## **INVITATION TO BID**



## **DESCRIPTION: ELECTRIFICATION PROJECTS**

Bidders must indicate which ward/ wards they are tendering for:

	Area	CIBD Grading	Indicate (x)
A)	Electrical engineering contractor to implement the Abaqulusi ward 1 electrification project (63 connections)	4EP	
В)	Electrical engineering contractor to implement the Abaqulusi ward 2 electrification project (200 connections)	5EP	
C)	Electrical engineering contractor to implement the Abaqulusi ward 3 electrification project (69 connections)	4EP	
D)	Electrical engineering contractor to implement the Abaqulusi ward 4 electrification project (101 connections)	5EP	
E)	Electrical engineering contractor to implement the Jozini ward 4 electrification project (213 connections)	5EP	

Bid No: <b>ZNT2011/2020LG</b>

CON	/IPA	NY	NAI	MF	•

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Type of Bidder (Tick One Box)

Type of Blader (Tiek One Bek)	
One-person Business/Sole Trader	
Close corporation	
PTY (Ltd)	
Private Company	
Partnership	
Consortium/Joint Venture	
Co-operative	
Participation Capacity(Tick One Box)	
Prime Contractor	
Supplier/Sub-Contractor	

## **RETURN OF PROPOSAL**

Proposal must be deposited in the **Bid box situated at Department of Co-operative Governance** and Traditional Affairs, Lift Area, 13th floor, North Tower, Natalia Building.

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Tender

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## **COGTA KZN**

**TENDER NUMBER: ZNT2011/2020LG** 

ELECTRIFICATION OF THE ABAQULUSI WARD 1 (63 CONNECTIONS), ABAQULUSI WARD 2 (200 CONNECTIONS), ABAQULUSI WARD 3 (69 CONNECTIONS), ABAQULUSI WARD 4 (101 CONNECTIONS) & JOZINI WARD 4 (213 CONNECTIONS)

## **TENDER**

PART 1 (OF 2): TENDERING PROCEDURES

## **CONTENTS**

T1.1	Tender Notice and Invitation to Tender
T1.2	Tender Data
T1.3	Standard Conditions of Tender

## **COGTA KZN**

**TENDER NUMBER: ZNT2011/2020LG** 

# ELECTRIFICATION OF THE ABAQULUSI WARD 1 (63 CONNECTIONS), ABAQULUSI WARD 2 (200 CONNECTIONS), ABAQULUSI WARD 3 (69 CONNECTIONS), ABAQULUSI WARD 4 (101 CONNECTIONS) & JOZINI WARD 4 (213 CONNECTIONS)

#### **T1.1: TENDER NOTICE AND INVITATION TO TENDER**

COGTA KZN hereby invites tenders for COGTA Electrification project for 2021/22 financial year.

Tenderers must have a CIDB contractor grading designation of class **4EP/ 5EP** or higher. In addition only tenderers who comply with the following functionality criteria will be eligible to submit bids:

#### PROJECT DESCRIPTION

COGTA KZN hereby invites experienced contractors for the construction of the following projects:

Bid Number	Project Name	Closing Date and Time	Preferential point System	CIDB Grading	Pre-qualification criteria for preferential procurement
ZNT2011/2020LG	Electrification OF the Abaqulusi ward 1 (63 connections), Abaqulusi ward 2 (200 connections), Abaqulusi ward 3 (69 connections), Abaqulusi ward 4 (101 connections) & Jozini ward 4 (213 connections)	23/07/2021 at 11h00	80/20	4 EP /5 EP or Higher	Tenderers must subcontract a minimum of 30% to an EME or QSE which resides within the COGTA KZN jurisdiction

## **Tender Briefing Sessions:**

## ANY ENQUIRIES REGARDING THE BIDDING PROCEDURE MAY BE DIRECTED TO:

**Department**: Co-operative Governance and Traditional Affairs

Contact Person: Ms Lindiwe Madlala / Mrs Helene Ruiters

**Tel:** 033 395 2174 / 2005

Fax: 086 642 8873/ 033 342 8830

Email: lindiwe.madlala@kzncogta.gov.za / Helene.ruiters@kzncogta.gov.za

#### ANY ENQUIRIES REGARDING SPECIFICATION INFORMATION MAY BE DIRECTED TO:

**Contact Persons:** 

Mr. Vuyo Sogoni (Programme Manager)

TEL: 0837810626

Mr Xolani Banda (Electrical Engineer: COGTA)

TEL: 083 443 8462

**Unit: KZN COGTA Governmental Infrastructure** 

Evaluation Criteria: The evaluation will be conducted in four stages namely:

#### Stage 1: "Local Production Content" Bid Number - ZNT2011/2020LG

- Only locally produced or locally manufactured Residential Electricity Meters with a minimum threshold of 70% (Prepaid Electricity Meters) for locally production content will be considered;
- Only locally produced or locally manufacture electrical cables with a minimum threshold of 90% for the local content will be considered; and
- Only locally produced or locally manufacture transformers with a minimum threshold of 80% for the local content will be considered.

## NB:

The exchange rate to be used for calculation of local production and content must be exchange rate published South African Reserve Bank (SARB) 12H00 on the date of the advertisement of the bid; and.

Only the South African Bureau Standard (SABS) approved the technical specification number SATS 1286.2011 must be used to calculate local content.

Only bids that achieve the minimum stipulated threshold for local production and content will be evaluated further.

#### Stage 2: "Pre-Qualification criteria" evaluation

- A tender that fail to meet the pre-qualifying criteria stipulated in the tender documents is an unacceptable tender.

## Stage 3: "Administrative compliance"

- Bidders that do not meet the Administrative compliance (Compliance with mandatory and other bid requirement) will not be eligible for further evaluation and will be deemed as non-response.

## Stage 4: "functionality" evaluation

NB: Bidders must score 70 out of 100 to proceed to the next stage (Financial Evaluation)

Stage 4: Evaluation in terms of the 80/20 preference point systems prescribed in Preferential Procurement Regulations

Price=80 points, B-BBEE=20 points. Bidders are required to submit an original or certified copy of B-BBEE certificate to claim preferential points.

#### **REQUIRED DOCUMENTS:**

Potential bidders are urged to submit the following attachments when submitting their proposals, failure to do so will lead to disqualification.

- Valid CIDB Contractor Grading
- Full CSD Report (Not older than one Month)
- Fully Completed and signed Tender Forms i.e. Form of Offer, all returnable MBDs (MBD 1-9 (Part of the document)
- In the case of partnerships/ consortiums/ joint venture agreement, signed agreement must be submitted with the tender document (attached to Schedule 2).

#### **OBTAINING OF TENDER DOCUMENTS:**

Tender documents for each of the above project are obtainable at COGTA KZN: Supply Chain Management Office at non-refundable fee of R 527.00

Tenders should be sealed, endorsed on the envelope with:

BID NO. ZNT2011/2020LG

PROJECT NAME: ELECTRIFICATION OF THE ABAQULUSI WARD 1 (63 CONNECTIONS), ABAQULUSI WARD 2 (200 CONNECTIONS), ABAQULUSI WARD 3 (69 CONNECTIONS), ABAQULUSI WARD 4 (101 CONNECTIONS) & JOZINI WARD 4 (213 CONNECTIONS)

#### **CONDITIONS OF ACCEPTANCE:**

- COGTA KZN is under no obligation to accept any proposal/tender and reserves
  the right to accept the whole or any part of the proposal/tender. No
  proposal/tenders will be considered from persons in the service of the state.
- The bidder or any of its directors/shareholders is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector;
- The bidder has not abused the Employer's Supply Chain Management System; or failed to perform on any previous contract and has been given a written notice to this effect.
- No late, incomplete, unsigned faxed, couriered, and emailed tenders will be accepted
- The tender offer submitted shall remain valid, irrevocable and open for written acceptance by COGTA KZN for a period of 90 days from the closing date.
- The award of the tender may be subjected to price negotiation with the preferred tenderers.
- COGTA KZN reserves the right to extend the tender period by notice in the press and on the COGTA KZN 's official website www.kzncogta.gov.za

## NB: Preferred bidders will be required to furnish the COGTA with:

- CK/ Company registration, Certified ID Copies not later than 3 month
- Tax Compliance Status PIN
- Certificate issued by the COGTA KZN to which he may be indebted to the effect that he and, in the event of the bidder being a company, also any of its directors, is not indebted to COGTA KZN for rates, taxes and/or Governmental service charges which are in arrear for a period more than three months and that no dispute exists between such bidder and COGTA KZN or Governmental entity concerned in respect of any such arrear amounts. Bidders who reside within COGTA KZN jurisdiction will be verified with COGTA KZN Revenue Section.

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Criterion	Weighting per criterion (maximum score)		
Related experience	40		
Key staff competence	40		
Plant and Equipment	20		
Total	100		

The **minimum total score** required for all criteria is 70% **(70 points).** Tenderers scoring less than 70% will be regarded as non-responsive.

