on completion of the *works* as per Works Order.
- Eskom will deliver material to the contractor on a weekly basis.

### **5.1 Supply of ad hoc material by Contractor:**

- In the event that Eskom cannot procure material for any of the projects executed under this contract within the required timeframes, the Contractor will be requested to submit a quotation/s in order to supply this material.
- The Employer will assess the quotation and provide an instruction to proceed with the procurement of such material.
- Contractor will only be reimbursed for material purchases upon submission of the actual supplier invoice. This should be submitted with the Contractor's progress claims.

### **5.2 Storage of all material issued by Eskom**

- Contractors should have sufficient space and capacity at their facilities to store all material related to this project.
- All the material related to this contract will be delivered to the Contractor's facility for storage and safekeeping.
- Once this material has been handed over to the Contractor, such material will be the responsibility of the Contractor until completion.
- Contractors take full accountability of all materials (as well as the replacement and management thereof) once delivered and handed over by Eskom.
- Contractor to adhere to good housekeeping practises when storing material.

**NB: Provision has been made in the price list/BoQ for storage of material to be paid as a once-off for the entire duration of this contract. Contractor to make sufficient allowance in their rate to cover all costs associated with the storage of Eskom material**

## **6. Site Establishment and De-establishment**

- The *Contractor* will be required to establish a Site Office on Site where meetings can be held and will ensure that basic amenities are available, such as a table and chairs.
- *Contractor* to clear and de-establish total site on completion of proposed *works*.
- *Contractor* is required to collect, load and cart away all rubble and surplus demolished *works* and dispose thereof at a registered waste site
- Contractor to apply good housekeeping at all times.

- Contracts shall ensure the safety of site public and all employees through the provision of security guards.
- Where applicable, Site Establishment will make provision for costs to be incurred by the *Contractor* to ensure adherence to the Environmental Management Plans and other Specifications attached to this contract.
- The Site Management Plan to be submitted and approved by the Eskom representative/Project Manager for the specific works order within 7 days after Works/Purchase Order is awarded. NOTE: Only required when there is a physical site establishment. This plan to be signed off with the Works/Purchase Order at the Site Handover meeting. A template for the “site management plan” will be provided to the contractor as the start of this contract.
- Security and safeguarding of the site will form part of site establishment.

## 7. 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* shall be responsible for adequate liaison with all landowners affected during the project to ensure that they are aware of the location of the *Contractor* at all times as well as the estimated time the *Contractor* will be working on the premises.
- The *Contractor* shall adequately inform the land-owners on the number of employees that will be working on the land-owners land at one particular time.
- The *Contractor* shall negotiate access with property owners for the erection of the network and installation of service connections.
- The *Contractor* is required to make all the necessary arrangements with the Local Authorities for road crossing structures and removal thereof.
- The *Contractor* may exercise the option to use a Liaison Officer (e.g. CLO – Community Liaison Officer) for interaction with Customers or parties affected. The onus is on the Contractor to liaise with the Ward Councillor to acquire the relevant CLO
- The Contractor will be responsible for external disputes which may occur with regard to the works

## 8. 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 *work*.
- The *Contractor* shall familiarize himself with all existing services (water, electricity, sewage, etc) prior to starting of the *works*.
- The onus is on the *Contractor* to obtain the latest revision of standards applicable at the time of issue of the Works Order.
- The *Contractor* is required to supply all labour, plant, equipment, loose tools and transport for the duration and completion of the project.
- The *Contractor* to use local labour at various sites as encouraged by the Department of Public Works in their latest document “**Framework for the Implementation of Labour Intensive Projects under the Expanded Public Works Programme (EPWP)**”. The Contractor to ensure liaising and meeting with the relevant Ward Councillor to obtain Community Liaison Officer (CLO) to assist in acquiring localised labour as required by the EPWP.
- The *Contractor* will ensure that testing and commissioning of installations takes place where applicable as per the handover document attached to this contract and that all required Certificates of Compliance are completed.

- *Contractor* to provide breakdown 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 compensation events. .
- The *Contractor* will report all obstacles or risks on site that could impact on time, cost, quality, environmental as well as health and safety in writing to the *Employer*. In the event of an emergency, the *Contractor* will report the incident immediately to the *Employer*
- The *Contractor* shall ensure that all Construction work is carried out in accordance with all other statutory requirements applicable to the area.
- The *Contractor* shall ensure that all Construction work is carried out in accordance with Eskom's specifications, standards and regulations including the CD containing "A Technical brief for Electrical Reticulation Projects" handed to and signed for by the *Contractor*.
- The *Contractor* is responsible for providing all PPE for the duration and completion of this contract per project. Contractor should provide a list of their permanent staff as well as submit copies of the ID docs of the temporary staff whom they will provide PPE for.

## 9. Expanded Public Works Programme (EPWP)

- The contractor must report all local/temporary labourers employed in a project. The cost of employing such labour will be inclusive in the activity/item in the price list. No additional costs will be paid.
- The contractor is to submit the completed EPWP report with the submission of each progress claim. .
- The contractor must submit REV 7EPWP report together with the assessment claim for payment. This template could change during the course of this contract and the latest applicable template should apply at all times.
- The contractor is responsible for assisting Eskom in reporting all work done.
- No payment will be certified without the required report being submitted

## 10. Lost Time Injury Report (LTIR)/OHS Stats Report of Man Hours and incidents

- The Contractor must submit this report with each payment assessment claim for all major reticulation projects.
- As for minor reticulation projects, the Contractor is to submit a monthly Man-hours report for work done on all "minor" projects.
- No payment will be certified unless this report is submitted.

## 11. Wayleaves and other

- The *Contractor* shall adhere to all the requirements of the applicable Local Authority or Metrorail when arranging and completing road and rail crossing.
- All costs for damaged fences and road reserve shall be borne by the *Contractor*

## 12. Subcontracting



The Contractor should ensure that a vetting/evaluation process is done on all his subcontractors performing work under this contract. This process will determine whether the subcontractor meets the Employers' minimum requirements and has the technical capability to perform the scope. This process will follow after the Employer's acceptance of the said subcontractor and prior to his appointment to perform the scope.

The vetting/evaluation process could include an internal evaluation by the Employer. (Note: In order to determine whether this is a requirement for your subcontractor, please consult with the *Employer's representative/project coordinator*).

**IMPORTANT NOTE: The principle Contractor is not allowed to subcontract 100% of the scope of work to his subcontractor.** In reference to Panel/term contracts; a Principle contractor may not subcontract work to another Contractor on the same panel.

### 12.1 Subcontractor requirements

The principle *Contractor* must ensure that his proposed subcontractor has the following documentation on record (for access by the Employer) before the appointment.

- Valid accreditations, authorization and/or Registration necessary to perform the scope
- Signed 37.2 agreement between Principle Contractor and Subcontractor
- Approved H&S plan for the subcontractor's portion of the works.
- Principle contractor to ensure his subcontractor complies with the construction regulations. Eg. Where security services are subcontracted the Contract is to ensure that Eskom Protective Services department has vetted and approve the security subcontractor before they can be mobilized OR in the case of Bush clearing, that this appointment is done via relevant Eskom department (Land Development/Environmental)
- A signed written contract that clearly outlines the roles and responsibilities of each party - must exist between the principal contractor and sub-contractor/s preferably in the NEC Engineering and Construction Subcontract or Short Subcontract form.
- Subcontractor should submit a valid Tax clearance certificate to the principle contractor.
- Subcontractors should comply with relevant requirements of the Skills Levies Act, Unemployment Insurance Fund Act and the Compensation of Occupational Injuries and Diseases Act.
- Have the required CIDB grading in place to execute the scope.
- Compliance to approved Safety, Health, Environmental and Quality plans

The contractor to indicate the percentage of subcontracting, the proposed subcontractors together with their BBBEE statuses, and the sources of assets, goods or services when local content and production criteria are applicable. The NEC system is compulsory for all subcontract documentation.

## 13. Retention

Eskom will retain 2.5% of each payment certificate issued under this contract for SDL&I performance. The 2.5% will only be reimbursed to the supplier at the end of the contract term if the contractor fulfilled its SDL&I obligations. Every contract should be accompanied by the SDL&I implementation schedule which must be completed by the supplier and returned to SDL&I within 30 days of contract award.

It shall be used as a reference document for monitoring, measuring and reporting on the supplier's progress in delivering on their stated SDL&I commitments. Contract Manager shall provide a copy of the plan and the contract at contract award.

In addition to this, a further 10% retention will be deducted on all major works/projects.