Documents may be collected during working hours **between the hours of 08h00 and 15h00** from **28 June 2021** from the Supply Chain Management Unit. Proof of payment of the non-refundable tender deposit of R527.00 Rand (Five Hundred Rands) is required on collection of the tender documents.

The physical address for the collection of tender documents is: Supply Chain Management Office, 330 Langalibalele Street, Room 8, 13<sup>th</sup> floor, North Tower, Natalia Building, Pietermaritzburg, Telephone: (033) 3952174 / 2005.

Technical Enquiries may be directed to Mr. Vuyo Sogoni or Xolani Banda the Governmental official responsible for this tender, at Tel No. 083 781 0626 / 083 443 8462 and e-mail <a href="wuyo.sogoni@kzncogta.gov.za">wuyo.sogoni@kzncogta.gov.za</a> or <a href="wuyo.sogoni@kzncogta.gov.za">wolani.banda@kzncogta.gov.za</a>. Supply Chain Management related enquiries may be directed to Ms. Lindiwe Madlala or Helene Ruiters at 033 395 2174 /2005 and email <a href="mailto:lindiwe.madlala@kzncogta.gov.za">lindiwe.madlala@kzncogta.gov.za</a> or Helene.ruiters@kzncogta.gov.za

The closing time for receipt of tenders is **11H00** on **23 July 2021**. Tenders must be enclosed in sealed envelopes, bearing the applicable, project name, the tender heading and reference number, as well as the closing time and due date, and must be addressed to:

Supply Chain Management
Department of Cooperative Governance and Traditional Affairs
13<sup>th</sup> Floor, Natalia Building
330 Langalibalele Street, Pietermaritzburg

This tender will be evaluated according to points awarded for price and B-BBEE Status Level of Contribution. The 80/20 Preference Point System will be applied to this tender.

Tenders must be submitted in the TENDER BOX situated in the 13 floor, North Tower, Natalia Building, Pietermaritzburg. Tenders will be publicly opened simultaneously at the latter addresses at the time indicated. A tender must remain valid for a period of 90 days from the closing date for the submission of tenders. The lowest or any tender will not necessarily be accepted, and the COGTA KZN reserves the right to accept a tender as a whole or in part. Telegraphic, telephonic, telex, facsimile, e-mail, posted and late tenders will not be accepted. Tenders may only be submitted on the tender documentation that is issued. More requirements for sealing, addressing, delivery, opening and assessment of tenders are stated in the Tender Data. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2011, THE GENERAL CONDITIONS OF CONTRACT 2015 (GCC 2015) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT

NB: NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE (AS DEFINED IN REGULATION 1 OF THE LOCAL GOVERNMENT: COGTA KZN SUPPLY CHAIN MANAGEMENT REGULATIONS)

## T1.2: TENDER DATA

The conditions of tender are the Standard Conditions of Tender as contained in Annexure F of the CIDB Standard for Uniformity in Construction Procurement (July 2015) as published in Government Gazette No 38960, Board Notice 136 of 2015 of 10 July 2015. (See <a href="https://www.cidb.org.za">www.cidb.org.za</a>).

The Standard Conditions of Tender make several references to the Tender Data for details that apply specifically to this tender. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the Standard Conditions of Tender.

Bid should read tender and vice versa throughout the document – implying both words have the same meaning.

Each item of data given below is cross-referenced to the clause in the Standard Conditions of Tender to which it mainly applies.

No	Clause	Wording		
1	F.1.1	The employer is COGTA KZN		
2	F.1.2	Volume 1: Tender Document Volume 2: Tender Drawings		
		This document in which are bound the Tendering Procedures, Returnable Documents, Agreements and Contract Data, Pricing Data, Scope of Work, Site Information and Additional Documents.		
3	F.1.4	The Employer's agent is:		
		Name: Focus Project Management		
		Address: 37 Island Circle Island Office Park, Riverhorse Valley, Durban, 4001		
		Tel: (031) 312 2093		
		E-mail: jason@focuspm.co.za.		
4	F.2.1	Only those tenderers who have in their employ management and supervisory staff satisfying the requirements of the Scope of Work for labour intensive competencies for supervisory and management staff are eligible to submit tenders. NQF Level 5 will be a minimum requirement for supervisors.		
		Only those tenderers who are registered with the CIDB, or are capable of being so prior to the evaluation of submissions, in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations, for a 5EP class of construction work, are eligible to have their tenders evaluated.		
		Joint ventures are eligible to submit tenders provided that:		
		every member of the joint venture is registered with the CIDB;		
		2. the lead partner has a contractor grading designation in the 5EP class of construction work;		
		3. the combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a		

No	Clause	Wording
		contractor grading designation determined in accordance with the sum tendered for 4EP/5EP class of construction work or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations; and
		Only those tenderers who satisfy the following eligibility criteria are eligible to submit tenders:
		a) Availability of resources.
		<ul><li>b) Capacity to mobilize own and subcontracting resources.</li><li>c) Availability of skills to manage and perform the contract (assigned personnel)</li><li>d) Quality achievements on previous contracts of a similar nature.</li></ul>
5	F.2.2	Add the following to the Clause:  "Accept that the Employer will not compensate the tenderer for any costs incurred in attending tender interviews in the office of the Employer or the Employer's Agent."
6	F.2.3	Amend the Clause to read:  "and notify the Employer's Agent of any discrepancy"
		Bidders must examine the bid documents upon receipt to ensure that all pages and drawings (if applicable) are included and are to report any missing pages or drawings. Drawings which are illegible or indistinct, and errors or ambiguities in the Specifications, Schedule of Quantities and Drawings or any contradictions between the specifications, Schedule of Quantities and Drawings must be reported to the Contact Person as listed on the cover of this document in order to obtain rulings on such errors, ambiguities or discrepancies. No claim for extras based on such errors, ambiguities or discrepancies will be considered after the opening of bids. Bidders having any queries relating to discrepancies in, or omissions from the bid document shall contact the Employer or Employer's Agent immediately.
7	F.2.7	Due to Covid 19, there will be no site briefing. Any inquiries must be directed to, Mr. Vuyo Sogoni (Programme Manager) TEL: 0837810626
		Mr Xolani Banda (Electrical Engineer: COGTA) TEL: 083 443 8462
8	F.2.8	Modify the Clause to read:  Request clarification of the tender documents, if necessary, by notifying the Employer's Official or Agent at least seven working days before the closing time stated in the tender data.
9	F.2.11	Add the following to the Clause:  "In the event of a mistake having been made on the price schedule, it shall be crossed out in non-erasable ink and be accompanied by an initial of each signatory to the Tender at each and every price alteration."  "If correction fluid has been used on any specific item price, such item will not be
		considered. Corrections in terms of price may not be made by means of correction fluid such as Tippex or similar product.
		No correction fluid may be used in a Price Schedule where prices are calculated to arrive at a total amount. If correction fluid has been used, the tender as a whole will be classified non-responsive and not be considered.
		The Employer will reject and classify the tender non-responsive if corrections are not made in accordance with the above."

No	Clause	Wording
10	F2.12	Alternative offers <u>will not</u> be considered if the main tender submission is not completed and submitted.
		If a tenderer wish to submit an alternative offer, the only criteria permitted for such alternative tender offer is that it demonstrably satisfies the Employer's standards and requirements, the details of which may be obtained from the Employer's Agent. Before an alternative offer will be considered, the tenderer must price the contract as specified and then offer his alternative proposal as a complete standalone offer in addition to the offer based on the tender requirements.
		Calculations, drawings, product specifications and all other pertinent technical information and characteristics as well as modified or proposed Pricing Data must be submitted with the alternative tender offer to enable the Employer to evaluate the efficacy of the alternative and its principal elements, to take a view on the degree to which the alternative complies with the Employer's standards and requirements and to evaluate the acceptability of the pricing proposals. Calculations must be set out in a clear and logical sequence and must clearly reflect all design assumptions. Pricing Data must reflect all assumptions in the development of the pricing proposal.
		Acceptance of an alternative tender offer will mean acceptance in principle of the offer. It will be an obligation of the contract for the tenderer, in the event that the alternative is accepted, to accept full responsibility and liability that the alternative offer complies in all respects with the Employer's standards and requirements.
		The modified Pricing Data must include an amount equal to 5% of the amount tendered for the alternative offer to cover the Employer's costs of confirming the acceptability of the detailed design before it is constructed.
11	F.2.13.2 and F.2.13.3	Each Tenderer is required to return the original completed tender documents, including drawings with all the required information supplied, duly completed in non-erasable ink in all respects <b>together with one copy of Parts T2, C1 and C2.</b>
		The original Bill of Quantities and Form of Offer and Acceptance (Form C1.1), duly completed and signed by the tenderer, must be returned in respect of the project for which a tender is submitted.