## 14. Payment and Invoicing

May 2019 Rev0

## PAYMENT PROCESS – Project Execution WCOU

In an endeavour to reduce the time taken to pay suppliers/contractors, the process now allows submission of invoices from manual to electronic submission via e-mail to

[invoicessskomlocal@eskom.co.za](mailto:invoicessskomlocal@eskom.co.za)

The *Contractor* assesses the amount due and applies to the *Employer* for payment adhering to the following payment process:

item	ACTIVITY	RESPONSIBLE PERSON
1	<ul style="list-style-type: none"> <li>The <i>Contractor</i> to forward to the PC an Assessment of work completed on the <i>assessment day</i>. (i.e. as per NEC3 Payment Certificate format as attached to this contract with supporting Bill of Quantities and cost).</li> <li>The <i>Contractor</i> attaches the detail assessment of the amount due to each tax invoice showing the Price for Work Done to Date for each item in the Price List for work which he has completed.</li> </ul>	<i>Contractor</i>
2	<ul style="list-style-type: none"> <li>PC/PM (known as <i>Employer</i>) together with the <i>Contractor</i> agrees to the Assessment.</li> <li>Any possible issues regarding the claim of actual work completed will be addressed with the <i>Contractor</i>.</li> </ul>	PC/PM and <i>Contractor</i>
3	PC/PM will thereafter submit Assessment to the relevant QS to compile a Payment Certificate	PC/PM
4	Once the Assessment is verified, the Payment Certificate will be compiled and signed by the QS and handed over to the PC/PM	QS
5	The PC/PM will check the Payment Certificate with Assessment and request the Project Controller to process the required detail on the SAP system	PC/PM
6	The Project Controller to process the Service Entry on SAP and create a SE Number	Project Controller
7	The Project Controller to notify PC/PM once the SE number is generated	Project Controller
8	The PC/PM will then approve the SE on SAP thereby generating a Good Receipt (GR) number	PC/PM
9	The SE number and the GR number to be populated on the Payment Certificate	PC/PM
10	PC/PM to sign and issue the Payment Certificate to <i>Contractor</i>	PC/PM
11	On receipt of the Payment Certificate with the SE and GR numbers, the <i>Contractor</i> will sign the Payment Certificate and, together with the relevant invoice, submit directly to <a href="mailto:invoicessskomlocal@eskom.co.za">invoicessskomlocal@eskom.co.za</a>	<i>Contractor</i>
<p>Project Co-ordinator – PC ; Quantity Surveyor – QS ; Service Entry – SE ; Goods Receipt – GR ; Employer's Representative or Programme Manager - PM SAP - Financial Accounting System</p>		

In terms of core clause 50 the *Contractor* assesses the amount due and applies to the *Employer* for payment. The *Contractor* applies for payment with a tax invoice addressed to the *Employer* as follows:

The *Contractor* includes the following information on each tax invoice:

- Name and address of the Contractor
- The contract number (46...) and title as well as Purchase Order Number (45....);
- The total Price for Work Done to Date which the Contractor has completed;
- Other amounts to be paid to the Contractor;
- Less amounts to be paid by or retained from the Contractor;
- The change in the amount due since the previous payment being the invoiced amount - excluding VAT, the VAT and including VAT;
- (add other as required)

In addition;

1. The words "**TAX INVOICE**" in a prominent place (preferably at the top of the page).
2. **Name, address and VAT registration number of the supplier/contractor.**
3. **Name, address and VAT registration number of the recipient.**

Please note: Eskom's name has to be reflected as **Eskom Holdings SOC Limited** on all tax invoices and Eskom's VAT number is 4740101508. The word just Eskom is not acceptable.

4. An **individual serial number** (tax invoice number) and **date issued**.
5. A **full and proper description** of goods and/or services supplied.

Please note: Merely referring to a contract is not sufficient.

6. The **quantity** or **volume** of goods or services supplied.
7. Ensure that the Eskom Purchase Order Number is clearly indicated on your invoice together with the line number on the order you are billing for
8. Where the supply is subject to VAT at the standard rate, the following in Rand:
  - ☐ The pre-VAT value, VAT amount and consideration OR
  - ☐ The total consideration with a statement that VAT is included @15% OR
  - ☐ The total consideration and the Rand amount of VAT charged.

#### **Invoice Submission:**

- All electronic invoices must be sent in PDF format only
- Each PDF file should contain one invoice; or one debit note; or one credit note only. Eskom SAP system does not support more than one PDF being linked into workflow at a time
- Only one PDF file per email. ( i.e. one invoice or one debit note or one credit note only)
- Send all invoices in PDF straight from your system to the Eskom email address i.e. [invoiceseskomlocal@eskom.co.za](mailto:invoiceseskomlocal@eskom.co.za)

#### **Follow-up with Finance Shared Services (FSS):**

All queries and follow-up on invoice payments should be made by contacting the FSS Contact Centre at +27 11 800 5060 or email [fss@eskom.co.za](mailto:fss@eskom.co.za)

Introducing electronic invoicing does not guarantee payment, but will ensure visibility of all invoices as well as ensure that no invoices are lost. If the Goods Receipt (GR) is **not** done, the invoice will be parked and the system will automatically send an email to the end user to do the GR. This is also tracked by Eskom through the park invoice report.

Your company can request a park invoice report from the Finance Shared Services (FSS) Contact Center which can then be followed up and corrected. You are welcome to forward the details of invoices corrected to the FSS Contact Center.

## 15. Performance Management

- The *Contractor's* Performance will be assessed in accordance with the Performance Appraisal Process attached to this contract at completion of each works order.
- The signed Contractor performance appraisal needs to be submitted with the final invoice/payment for each works order.

## 16. Health and Safety Management

The *Contractor* shall ensure adherence to Eskom Life Saving Rules at all times.

**Note:** Contravention to any of the Eskom Life Saving rules, can result in termination of the contract subject to the outcome on an investigation.

### RULE 1: OPEN, ISOLATE, TEST, EARTH, BOND AND/OR INSULATE BEFORE TOUCH

No person may work on any electrical network unless:

- He / she is trained and authorised as competent for the task to be done.
- A pre-task risk assessment to identify all risks and hazards must be conducted prior to any work commencing.
- An equi-potential zone is created for each worker on the job site by earthing, bonding and/or insulating according to approved divisional procedures.
- All conducting material is connected together, all staff onsite wear electrical safety shoes and insulating techniques are applied according to standards.
- The authorised person (Team leader) has certified and shown all team members that the apparatus is safe to work on. He / she is trained and authorised as competent for the task to be done.
- *Contractor* to take precautionary measures when working in close proximity to other power lines.
- Jumper covering is provided to serve as an overhead jumper protection covering above solid cut-outs to reduce bird electrocutions

### RULE 2 : HOOK UP AT HEIGHTS

Working at height is defined as any work where an activity above 2 metres is performed from ladders, scaffolds, platforms, buckets, excavation, structures or where there is a potential for a fall. A pre-task risk assessment to identify all risks and hazards must be conducted prior to any work at height commencing.

No person may work at height where there is a risk of falling unless:

- You are appropriately trained.
- You are appropriately secured during ascending and descending.
- You are using an approved fall arrest system where applicable

The *Contractor* must be aware of the operating heights when working under HV lines.

### **RULE 3 : BUCKLE UP**

No person may drive any vehicle on Eskom business:  
Unless the driver and all passengers are wearing seat belt

### **RULE 4: BE SOBER**

No person is allowed to work under the influence of drugs and alcohol. Under-the-influence' means the use of alcohol, drugs and /or a controlled substance to the extent that:

- The individuals faculties are in any way impaired by the consumption or use of the substances or;
- The individual is unable to perform in a safe, productive manner or;
- The individual has a level of any such substance in his body that corresponds with or exceeds accepted medical/legal standards or;
- The individual has a level of alcohol in his body that is greater than 0,02 % blood alcohol concentration.
- Any level of an illegal substance in the body' irrespective of when the substance was used

### **RULE 5: ENSURE THAT YOU HAVE A PERMIT TO WORK**

Where an authorisation limitation dictates, no person shall work without the required Permit to Work. (PTW)