No	Clause	Wording
12	F.2.13.4	Add the following to the clause: "Only authorised signatories may sign the original and all copies of the tender offer where required in terms of F.2.13.3
		In the case of a <b>ONE-PERSON CONCERN</b> submitting a tender, this shall be clearly stated.
		In case of a <b>COMPANY</b> submitting a tender, include a copy of a <u>resolution by its</u> <u>board of directors</u> authorising a director or other official of the company to sign the documents on behalf of the company.
		In the case of a <b>CLOSE CORPORATION</b> submitting a tender, include a copy of a <u>resolution by its members</u> authorising a member or other official of the corporation to sign the documents on each member's behalf.
		In the case of a <b>PARTNERSHIP</b> submitting a tender, <u>all the partners</u> shall sign the documents, unless one partner or a group of partners has been authorised to sign on behalf of each partner, in which case <u>proof of such authorisation</u> shall be included in the Tender.
		In the case of a <b>JOINT VENTURE/CONSORTIUM</b> submitting a tender, include <u>a</u> <u>resolution</u> of each company of the Joint Venture together with a resolution by its members authorising a member of the Joint Venture to sign the documents on behalf of the Joint Venture.
		Accept that failure to submit proof of authorisation to sign the tender, shall result in a Tender Offer being regarded as non-responsive."
13	F.2.13.5	The identification details are:
		Each tender shall be enclosed in a sealed envelope, bearing the correct identification details and shall be placed in the tender box located at: the foyer of:
		COGTA KZN Offices 13 <sup>th</sup> Floor, North Tower, Natalia Building 330 Langalibalele Street, Pietermaritzburg 3201
		This address is available from 8:00-16:00 on working days for delivery of Tender offers.
14	F.2.13.6 / F.3.5	A two-envelope procedure will not be followed.

No	Clause	Wording					
15	F.2.13.9	Telephonic, telegraphic, telex, facsimile, e-mailed or posted tender offers will not be accepted					
16	F.2.14	Add the following to the clause:  "Accept that the Employer shall in the evaluation of tenders take due account of the Tenderer's past performance in executing similar building works of comparable magnitude, and the degree to which he possesses the necessary technical, financial and other resources to enable him to complete the Works successfully within the contract period. Satisfy the Employer and Engineer as to his ability to perform and complete the Works timeously, safely and with satisfactory quality, by furnishing details in Part T2 – Returnable Documents.					
		Accept that the Employer is restricted in accordance with clause 5 (1h) of the Constructions Regulations, 2014, to only appoint a contractor who he is satisfied has the necessary competencies and resources to carry out the work safely. Accept that submitting inferior and inadequate information relating to health and safety (as required in clause F2.23) shall be regarded as justifiable and compelling reasons not to award a contract to a Tenderer."					
17	F.2.15.1	The closing time for submission of tender offers is as stated in the Tender Notice and Invitation to Tender.					
18	F.2.16	The tender offer validity period is 90 days. If the expiry coincides with a public holiday, the validity will expire at close of business on the first working day following on the 90 days.					
19	F.2.18	The tenderer shall, when requested by the Employer to do so, submit the names of all management and supervisory staff that will be employed to supervise the Exempted Micro Enterprises (EME's) and/or Labour Intensive portion of the works together with satisfactory evidence that such staff members satisfy the eligibility requirements as required in Part C3 Section C3.3: Procurement.					
20	F.2.19	Access shall be provided by the Tenderer to his premises during working hours for inspections, tests and analysis.					
21	F.2.20	The successful Tenderer will be required to submit a Fixed Performance Guarantee in the prescribed format from an approved insurer or financial institution prior to the commencement of work on this contract.					
22	F.2.23	<ul> <li>The tenderer is required to submit with his tender: <ol> <li>A valid Tax Compliance Pin or Tax Clearance Certificate issued by the South African Revenue Services or as alternatively stipulated on schedule T2.1.3: Tax Clearance Certificate</li> <li>Refer to part T2: Returnable Schedules for a list of documents that are to be returned with the tender.</li> </ol> </li> <li>Failure to comply with any of the above will result in the tender being considered non responsive.</li> </ul>					
23	F.2.24	Add the following new clause: In the case of a Joint Venture/Consortium the tax clearance certificate must be for the Joint Venture/Consortium or individual valid tax clearance certificates for all the members of the Joint Venture/Consortium."					
24	F.2.25	Add the following new clause:					
		Accept that no Tenderer shall make any attempt either directly or indirectly to canvass any of the Employer's officials or the Employer's agent in respect of his					

No	Clause	Wording			
		tender, after the opening of the tenders but prior to the Employer arriving at a decision thereon.			
		"No Tenderer shall make any attempt to obtain particulars of any relevant information other than that disclosed at the opening of tenders."			
25	F.2.26	Add the following new clause:  Accept that the Employer is prohibited to award a tender to a person -  a) who is in the service of the state; or  b) if that person is not a natural person, of which any director, manager, principles shareholder or stakeholder is a person in the service of the state; or  c) a person who is an advisor or consultant contracted with COGTA KZN			
		Governmental entity.  "In the service of the state" means to be -  a) a member of:-  • any Governmental council;  • any provincial legislature; or			
		<ul> <li>the National Assembly or the National Council of Provinces;</li> <li>a member of the board of directors of any Governmental entity;</li> <li>an official of any COGTA KZN or Governmental entity;</li> <li>an employee of any national or provincial department;</li> </ul>			
		<ul> <li>d) an employee of any national or provincial department;</li> <li>e) provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No.1 of 1999);</li> </ul>			
		f) a member of the accounting authority of any national or provincial public entity; or			
		g) an employee of Parliament or a provincial legislature." In order to give effect to the above, the questionnaire for the declaration of interests in the tender of persons in service of state in part T2 – Returnable Documents must be completed."			
26	F.2.27	Add the following new clause:  Accept that the notes to the Employer's annual financial statements must disclose particulars of any award of more than R2000 to a person who is a spouse, child or parent of a person in the service of the state (defined in clause F2.25), or has been in the service of the state in the previous twelve months, including —  a) the name of that person;			
		b) the capacity in which that person is in the service of the state; and c) the amount of the award.			
		In order to give effect to the above, the questionnaire for the declaration of interests in the tender of persons in service of state in part T2 – Returnable Documents must be completed in full and signed."			
27	F.2.28	Add the following new clause:  ""Employment Contracts"  Accept that successful tenderers shall be obliged to conclude employment contracts with their employees failing which the COGTA KZN reserves the right to terminate the awarded contracts.			
		terminate the awarded contracts.			

No	Clause	Wording					
28	F.2.29	Add the following new clause:					
		"Remuneration					
		Accept that successful tenderers shall pay their workers a remuneration not less than that recommended and regulated by the Department of Labour."					
29	F.2.31	Add the following new clause:					
		"Governmental Clearance Billing Certificate:					
		Accept that no contract will be awarded to a tenderer who is in arrears for more than three months (or who fails to make suitable arrangements to settle the arrears) in respect of Governmental rates and other charges due any COGTA KZN." If the tender amount is expected to be more than R10m the period for arrears reduce to one month.					
30	F.2.32	Add the following new clause:					
		"Additional conditions of bid:"					
		<ol> <li>The Employer/Engineer may also request that the Tenderers provide written evidence that his financial, labour and other resources are adequate for carrying out the contract.</li> </ol>					
		2. The Employer reserves the right to appoint a firm of chartered accountants ar auditors and/or execute any other financial investigations on the financi resources of any bidder. The bidder shall provide all reasonable assistance such investigations.					
		3. The Employer may appoint more than one contractor on this project, subject to the specific conditions agreed to in the Form of Acceptance.					
		4. The bid document shall be submitted as a whole and shall not be taken apart.					
		5. List of returnable documents (PART T2) must be completed in full.					
		NB: If PART T2 is not completed in full by the bidder, this offer will be rejected.					
31	F.3.1.1	Change "five working days" to "seven working days".					
32	F.3.2	Change "seven days" to "five working days".					
33	F.3.4	The time and location for the opening of tender submissions are stated in the Tender Notice and Invitation to Tender.					
34	F.3.5	A two-envelope procedure will not be followed.					
35	F.3.8.1	Add the following to F3.8.1:					
		"(d) Tender offers will only be considered responsive if the minimum Functionality requirement of <b>70</b> % is achieved."					