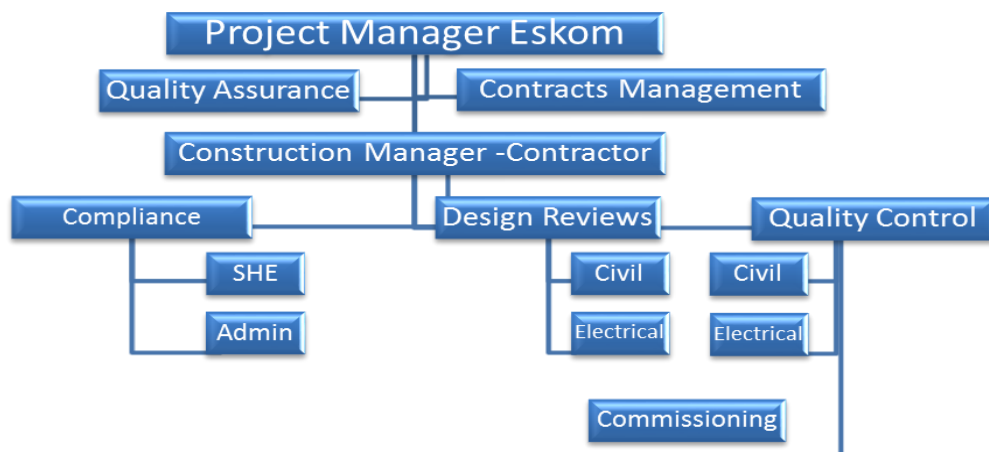
- Work is as defined in the Plant Safety Regulations (PSR) and Operating Regulations for High Voltage Systems (ORHVS) of Eskom.
- A Risk Assessment must be carried out jointly by the Authorised (AP) and Responsible Person (RP) on all work before it commences.
- The PTW must be issued by an AP, in accordance with the PSR.
- The PTW must be accepted in writing by an authorised RP.
- The PTW shall be shown to everyone working on the job and the risks explained.
- The RP must ensure that all staff working on that job is entered on a Workers' Register and the risks explained to each one.
- The RP must ensure that the conditions of the PTW are enforced for the duration of the work.

### **SHEQ REQUIREMENTS:**

In compliance to Eskom's SHEQ Policy, the Contractor to ensure;

- Commitment to safety, health and environmental excellence
- Conduct business with respect and care for people and minimise or avoid impact on the environment
- Compliance to environmental legislation, conditions of Environmental Authorisations and requirements set out in environmental management plans
- Acceptance that all injuries and occupational illnesses, as well as safety and environmental incidents are preventable
- Report, respond to, investigate, close-out, and share learning from safety and environmental incidents
- That SHE is an integral part of your operations and that:
  - no operating condition, or urgency of service, can justify endangering the life of anyone or cause injury or damage to the environment

In addition, the *Contractor* to ensure as a **tender returnable** the following information (as per organogram) is provided to the *Employer*, stating who the relevant qualified person is as per various role levels of the below organogram with all required credentials.



### Other Health & Safety Requirements:

- **The Contractor shall comply with:**
  - The **Occupational Health and Safety Act, 1993**, and all regulations made there under as per the standard clause Z6, stipulated on page 8 of this contract.
  - The **Construction Regulations, 2003**.
  - The Health and Safety Requirements of the *Employer* more fully set out in Distribution Standards **34-333** (The Contractor will sign page 36 of the specification as acknowledgement of receipt and adherence)
  - All Eskom Safety and Operating Procedures as outlined in the **ORHVS (Operating Regulations on High Voltage Systems)** and the standards attached to this document i.e. 34-145 and 34-146.

- The Contractor shall ensure that the Site Supervisor has a valid and applicable ORHVS Authorisation. Should a Contractor be in the process of having an in-house employee authorised, then he should indicate by schedule as to when the person will be fully authorised. This however should be finalised before tenders are evaluated and proof thereof provided.
- The Contractor shall ensure that the Contractor's Responsible Person shall supervise the works at all times and be available to take permits where necessary.
- The Contractor shall appoint a person who will liaise with the Eskom Safety Officer responsible for the premises relevant to this contract.

**"LEGAL COMPLIANCE TO CONSTRUCTION REGULATIONS 2014 Regulation 8(5 and6)  
Appointment of Construction Health and Safety Officer (CHSO) and Professional  
Registration:**

The 2014 Construction Regulations were promulgated in February 2014 and have fundamental implications on Eskom and its contractors. These regulations describe the requirements and obligations that are binding and applicable to all persons involved in construction work.