No	Clause	Wording						
36	F.3.8.1 Tenderers are required to demonstrate their ability to undertake work and provid proof of previous experience and expertise to undertake a project of this nature. Tenderers are therefore required to meet a <b>minimum Functionality Score of 7</b> (70 points out of 100) based on the criteria listed below.  The following evaluation criteria will be used to determine responsiveness in term							
	1	of functionalit	ty.	_		•		
		Bid Number	Project Name	Closing Date and Time	Preferent ial point System	CIDB Grading	Pre-qualification criteria for preferential procurement	
		ZNT2011/20 20LG	Electrification OF the Abaqulusi ward 1 (63 connections), Abaqulusi ward 2 (200 connections), Abaqulusi ward 3 (69 connections), Abaqulusi ward 4 (101 connections) & Jozini ward 4 (213 connections)	Date 23/07/20 21 Time: 11H00	80/20	4EP / 5EP or Higher	Tenderers must subcontract a minimum of 30% to an EME or QSE	
		Stage 1: "Admi Bidders that do will not be eligi	teria: The evaluation winistrative compliance on not meet the Administible for further evaluation tionality" evaluation	e" strative com	<b>npliance</b> (Cor	mpliance wit non-respons	th mandatory and other bid resive.	
ļ		Related expe				(max 40	kimum score)	
ļ	1	Key staff com				40		
ļ		Plant and Equ	•			20		
	1	Total	·			100		
			n total score require egarded as non-res	-	70 points)	. Tendere	ers scoring less than	
ĺ	•							

No	Clause	Wording			
		<ol> <li>Where there is a discrepancy between an amount shown in figures and the corresponding amount in words, the amount stated in words shall take preference.</li> <li>In the Bill of Quantities, if there is an error in the line item total resulting from the product of the quantity and the unit rate, the line item total shall govern and the rate shall be corrected. Where there is a misplacement of the decimal point in the unit rate, the line item total shall govern and the unit rate shall be corrected.</li> <li>Where there is an error in the total of the process or in the tenderer's addition of prices, the total of the prices shall govern and the tenderer will be asked to revise selected item prices (and their rates in the Bill of Quantities) to achieve the tendered total of the prices.</li> </ol>			
		may be disqualified.			
38	F.3.11.1	Tenders will be evaluated in terms of the COGTA KZN Supply Chain Management Policy. Any parts of the Supply Chain Management Policy that are outdated will be replaced by the applicable portions of the current Preferential Procurement Policy Framework Act and associated Regulations.  The method for the evaluation of responsive tenders shall be Method 1: Financial Offer and Preference as described under Clause F.3.11.2.			
		The <b>80/20</b> Preference Point system will be applied where a maximum of <b>EIGHTY (80)</b> tender adjudication points will be awarded for price and a maximum of <b>TWENTY (20) points</b> for B-BBEE Status Level of Contribution. Refer to Part T2 - Returnable Schedules.			
39	F.3.11.7	The financial offer will be scored using Formula 2 (option 1) in Table F.1 of the Standard Conditions of Tender (Section T1.3 of this document) where the value of $W_1$ is:  1) 90 where the financial values inclusive of VAT of all responsive tenders received are in excess of R50 000 000, or  2) 80 where the financial value inclusive of VAT of one or more responsive tender offers is equal to or less than R50 000 000.			
40	F.3.11.8	Up to 100 minus W <sub>1</sub> tender evaluation points will be awarded to tenderers on the basis of the data supplied in Part 2: Returnable Schedules of the Tender Portion.  Up to 100 minus W <sub>1</sub> tender evaluation points will be awarded to tenderers that complete the preference claim form (T2.1.10) in terms of the Preferential Procurement Regulations 2017 and are found to be eligible for the preference claimed.  Preference points shall be scored in accordance with Regulation 5 (2) or 6 (2) of the Preferential Procurement Regulations, 2017. Preference points will be awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the table below.  In applying the 80/20 BEE points system for acquisition of services, works or goods with a Rand value below R50 000 000 (all applicable taxes included):			

No	Clause	Wording					
		B-BBEE Status Level of Contributor	Number of Points				
		1	20				
		2	18				
		3	14				
		4	12				
		5	8				
		6	6				
		7	4				
		8	2				
		Non-compliant contributor	0				
		A trust, consortium or joint venture will qualify for point as an unincorporated entity, provided that the entity BBEE scorecard as if they were a group structure at BBEE scorecard is prepared for every separate bid.	submits their consolidated B-				
41	F.3.13.1	Add the following to the Clause:					
		African Revenue Services or as alternatively Tax Clearance Certificate, or has made arra tax obligations and can provide proof thereof	African Revenue Services or as alternatively stipulated on schedule T2.1.3: Tax Clearance Certificate, or has made arrangements to meet outstanding tax obligations and can provide proof thereof;				
		Guarantee in the prescribed format from a commencement of each assignment awarde					
		,	The tenderer is registered with the Construction Industry Development Board (CIDB) in an appropriate contractor grading designation;				
		of Tender Defaulters in terms of the Prever	The tenderer or any of its directors/shareholders is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the				
		<ul> <li>k) The tenderer has not:</li> <li>i) abused the Employer's Supply Chain Maii) failed to perform on any previous contranotice to this effect;</li> </ul>					

No	Clause	Wording
		The tenderer has completed the Compulsory Enterprise Questionnaire and     i) there are no conflicts of interest which may impact on the tenderer's ability to perform the contract in the best interests of the employer or potentially compromise the tender process, and     ii) no person or persons in the employ of the state have been found to be involved in or associated with the submission of the tender or will participate in the contract in any manner whatsoever;
		m) The tenderer is registered and in good standing with the compensation fund or with a licensed compensation insurer;
		n) The Employer is reasonably satisfied that, in terms of the Construction Regulations, 2014 (issued in terms of the Occupational Health and Safety Act, 1993), the tenderer has the necessary competencies and resources to carry out the work safely;
		o) Neither the tenderer nor any of its directors, partners or principals is in arrears for more than 3 months with Governmental rates and taxes and Governmental service charges. If the tender amount is expected to be more than R10 million, the period for arrears reduces to one month;
		p) The Form of Offer and Acceptance is correctly completed and signed;
		q) Tenders containing any one or more errors or omissions, or tenders not having complied with any one of the pre-emptory tender conditions as detailed in this tender document, shall not be considered and shall automatically be rejected.
		r) Completion of schedule T2.2.8: Contract Organogram and T2.2.9: Key Personnel Returnable and attaching the CV's and certified qualifications
		s) Copies of section T2, C1 and C2
		t) Completion of the technical data sheets and submission of any supplier brochures required (if applicable, delete if not applicable)
		u) Completion of the quality scoring schedules and submit all relevant documentation required (if applicable, delete if not applicable)
42	F.3.17	The number of paper copies of the signed contract to be provided by the employer is one.

## **T1.3: STANDARD CONDITIONS OF TENDER**

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## CIDB STANDARD CONDITIONS OF TENDER

(July 2015 edition)

As published in Annex F of the CIDB Standard for Uniformity in Construction Procurement in Board Notice 136 of 2015 in Government Gazette No 38960 of 10 July 2015

## F.1 General

#### F.1.1 Actions

- **F.1.1.1** The employer and each tenderer submitting a tender offer shall comply with these conditions of tender. In their dealings with each other, they shall discharge their duties and obligations as set out in F.2 and F.3, timeously and with integrity, and behave equitably, honestly and transparently, comply with all legal obligations and not engage in anticompetitive practices.
- **F.1.1.2** The employer and the tenderer and all their agents and employees involved in the tender process shall avoid conflicts of interest and where a conflict of interest is perceived or known, declare any such conflict of interest, indicating the nature of such conflict. Tenderers shall declare any potential conflict of interest in their tender submissions. Employees, agents and advisors of the employer shall declare any conflict of interest to whoever is responsible for overseeing the procurement process at the start of any deliberations relating to the procurement process or as soon as they become aware of such conflict, and abstain from any decisions where such conflict exists or recuse themselves from the procurement process, as appropriate.

Note: 1A conflict of interest may arise due to a conflict of roles which might provide an incentive for improper acts in some circumstances. A conflict of interest can create an appearance of impropriety that can undermine confidence in the ability of that person to act properly in his or her position even if no improper acts result.

2Conflicts of interest in respect of those engaged in the procurement process include direct, indirect or family interests in the tender or outcome of the procurement process and any personal bias, inclination, obligation, allegiance or loyalty which would in any way affect any decisions taken.

**F.1.1.3** The employer shall not seek and a tenderer shall not submit a tender without having a firm intention and the capacity to proceed with the contract.

## F.1.2 Tender Documents

The documents issued by the employer for the purpose of a tender offer are listed in the tender data.

#### F.1.3 Interpretation

- **F.1.3.1** The tender data and additional requirements contained in the tender schedules that are included in the returnable documents are deemed to be part of these conditions of tender.
- **F.1.3.2** These conditions of tender, the tender data and tender schedules which are only required for tender evaluation purposes, shall not form part of any contract arising from the invitation to tender.
- **F.1.3.3** For the purposes of these conditions of tender, the following definitions apply:
- a) Conflict of interest means any situation in which:
  - someone in a position of trust has competing professional or personal interests which make it difficult to fulfil his or her duties impartially;

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- ii) an individual or organisation is in a position to exploit a professional or official capacity in some way for their personal or corporate benefit; or
- iii) incompatibility or contradictory interests exist between an employee and the organisation which employs that employee.
- b) comparative offer means the price after the factors of a non-firm price and all unconditional discounts it can be utilised to have been taken into consideration:
- c) corrupt practice means the offering, giving, receiving or soliciting of anything of value to influence the action of the employer or his staff or agents in the tender process;
- d) fraudulent practice means the misrepresentation of the facts in order to influence the tender process or the award of a contract arising from a tender offer to the detriment of the employer, including collusive practices intended to establish prices at artificial levels;
- e) organization means a company, firm, enterprise, association or other legal entity, whether incorporated or not, or a public body;
- f) functionality means the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs.