One of the fundamental requirements focuses on professional registration, where a contractor must appoint in writing, a full time or part time Construction Health and Safety Officer (CHSO) after consultation with the client and after having considered the size of the project, the degree of danger likely to be encountered or the accumulation of hazards or risks on the site. No contractor may appoint a CHSO who is not registered with the South African Council for the Project and Construction Management Professions (SACPCMP) and has necessary competencies and resources. The CHSO's involvement is generally to assist with the control of all health and safety related aspects on site. This will be effective as of 6<sup>th</sup> August 2015."

- The person so appointed shall:
  - supply the Eskom Safety Officer with copies of minutes of all Health and Safety Committee meetings (if relevant), on a monthly basis.
  - supply the Eskom Safety Officer with copies of all appointments in respect of employees employed on this contract, in terms of the Act and Regulations and shall advise the Eskom Safety Officer of any changes thereto – to be handed over to the *Employer* prior to construction start.
- Eskom may, at any stage during the currency of this agreement, be entitled to;
  - do safety audits at the *Contractor's* premises, its work-places and on its employees;
  - refuse any employee, sub-contractor or agent of the *Contractor* access to its premises if such person has been found to commit any unlawful act or any unsafe working practice or is found to be not authorized or qualified in terms of the Act
  - issue the *Contractor* with a work stop order or a compliance order should Eskom become aware of any unsafe working procedures or conditions or any non-compliance with the Act, Regulations and Procedures referred to in 1 above by the *Contractor* or any of its employees, sub-contractors or agents.
- No extension of time will be allowed as a result of any action taken by Eskom in terms of the above and the *Contractor shall* have no claim against Eskom as a result thereof. Furthermore, no amendments to the Act or the Regulations or reasonable amendment to Eskom's Safety and Operating Procedures will entitle the *Contractor* to claim any additional costs incurred in complying therewith from Eskom.

- The *Contractor* shall be responsible for all expenses incurred to ensure adherence to Health and Safety Regulations as stipulated above which includes but is not restricted to ORHVS training courses, etc.
- Typically, the identified risks as listed in the “Health & Safety Specification” for this contract which could endanger persons/*works* as per scope of work to be completed by the *Contractor*. Specific risks, related to this project are as follows:

**NB: To be prepared when issuing Works/Purchase Order, Site Specific**

Typical Risk	Y/N	Detailed Description
LIVE UNDERGROUND CABLES		
WORK IN LIVE CHAMBERS/RESTRICTED AREAS		
LIVE OVERHEAD CONDUCTORS/CROSSINGS		
CLOSE PROXIMITY WORK TO LIVE EQUIPMENT		
OPERATING OF CRANES/VEHICLE MOUNTED		
STATIC ELECTRICITY/INDUCTION		
WORK WITH CHAINSAWS/MECHANICAL CUTTERS		
MATERIALS HANDLING/ HEAVY EQUIPMENT HANDLING		
CONDUCTOR STRINGING AND TENSIONING		
VEHICLE RISKS		
WORK IN OPEN TRENCHES/EXCAVATIONS		
BIOLOGICAL/HEALTH RISKS (CAMPS)		
WEATHER RELATED RISKS (UV, HEAT, COLD, WIND, RAIN, SNOW, ETC.)		
ENVIRONMENTAL RISKS		
ERGONOMIC RISKS (BODY POSITION, FATIGUE)		
WORK ON/DISMANTLING OF RUSTED & ROTTEN POLES AND STRUCTURES		
FIRE RISKS		
PUBLIC SAFETY RISKS		
WORK CLOSE TO PUBLIC ROADS		
WORKING IN ENVIRONMENTAL SENSITIVE AREA		
HISTORICAL EVENTS THAT COULD INFLUENCE THE PROJECT, I.E. CURRENT STRUCTURE DESIGNS, AGE OF STRUCTURES TO BE WORKED ON, ETC		
DEMOGRAPHICS OF THE AREA		

- **THE CONTRACTOR SHALL IDENTIFY MITIGATION ACTIONS FOR ALL IDENTIFIED RISKS, AS WELL AS IDENTIFY ANY ADDITIONAL RISKS AND INCLUDE IT IN THE HEALTH AND SAFETY PLAN TO BE PROVIDED TO THE EMPLOYER ON TENDER RETURN.**

## 17. Compensation for Occupational Injuries and Diseases (COLD) Act



The *Contractor* shall submit with his tender proof of adherence to the above Act.