## F.1.4 Communication and employer's agent

Each communication between the employer and a tenderer shall be to or from the employer's agent only, and in a form that can be readily read, copied and recorded. Communications shall be in the English language. The employer shall not take any responsibility for non-receipt of communications from or by a tenderer. The name and contact details of the employer's agent are stated in the tender data.

#### F.1.5 Cancelation and Re-Invitation of Tenders

- F1.5.1 An organ of state may, prior to the award of the tender, cancel a tender if-
  - due to changed circumstances, there is no longer a need for the services, works or goods requested; or
  - (b) funds are no longer available to cover the total envisaged expenditure; or (c) no acceptable tenders are received.
- **F1.5.2** The decision to cancel a tender must be published in the cidb website and in the government Tender Bulletin for the media in which the original tender invitation was advertised.

#### F.1.6 Procurement procedures

#### F.1.6.1 General

Unless otherwise stated in the tender data, a contract will, subject to F.3.13, be concluded with the tenderer who in terms of F.3.11 is the highest ranked or the tenderer scoring the highest number of tender evaluation points, as relevant, based on the tender submissions that are received at the closing time for tenders.

#### F.1.6.2 Competitive negotiation procedure

**F.1.6.2.1** Where the tender data require that the competitive negotiation procedure is to be followed, tenderers shall submit tender offers in response to the proposed contract in the first round of submissions. Notwithstanding the requirements of F.3.4, the employer shall announce only the names of the tenderers who make a submission. The requirements of 36 F.3.8 relating to the material deviations or qualifications which affect the competitive position of tenderers shall not apply.

- F.1.6.2.2 All responsive tenderers, or not less than three responsive tenderers that are highest ranked in terms of the evaluation method and evaluation criteria stated in the tender data, shall be invited in each round to enter into competitive negotiations, based on the principle of equal treatment and keeping confidential the proposed solutions and associated information. Notwithstanding the provisions of F.2.17, the employer may request that tenders be clarified, specified and fine-tuned in order to improve a tenderer's competitive position provided that such clarification, specification, fine-tuning or additional information does not alter any fundamental aspects of the offers or impose substantial new requirements which restrict or distort competition or have a discriminatory effect.
- **F.1.6.2.3** At the conclusion of each round of negotiations, tenderers shall be invited by the employer to make a fresh tender offer, based on the same evaluation criteria, with or without adjusted weightings. Tenderers shall be advised when they are to submit their best and final offer.
- **F.1.6.2.4** The contract shall be awarded in accordance with the provisions of F.3.11 and F.3.13 after tenderers have been requested to submit their best and final offer.

#### F.1.6.3 Proposal procedure using the two stage-system

#### F.1.6.3.1 Option 1

Tenderers shall in the first stage submit technical proposals and, if required, cost parameters around which a contract may be negotiated. The employer shall evaluate each responsive submission in terms of the method of evaluation stated in the tender data, and in the second stage negotiate a contract with the tenderer scoring the highest number of evaluation points and award the contract in terms of these conditions of tender.

#### F.1.6.3.2 Option 2

- **F.1.6.3.2.1** Tenderers shall submit in the first stage only technical proposals. The employer shall invite all responsive tenderers to submit tender offers in the second stage, following the issuing of procurement documents.
- **F.1.6.3.2.2** The employer shall evaluate tenders received during the second stage in terms of the method of evaluation stated in the tender data, and award the contract in terms of these conditions of tender.

## F.2 Tenderer's obligations

## F.2.1 Eligibility

- **F.2.1.1** Submit a tender offer only if the tenderer satisfies the criteria stated in the tender data and the tenderer, or any of his principals, is not under any restriction to do business with employer.
- **F.2.1.2** Notify the employer of any proposed material change in the capabilities or formation of the tendering entity (or both) or any other criteria which formed part of the qualifying requirements used by the employer as the basis in a prior process to invite the tenderer to submit a tender offer and obtain the employer's written approval to do so prior to the closing time for tenders.

#### F.2.2 Cost of tendering

F2.2.1 Accept that, unless otherwise stated in the tender data, the employer will not compensate the tenderer for any costs incurred in the preparation and submission of a tender offer, including the costs of any testing necessary to demonstrate that aspects of the offer complies with requirements.

F2.2.2 The cost of the tender documents charged by the employer shall be limited to the actual cost incurred by the employer for printing the documents. Employers must attempt to make available the tender documents on its website so as not to incur any costs pertaining to the printing of the tender documents.

#### F.2.3 Check documents

Check the tender documents on receipt for completeness and notify the employer of any discrepancy or omission.

## F.2.4 Confidentiality and copyright of documents

Treat as confidential all matters arising in connection with the tender. Use and copy the documents issued by the employer only for the purpose of preparing and submitting a tender offer in response to the invitation.

#### F.2.5 Reference documents

Obtain, as necessary for submitting a tender offer, copies of the latest versions of standards, specifications, conditions of contract and other publications, which are not attached but which are incorporated into the tender documents by reference.

#### F.2.6 Acknowledge addenda

Acknowledge receipt of addenda to the tender documents, which the employer may issue, and if necessary apply for an extension to the closing time stated in the tender data, in order to take the addenda into account.

## F.2.7 Clarification meeting

Attend, where required, a clarification meeting at which tenderers may familiarize themselves with aspects of the proposed work, services or supply and raise questions. Details of the meeting(s) are stated in the tender data.

#### F.2.8 Seek clarification

Request clarification of the tender documents, if necessary, by notifying the employer at least five working days before the closing time stated in the tender data.

#### F.2.9 Insurance

Be aware that the extent of insurance to be provided by the employer (if any) might not be for the full cover required in terms of the conditions of contract identified in the contract data. The tenderer is advised to seek qualified advice regarding insurance.

## F.2.10 Pricing the tender offer

- **F.2.10.1** Include in the rates, prices, and the tendered total of the prices (if any) all duties, taxes (except Value Added Tax (VAT), and other levies payable by the successful tenderer, such duties, taxes and levies being those applicable 14 days before the closing time stated in the tender data.
- **F2.10.2** Show VAT payable by the employer separately as an addition to the tendered total of the prices.
- **F.2.10.3** Provide rates and prices that are fixed for the duration of the contract and not subject to adjustment except as provided for in the conditions of contract identified in the contract data.
- **F.2.10.4** State the rates and prices in Rand unless instructed otherwise in the tender data. The conditions of contract identified in the contract data may provide for part payment in other currencies.

#### F.2.11 Alterations to documents

Do not make any alterations or additions to the tender documents, except to comply with instructions issued by the employer, or necessary to correct errors made by the tenderer. All signatories to the tender offer shall initial all such alterations.

#### F.2.12 Alternative tender offers

- **F.2.12.1** Unless otherwise stated in the tender data, submit alternative tender offers only if a main tender offer, strictly in accordance with all the requirements of the tender documents, is also submitted as well as a schedule that compares the requirements of the tender documents with the alternative requirements that are proposed.
- **F.2.12.2** Accept that an alternative tender offer may be based only on the criteria stated in the tender data or criteria otherwise acceptable to the employer.
- **F.2.12.3** An alternative tender offer may only be considered in the event that the main tender offer is the winning tender.

#### F.2.13 Submitting a tender offer

- **F.2.13.1** Submit one tender offer only, either as a single tendering entity or as a member in a joint venture to provide the whole of the works, services or supply identified in the contract data and described in the scope of works, unless stated otherwise in the tender data.
- **F.2.13.2** Return all returnable documents to the employer after completing them in their entirety, either electronically (if they were issued in electronic format) or by writing legibly in non-erasable ink.
- **F.2.13.3** Submit the parts of the tender offer communicated on paper as an original plus the number of copies stated in the tender data, with an English translation of any documentation in a language other than English, and the parts communicated electronically in the same format as they were issued by the employer.
- **F.2.13.4** Sign the original and all copies of the tender offer where required in terms of the tender data. The employer will hold all authorized signatories liable on behalf of the tenderer. Signatories for tenderers proposing to contract as joint ventures shall state which of the signatories is the lead partner whom the employer shall hold liable for the purpose of the tender offer.
- **F.2.13.5** Seal the original and each copy of the tender offer as separate packages marking the packages as "ORIGINAL" and "COPY". Each package shall state on the outside the employer's address and identification details stated in the tender data, as well as the tenderer's name and contact address.
- **F.2.13.6** Where a two-envelope system is required in terms of the tender data, place and seal the returnable documents listed in the tender data in an envelope marked —financial proposall and place the remaining

returnable documents in an envelope marked —technical proposall. Each envelope shall state on the outside the employer's address and identification details stated in the tender data, as well as the tenderer's name and contact address.

- **F.2.13.7** Seal the original tender offer and copy packages together in an outer package that states on the outside only the employer's address and identification details as stated in the tender data.
- **F.2.13.8** Accept that the employer will not assume any responsibility for the misplacement or premature opening of the tender offer if the outer package is not sealed and marked as stated.
- **F.2.13.9** Accept that tender offers submitted by facsimile or e-mail will be rejected by the employer, unless stated otherwise in the tender data.

## F.2.14 Information and data to be completed in all respects

Accept that tender offers, which do not provide all the data or information requested completely and in the form required, may be regarded by the employer as non-responsive.

## F.2.15 Closing time

- F.2.15.1 Ensure that the employer receives the tender offer at the address specified in the tender data not later than the closing time stated in the tender data. Accept that proof of posting shall not be accepted as proof of delivery.
- F.2.15.2 Accept that, if the employer extends the closing time stated in the tender data for any reason, the requirements of these conditions of tender apply equally to the extended deadline.

#### F.2.16 Tender offer validity

- **F.2.16.1** Hold the tender offer(s) valid for acceptance by the employer at any time during the validity period stated in the tender data after the closing time stated in the tender data.
- **F.2.16.2** If requested by the employer, consider extending the validity period stated in the tender data for an agreed additional period with or without any conditions attached to such extension.
- **F.2.16.3** Accept that a tender submission that has been submitted to the employer may only be withdrawn or substituted by giving the employer's agent written notice before the closing time for tenders that a tender is to be withdrawn or substituted.
- **F.2.16.4** Where a tender submission is to be substituted, submit a substitute tender in accordance with the requirements of F.2.13 with the packages clearly marked as —"SUBSTITUTE".

#### F.2.17 Clarification of tender offer after submission

Provide clarification of a tender offer in response to a request to do so from the employer during the evaluation of tender offers. This may include providing a breakdown of rates or prices and correction of arithmetical errors by the adjustment of certain rates or item prices (or both). No change in the competitive position of tenderers or substance of the tender offer is sought, offered, or permitted.

Note: Sub-clause F.2.17 does not preclude the negotiation of the final terms of the contract with a preferred tenderer following a competitive selection process, should the Employer elect to do so.

#### F.2.18 Provide other material

**F.2.18.1** Provide, on request by the employer, any other material that has a bearing on the tender offer, the tenderer's commercial position (including notarized joint venture agreements), referencing arrangements, or samples of materials, considered necessary by the employer for the purpose of a full and fair risk assessment. Should the tenderer not provide the material, or a satisfactory reason as to why it cannot be provided, by the time for submission stated in the employer's request, the employer may regard the tender offer as non-responsive.

F.2.18.2 Dispose of samples of materials provided for evaluation by the employer, where required.

## F.2.19 Inspections, tests and analysis

Provide access during working hours to premises for inspections, tests and analysis as provided for in the tender data.

## F.2.20 Submit securities, bonds and policies

If requested, submit for the employer's acceptance before formation of the contract, all securities, bonds, guarantees, policies and certificates of insurance required in terms of the conditions of contract identified in the contract data.

#### F.2.21 Check final draft

Check the final draft of the contract provided by the employer within the time available for the employer to issue the contract.

#### F.2.22 Return of other tender documents

If so instructed by the employer, return all retained tender documents within 28 days after the expiry of the validity period stated in the tender data.

#### F.2.23 Certificates

Include in the tender submission or provide the employer with any certificates as stated in the tender data.

## F.3 The employer's undertakings

## F.3.1 Respond to requests from the tenderer

- **F.3.1.1** Unless otherwise stated in the tender Data, respond to a request for clarification received up to five working days before the tender closing time stated in the Tender Data and notify all tenderers who drew procurement documents.
- **F.3.1.2** Consider any request to make a material change in the capabilities or formation of the tendering entity (or both) or any other criteria which formed part of the qualifying requirements used to prequalify a tenderer to submit a tender offer in terms of a previous procurement process and deny any such request if as a consequence:

- a) an individual firm, or a joint venture as a whole, or any individual member of the joint venture fails to meet any of the collective or individual qualifying requirements:
- b) the new partners to a joint venture were not prequalified in the first instance, either as individual firms or as another joint venture; or
- c) in the opinion of the Employer, acceptance of the material change would compromise the outcome of the prequalification process.

#### F.3.2 Issue Addenda

If necessary, issue addenda that may amend or amplify the tender documents to each tenderer during the period from the date that tender documents are available until three days before the tender closing time stated in the Tender Data. If, as a result a tenderer applies for an extension to the closing time stated in the Tender Data, the Employer may grant such extension and, shall then notify all tenderers who drew documents.

#### F.3.3 Return late tender offers

Return tender offers received after the closing time stated in the Tender Data, unopened, (unless it is necessary to open a tender submission to obtain a forwarding address), to the tenderer concerned.

#### F.3.4 Opening of tender submissions

- **F.3.4.1** Unless the two-envelope system is to be followed, open valid tender submissions in the presence of tenderers' agents who choose to attend at the time and place stated in the tender data. Tender submissions for which acceptable reasons for withdrawal have been submitted will not be opened.
- **F.3.4.2** Announce at the meeting held immediately after the opening of tender submissions, at a venue indicated in the tender data, the name of each tenderer whose tender offer is opened and, where applicable, the total of his prices, number of points claimed for its BBBEE status level and time for completion for the main tender offer only.
- F.3.4.3 Make available the record outlined in F.3.4.2 to all interested persons upon request.

## F.3.5 Two-envelope system

- **F.3.5.1** Where stated in the tender data that a two-envelope system is to be followed, open only the technical proposal of valid tenders in the presence of tenderers' agents who choose to attend at the time and place stated in the tender data and announce the name of each tenderer whose technical proposal is opened.
- **F.3.5.2** Evaluate functionality of the technical proposals offered by tenderers, then advise tenderers who remain in contention for the award of the contract of the time and place when the financial proposals will be opened. Open only the financial proposals of tenderers, who score in the functionality evaluation more than the minimum number of points for functionality stated in the tender data, and announce the score obtained for the technical proposals and the total price and any points claimed on BBBEE status level. Return unopened financial proposals to tenderers whose technical proposals failed to achieve the minimum number of points for functionality.

## F.3.6 Non-disclosure

Not disclose to tenderers, or to any other person not officially concerned with such processes, information relating to the evaluation and comparison of tender offers, the final evaluation price and recommendations for the award of a contract, until after the award of the contract to the successful tenderer.

## F.3.7 Grounds for rejection and disqualification

Determine whether there has been any effort by a tenderer to influence the processing of tender offers and instantly disqualify a tenderer (and his tender offer) if it is established that he engaged in corrupt or fraudulent practices.

#### F.3.8 Test for responsiveness

F.3.8.1 Determine, after opening and before detailed evaluation, whether each tender offer properly received:

- a) complies with the requirements of these Conditions of Tender,
- b) has been properly and fully completed and signed, and
- c) is responsive to the other requirements of the tender documents.

**F.3.8.2** A responsive tender is one that conforms to all the terms, conditions, and specifications of the tender documents without material deviation or qualification. A material deviation or qualification is one which, in the Employer's opinion, would:

- a) detrimentally affect the scope, quality, or performance of the works, services or supply identified in the Scope of Work,
- b) significantly change the Employer's or the tenderer's risks and responsibilities under the contract, or
- c) affect the competitive position of other tenderers presenting responsive tenders, if it were to be rectified.

Reject a non-responsive tender offer, and not allow it to be subsequently made responsive by correction or withdrawal of the non-conforming deviation or reservation.

#### F.3.9 Arithmetical errors, omissions and discrepancies

**F.3.9.1** Check the highest ranked tender or tenderer with the highest number of tender evaluation points after the evaluation of tender offers in accordance with F.3.11 for:

- a) the gross misplacement of the decimal point in any unit rate;
- b) omissions made in completing the pricing schedule or bills of quantities; or
- c) arithmetic errors in:
  - i) line item totals resulting from the product of a unit rate and a quantity in bills of quantities or schedules of prices; or
  - ii) the summation of the prices.

F3.9.2 The employer must correct the arithmetical errors in the following manner:

- a) Where there is a discrepancy between the amounts in words and amounts in figures, the amount in words shall govern.
- b) If bills of quantities or pricing schedules apply and there is an error in the line item total resulting from the product of the unit rate and the quantity, the line item total shall govern and the rate shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line item total as quoted shall govern, and the unit rate shall be corrected.
- c) Where there is an error in the total of the prices either as a result of other corrections required by this checking process or in the tenderer's addition of prices, the total of the prices shall govern and the

tenderer will be asked to revise selected item prices (and their rates if bills of quantities apply) to achieve the tendered total of the prices.

Consider the rejection of a tender offer if the tenderer does not correct or accept the correction of the arithmetical error in the manner described above.

#### F.3.10 Clarification of a tender offer

Obtain clarification from a tenderer on any matter that could give rise to ambiguity in a contract arising from the tender offer.

#### F.3.11 Evaluation of tender offers

#### **F.3.11.1 General**

Appoint an evaluation panel of not less than three persons. Reduce each responsive tender offer to a comparative offer and evaluate them using the tender evaluation methods and associated evaluation criteria and weightings that are specified in the tender data.

#### F.3.11.2 Method 1: Price and Preference

In the case of a price and preference:

- 1) Score tender evaluation points for price
- 2) Score points for BBBEE contribution
- 3) Add the points scored for price and BBBEE.