- To be completed per project and submitted to *Employer's* Representatives as per works order.

## 18. Quality of workmanship

- The *Contractor* is required to employ a competent Supervisor or Foreman on site for the duration of the project to implement workmanship quality checks. The Supervisor / Foreman appointed by the *Contractor* must be authorized to take a permit in terms of ORHVS and working earths.
- Eskom will do inspections and quality checks on installations completed by the *Contractor* prior to hand-over of each project.

## 19. Environmental Management

- The *Contractor* shall receive a Generic Environmental Management Plan where applicable and *Contractor* shall manage the documents.
- Specific Environmental Management Plans might be applicable to some projects. The specific EMP shall be handed over to the *Contractor* at commencement of the project and the *Contractor* shall manage it accordingly.
- *Contractor* shall provide toilet facilities, water and electricity.
- All environmental legal Liabilities and claims arising from the activities of the *Contractor* shall be for the *Contractors* expense and shall be priced for in the P&G's Price List.
- The *Contractor* is required to have an understanding of Eskom's basic environmental principles and commitments.
- No open fires will be allowed on Site.
- Existing roads or tracks are to be used as far as possible.

## 20. Construction Safety

- 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 and/or lines.
- The *Contractor* shall indemnify the *Employer* and the Engineer against responsibility for safety on the site of the works.
- Reference of the Safety Methodology Statement can be found in the Government Occupational Health and Safety Act (Act 85 of 1993) and Construction Regulations Document which is publicly available.
- Typically, RISK ANALYSIS IDENTIFYING RISKS THAT could endanger the work as done by the *Contractor* will be done per Works Order. The *Contractor* should identify mitigation actions for these risks, as well as identify any additional risks and submit at tender
- The safety of the *Contractors* personnel and employees acquire precedence over the construction works.
- The *Contractor* shall submit a Safety Plan to the *Employer* within one week of award of contract prior to starting on site. The Safety Plan to be assessed by the *Employers* Representative where after on approval will the *Contractor* be allowed access to site.

## 21. Handover on completion

1. On completion of the works as indicated on the works order, the Contractor shall complete the installation by adhering to all requirements as stipulated in the Handover Procedure as attached to this contract.
2. The Contractor shall negotiate with the *Employer* a reasonable handover date for each project.
3. At the handover meeting, all relevant requirements as per the Handover procedure shall be adhered to by the Contractor. The *Employer's* representative shall only verify the handover documentation.
4. All relevant test readings, including earth readings shall be indicated by the Contractor on the Handover Documentation. All test readings shall be done according to Eskom Specifications and Standards.

## 22. General

1. Except for site management and specialized labour such as operators for plant and equipment, the *Contractor* is encouraged to use "local" labour on a temporary basis for all manual tasks.
2. The *Contractor* will attend all site meetings as arranged by the *Employer*
3. The *Contractor* will report all obstacles on site that could impact on time and cost e.g. Trees, obsolete poles, and inclement weather to the *Employer* in writing.
4. All Construction work shall be carried out in accordance with all the statutory requirements applicable to the area, Eskom's specifications, standards and regulations
5. The *Contractor* will be given access to the proposed site and the *Contractor* must comply with Eskom's, National, Provincial and Local environmental policies, safety standards and laws.
6. The onus is on the *Contractor* to obtain the latest revision of standards applicable.
7. The *Employer* reserves the right to alter the scope of the works, programme and constraints.
8. The Clerk of Works of the *Employer* will do Quality Control Checks and inspections on the *works*. The *Contractor* notifies the Clerk of Works or *Employer's* Representative of any inspections to be done three days in advance.
9. The *Contractor* shall ensure that caution is exercised when working in close proximity of live electrical equipment.

## 23. Requirements for the programme

- A comprehensive and fully detailed programme is to be submitted within the seven (7) days after the introductory meeting and should indicate all milestones and critical dates. This programme must first be approved by the *Project Manager* and must be updated on an as and when required basis by the *Project Manager*.
- **The following dates shall be clearly reflected on the programme:**
- Starting and completion dates for all activities as well as relevant key dates for hold or witness points. All relevant significant activities shall be shown in order to monitor the progress in the factory/workshop.
- The programme shall also reflect a 2-week period for inspection and correcting of Defects before the completion date.
- Updated programmes must be available at all meetings reflecting progress to date and the date when delivery will take place through the use of task orders.
- **FORMAT OF THE PROGRAM**
- The *Contractor* shall submit his construction program in terms of the conditions of contract.
- The *Contractor* is to submit a revised programme for acceptance at each site meeting.
- This program shall be in the form of an approved Gantt Chart containing the following information:
- All construction activities, including milestones, initial tasks, critical path, required Outages, and target *Dates*. All potential risk activities should be clearly indicated on the critical path.
- Every activity on the programme will be clearly linked to labour resources and equipment required to perform the specific activity.
- Projected weekly progress on *site* for the entire duration of the contract.