#### F.3.11.3 Method 2: Functionality, Price and Preference

In the case of a functionality, price and preference:

- 1) Score functionality, rejecting all tender offers that fail to achieve the minimum number of points for functionality as stated in the Tender Data.
- 2) No tender must be regarded as an acceptable tender if it fails to achieve the minimum qualifying score for functionality as indicated in the tender invitation.
- 3) Tenders that have achieved the minimum qualification score for functionality must be evaluated further in terms of the preference points system prescribed in paragraphs 4 and 4 and 5 below. The 80/20 preference point system for acquisition of services, works or goods up to Rand value of R1 million
- 4) (a)(i) The following formula must be used to calculate the points for price in respect of tenders (including price quotation) with a rand value equal to, or above R 30 000 and up to Rand value of R 1 000 000 (all applicable taxes included):

$$Ps = 80 \left( 1 - \frac{Pt - Pmin}{Pmin} \right)$$

Where

Ps = Points scored for comparative price of tender or offer under consideration;

Pt = Comparative price of tender or offer under consideration; and

Pmin = Comparative price of lowest acceptable tender or offer.

(4)(a)(ii) An employer of state may apply the formula in paragraph (i) for price quotations with a value less than R30 000, if and when appropriate:

(4)(b) Subject to subparagraph(4)(c), points must be awarded to a tender for attaining the B-BBEE status level of contributor in accordance with the table below:

B-BBEE status level of contributor	Number of points
1	20
2	18
3	14
4	12
5	8
6	6
7	4
8	2
Non-compliant contributor	0

- (4)(c) A maximum of 20 points may be allocated in accordance with subparagraph (4)(b)
- (4)(d) The points scored by tender in respect of B-BBEE contribution contemplated in contemplated in subparagraph (4) (b) must be added to the points scored for price as calculated in accordance with subparagraph (4)(a).
- (4)(e) Subject to paragraph 4.3.8 the contract must be awarded to the tender who scores the highest total number of points.

The 90/ 10 preference points system for acquisition of services, works or goods with a Rand value above R 1 million

(5)(a) The following formula must be used to calculate the points for price in respect of tenders with a Rand value above R1 000 000 (all applicable taxes included):

$$Ps = 90 \left( 1 - \frac{Pt - Pmin}{Pmin} \right)$$

Where

Ps = Points scored for comparative price of tender or offer under consideration;

Pt = Comparative price of tender or offer under consideration; and

Pmin = Comparative price of lowest acceptable tender or offer.

(5)(b) Subject to subparagraph(5)(c), points must be awarded to a tender for attaining the BBBEE status level of contributor in accordance with the table below:

B-BBEE status level of contributor	Number of points
1	10
2	9
3	8
4	6
5	4
6	3
7	2
8	1
Non-compliant contributor	0

- (5)(c) A maximum of 10 points may be allocated in accordance with subparagraph (5)(b).
- (5)(d) The points scored by tender in respect of B-BBEE contribution contemplated in contemplated in subparagraph (5) (b) must be added to the points scored for price as calculated in accordance with subparagraph (5)(a).

(5)(e) Subject to paragraph 4.3.8 the contract must be awarded to the tender who scores the highest total number of points.

## F.3.11.6 Decimal places

Score price, preference and functionality, as relevant, to two decimal places.

#### F.3.11.7 Scoring Price

Score price of remaining responsive tender offers using the following formula:

 $N_{FO} = W_1 \times A$ 

where:

N<sub>FO</sub> is the number of tender evaluation points awarded for price.

 $W_1$  is the maximum possible number of tender evaluation points awarded for price as stated in the Tender Data.

A is a number calculated using the formula and option described in Table F.1 as stated in the Tender Data.

Table F.1: Formulae for calculating the value of A

Formula	Comparison aimed at achieving	Option 1 <sup>a</sup>	Option 2 <sup>a</sup>
1	Highest price or discount	$A = \left(1 + \left(\frac{P - Pm}{Pm}\right)\right)$	A = P/Pm
2	Lowest price or percentage commission / fee	$A = \left(1 - \left(\frac{P - Pm}{Pm}\right)\right)$	A = Pm/P
а	Pm is the comparative offer of the most favourable comparative offer P is the comparative offer of the tender offer under consideration		

## F.3.11.8 Scoring preferences

Confirm that tenderers are eligible for the preferences claimed in accordance with the provisions of the tender data and reject all claims for preferences where tenderers are not eligible for such preferences.

Calculate the total number of tender evaluation points for preferences claimed in accordance with the provisions of the tender data.

## F.3.11.9 Scoring functionality

Score each of the criteria and subcriteria for quality in accordance with the provisions of the Tender Data.

Calculate the total number of tender evaluation points for quality using the following formula:

 $N_Q = W_2 \times S_O / M_S$ 

where:

the

 $S_0$  is the score for quality allocated to the submission under consideration;

M<sub>S</sub> is the maximum possible score for quality in respect of a submission; and

W<sub>2</sub> is the maximum possible number of tender evaluation points awarded for the quality as stated in tender data

## F.3.12 Insurance provided by the employer

If requested by the proposed successful tenderer, submit for the tenderer's information the policies and / or certificates of insurance which the conditions of contract identified in the contract data, require the employer to provide.

## F.3.13 Acceptance of tender offer

Accept the tender offer, if in the opinion of the employer, it does not present any risk and only if the tenderer:

- a) is not under restrictions, or has principals who are under restrictions, preventing participating in the employer's procurement,
- can, as necessary and in relation to the proposed contract, demonstrate that he or she possesses the
  professional and technical qualifications, professional and technical competence, financial
  resources, equipment and other physical facilities, managerial capability, reliability, experience and
  reputation, expertise and the personnel, to perform the contract,
- c) has the legal capacity to enter into the contract,
- d) is not insolvent, in receivership, under Business Rescue as provided for in chapter 6 of the Companies Act, 2008, bankrupt or being wound up, has his affairs administered by a court or a judicial officer, has suspended his business activities, or is subject to legal proceedings in respect of any of the foregoing,
- e) complies with the legal requirements, if any, stated in the tender data, and
- f) is able, in the opinion of the employer, to perform the contract free of conflicts of interest.

## F.3.14 Prepare contract documents

- **F.3.14.1** If necessary, revise documents that shall form part of the contract and that were issued by employer as part of the tender documents to take account of:
- a) addenda issued during the tender period,
- b) inclusion of some of the returnable documents, and
- other revisions agreed between the employer and the successful tenderer.
- F.3.14.2 Complete the schedule of deviations attached to the form of offer and acceptance, if any.

## F.3.15 Complete adjudicator's contract

Unless alternative arrangements have been agreed or otherwise provided for in the contract, arrange for both parties to complete formalities for appointing the selected adjudicator at the same time as the main contract is signed.

## F.3.16 Notice to unsuccessful tenderers

- **F.3.16.1** Notify the successful tenderer of the employer's acceptance of his tender offer by completing and returning one copy of the form of offer and acceptance before the expiry of the validity period stated in the tender data, or agreed additional period.
- **F.3.16.2** After the successful tenderer has been notified of the employer's acceptance of the tender, notify other tenderers that their tender offers have not been accepted.

## F.3.17 Provide copies of the contracts

Provide to the successful tenderer the number of copies stated in the Tender Data of the signed copy of the contract as soon as possible after completion and signing of the form of offer and acceptance.

#### F.3.18 Provide written reasons for actions taken

Provide upon request written reasons to tenderers for any action that is taken in applying these conditions of tender, but withhold information which is not in the public interest to be divulged, which is considered to prejudice the legitimate commercial interests of tenderers or might prejudice fair competition between tenderers.

#### F3.19 Transparency in the procurement process

- **F3.19.1** The cidb prescripts require that tenders must be advertised and be registered on the cidb i.Tender system.
- **F3.19.2** The employer must adopt a transparency model that incorporates the disclosure and accountability as transparency requirements in the procurement process.
- **F3.19.3** The transparency model must identify the criteria for selection of projects, project information template and the threshold value of the projects to be disclosed in the public domain at various intervals of delivery of infrastructure projects.
- **F3.19.4** The client must publish the information on a quarterly basis which contains the following information: Procurement planning process
  - Procurement method and evaluation process
  - Contract type
  - Contract status
  - Number of firms tendering
  - Cost estimate
  - Contract title
  - Contract firm(s)
  - Contract price
  - Contract scope of work
  - Contract start date and duration
  - Contract evaluation reports
- **F3.19.5** The employer must establish a Consultative Forum which will conduct a random audit in the implementation of the transparency requirements in the procurement process.
- F3.19.6 Consultative Forum must be an independent structure from the bid committees.
- **F3.19.7** The information must be published on the employer's website.
- **F 3.19.8** Records of such disclosed information must be retained for audit purposes.