- Completion and hand-over *Dates* for formal inspection by the site supervisor must be indicated.
- A column showing the daily tempo of all the construction activities must be indicated next to the activity on the programme.
- Project expenditure on a monthly basis for the entire duration of the contract.
- The following project phases and activities are minimum requirements for the programme:
  - Site Establishment and Material Delivery – Lead times to be specified.
  - Preparation work – Work that can be completed without the necessity of power outages
  - Outage work – Work that must be completed under outage conditions
  - Planned outages to be included in the programme
  - *Contractors* float to be included in the programme
- The Contract Program will be on display in the *Contractors Site* Offices and will be updated weekly. In addition to the maintaining of this programme, the *Contractor* will report progress to the *Project Manager* at each site meeting or at request of the *Project Manager*.
- The *Contractor* shall also provide an organisation chart showing the personnel to be employed for the *works*, along with a detailed CV of all key personnel.
- Should any deviations to the program be found the *Contractor* shall submit a revised program to the *Project Manager* within one week of such deviations being brought to the *Contractor's* attention.
- The Outages must be arranged with *Employer* via the Outage arrangement procedures, as a pre-requisite for the acceptance of the programme by the *Project Manager*.
- Acceptance of any program by the *Project Manager* shall have no contractual status other than an indication that the *Project Manager* is satisfied as to the order in which the work is to be carried out, and that the *Contractor* undertakes to perform all work in accordance with the accepted program.
- The *Project Manager* retains the right to alter the accepted program should circumstances on *site* necessitate such a change.
  - OTHER INFORMATION TO BE SHOWN ON THE PROGRAM.
- The following Statutory non-working days are included within the contract period:
- All Public Holidays for the duration of the contract.
- The programme must clearly indicate the non-working days for the entire construction period.

## 24. Services and other things provided by the Employer

Item	Date by which it will be supplied
Access to site	Per works order
All project specific drawings	Per works order
Way leaves	Per works order
Health and Safety Spec	Per works Order

## Part 4: Site Information

Document reference	Title	No of pages
	This cover page	1
C4	Site Information	
	Total number of pages	

## C4: Site Information

### General description

1. The *Contractor* to ensure that he becomes fully aware of site conditions as well as access conditions such as soil/subsurface/ground water levels conditions prior to submitting a tender.
2. The *Contractor* is required to work in close proximity of existing underground cables within the substation property.
3. Access control to be monitored by the *Contractor* to avoid the public and animals from entering the premises during and after working hours.

**For example:** If an existing barrier fence is removed, it must be replaced the same day

4. The *Contractor* is deemed to execute Safety Procedures to ensure the safety of his staff, Sub-contractors and community during the Contract Period.
5. The safety of the *Contractors'* employees, Subcontractors and community takes preference over the scope of the works.
6. Caution to be implemented when *works* commences. Damage to Eskom, farmers/adjacent owner's property will be to the *Contractors'* account.
7. The *Contractor* should take all reasonable steps to become fully aware of existing services.
8. No fires are allowed on site (to fully comply with the EMP).

Security on site is to be provided by the *Contractor* after he has assessed the security risk and the need to have security on site. Contractor to adhere to the "subcontracting requirements" outlined in this contract.

### Subsoil information

#### Hidden services

The *Contractor* shall liaise with the relevant Eskom representative after the exact position of a structure and proposed cable route have been marked out as per design to determine the implication of design to underground services and all excavations to be done by hand.

The *Contractor* will be required to hand excavate to locate existing services where the position of such cannot be accurately fixed by other means, before commencing with excavation work. Any claims resulting from the *Contractor's* omitting to do this will be for his own account. Once the services have been located, the *Contractor* shall ensure that all the necessary precautions as per design are taken to protect such services during the construction period