## **COGTA KZN**

**TENDER NUMBER: ZNT2011/2020LG** 

ELECTRIFICATION OF THE ABAQULUSI WARD 1 (63 CONNECTIONS), ABAQULUSI WARD 2 (200 CONNECTIONS), ABAQULUSI WARD 3 (69 CONNECTIONS), ABAQULUSI WARD 4 (101 CONNECTIONS) & JOZINI WARD 4 (213 CONNECTIONS)

# **TENDER**PART 2 (OF 2): RETURNABLE DOCUMENTS

## **CONTENTS**

T2.1	Returnable Schedules	White
T2.2	Additional Returnable Schedules	White

#### **T2.1: RETURNABLE SCHEDULES**

The following documents are to be completed and returned, as they constitute the tender. Whilst many of the returnable documents are required for the purpose of evaluating the tenders, some will form part of the subsequent contract, as they form the basis of the tender offer. For this reason, it is very important that tenderers return **all information requested.** 

1.	RETURNABLE SCHEDULES REQUIRED FOR TENDER EVALUATION PURPOSES Failure to submit these applicable documents will result in the tender offer being disfrom further consideration.	
T 2.1.1	Authority of Signatory	Tick if completed and submitted
T 2.1.3	Valid Tax Clearance Certificate	Tick if completed and submitted
T 2.1.5	Business Registration Documents	Tick if completed and submitted
T 2.1.7	VAT Registration Certificate	Tick if completed and submitted
T 2.1.8	Broad Based Black Economic Empowerment (BBBEE) Certificate	Tick if completed and submitted
T 2.1.9	Joint Venture (JV) Agreement (Where Applicable)	Tick if completed and submitted
T 2.1.10	Preference Points Claim Form in terms of the Preferential Procurement Regulations 2017	Tick if completed and submitted
T 2.1.12	Status of Concern Submitting Tender	Tick if completed and submitted
T 2.1.13	Proof of Registration with the Construction Industry Development Board (in the applicable category or higher)	Tick if completed and submitted
T 2.1.14	Declaration of Interest in Tender of Persons in Service of the State	Tick if completed and submitted
T 2.1.15	Compulsory Enterprise Questionnaire	Tick if completed and submitted
T 2.1.16	Declaration of Tenderer's Past Supply Chain Management (SCM) Practices	Tick if completed and submitted
T 2.1.17	Declaration Concerning Fulfillment of the Construction Regulations, 2014	Tick if completed and submitted
T 2.1.18	Certificate of Independent Bid Determination	Tick if completed and submitted
T 2.1.19	Declaration of Indemnity	Tick if completed and submitted
T 2.1.21	Record of Addenda to Tender Documents	Tick if completed and submitted
T 2.1.22	Proposed Amendments	Tick if completed and submitted
T 2.1.23	Schedule of Work Satisfactorily Carried out by the Tenderer for Private Clients or Organs of State	Tick if completed and submitted
T 2.1.24	Schedule of Plant and Equipment Available for the Contract	Tick if completed and submitted
T 2.1.31	Schedule of Proposed Subcontractors	Tick if completed and submitted
T 2.1.35	Certificate of Attendance at Compulsory Clarification Meeting	Tick if completed and submitted

	LE SCHEDULES REQUIRED FOR TENDER EVALUATION PURPOSES (CONTINUE bmit these applicable documents will result in the tender offer being disqualified from fin.	,
T 2.2.1	Municipal declaration and returnable documents	ick if completed and submitted
T 2.2.2	Financial references	ick if completed and submitted
C1.1	Form of Offer and Acceptance	Tick if completed and submitted
C1.2b	Contract Data (Part 2) – Specified by the Contractor	Tick if completed and submitted

2.	ADDITIONAL RETURNABLE DOCUMENTS REQUIRED FOR TENDER EVALUATION PURPOSES THAT WILL BE INCORPORATED INTO THE CONTRACT	N
	Failure to submit this applicable document will result in the Tenderer having to submit upon request within 7 calendar days and if not complied with, will result in the tender obeing disqualified from further consideration [See also clause 2.18 of the Standard Co of Tender]	ffer
T 2.1.2	Payments of Municipal Accounts	Tick if completed and submitted
T 2.1.4	Proof of Registration with National Treasury Central Supplier Database	Tick if completed and submitted
T 2.2.3	Estimated Monthly Cash flow	Tick if completed and submitted
T 2.2.4	Personnel Schedule	Tick if completed and submitted
T 2.2.5	Quality Management Systems	Tick if completed and submitted
T 2.2.6	Preliminary Program of the Works	Tick if completed and submitted
T 2.2.7	Company Profile	
T 2.2.8	Contract Organogram	Tick if completed and submitted
T 2.2.9	Key Personnel Assigned to the Contract	Tick if completed and submitted
T2.2.10	Curriculum Vitae of Contracts Manager	Tick if completed and submitted
T2.2.11	Curriculum Vitae of Site Agent	Tick if completed and submitted
T2.2.12	Curriculum Vitae of General Foreman	Tick if completed and submitted
T2.2.13	Curriculum Vitae of Health and Safety Representative	Tick if completed and submitted

# OTHER DOCUMENTS AND AFFIDAVITS THAT WILL BE INCORPORATED INTO THE CONTRACT Failure to submit the applicable documents will result in the tender offer being disqualified from further consideration.

C 1.1 :	Form of Offer and Acceptance	Tick if completed and submitted
C 1.2a:	Contract Data (Part 1) – Specified by the Employer	Tick if completed and submitted
C 1.2b:	Contract Data (Part 2) – Specified by the Contractor	Tick if completed and submitted
C 1.4 :	Occupational Health and Safety Mandatory Agreement	Tick if completed and submitted
C 1.5 :	Disclosure Statement	Tick if completed and submitted
C 2.1	Pricing Instructions	Tick if completed and submitted
C 2.2 :	Bill of Quantities	Tick if completed and submitted
T 2.1.21	Record of Addenda to Tender Documents	Tick if completed and submitted
T 2.1.22	Proposed Amendments	Tick if completed and submitted

**T2.1.1: AUTHORITY OF SIGNATORY** 

Indicate the status of the tenderer by ticking the appropriate box hereunder. The tenderer must complete the certificate set out below for the relevant category.

A Company	B Partnership	C Joint Venture	D Sole Proprietor	E Close Corporation

Certificate for Company			
l,		chairperson of the board of di	rectors of
	,	hereby confirm that by resolut	ion of the
board (copy attached) taken on	20	, *Mr/Ms	
acting in the capacity of	(Pos	ion in the Enterprise), and who will	l sign as
follows:	. be, and is hereb	y, authorized to sign the Bid/Te	nder, and
any and all documents and/or correspond	ondence in conn	ection with this tender and any	contract
resulting from it on behalf of the compa	ny.		
As witnesses :			
	Chairman :		
	Date :		

	NAME	CAPACITY	SIGNATURE
1			
2			
3			
4			
5			

## NOTE:

- 1. \*Delete which is not applicable
- 2. NB: This resolution must be signed by all the Directors/Members/Partners of the Bidding Enterprise
- 3. Should the number of Directors/Members/Partners exceed the space available above, additional names and signatures must be supplied on a separate page.

## B. Certificate for Partnership

We, the undersigned, being the key partners in the business trading as
hereby authorize *Mr/Ms,
acting in the capacity of (Position in the Enterprise), and who will
sign as follows:be, and is hereby, authorized to sign the
Bid/Tender, and any and all documents and/or correspondence in connection with this tender
and any contract resulting from it on behalf of the company.

NAME	ADDRESS	SIGNATURE	DATE

#### NOTE:

- 4. \*Delete which is not applicable
- 5. NB: This resolution must be signed by all the Directors/Members/Partners of the Bidding Enterprise
- 6. Should the number of Directors/Members/Partners exceed the space available above, additional names and signatures must be supplied on a separate page.

We, the undersigned, are submitting this tender offer in a Joint Venture / Consortium and hereby authorize \*Mr/Ms,.....acting in the capacity of lead partner, and who will sign as follows: .....be, and is hereby, authorized to sign the Bid/Tender, and any and all documents and/or correspondence in connection with this tender and any contract resulting from it on behalf of the company.

This authorization is evidenced by the attached power of attorney signed by legally authorized signatories of all the partners to the Joint Venture / Consortium.

NAME OF FIRM	Lead Partner (X)	ADDRESS	% of Contract Value	AUTHORISING SIGNATURE, NAME & CAPACITY

C.

	hereby confirm that I		usiness
As witnesses :	Simonhuma v Sala		
		Date :	
Certificate for Close C	orporation		
-	eing the key members in the bu	_	
acting in the capacity of	, (Position in t	the Enterprise), and who will sign	gn as follo
	be, and is hereby, authors	orized to sign the Bid/Tende	r, and any
all documents and/or co	be, and is hereby, authorrespondence in connection w	orized to sign the Bid/Tende	r, and any a
	be, and is hereby, authorrespondence in connection w	orized to sign the Bid/Tende vith this tender and any cor	r, and any a
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all documents and/or confrom it on behalf of the confrom it on behalf of the confront in the c	rrespondence in connection wompany.  ADDRESS  ot applicable	SIGNATURE  Directors/Members/Partne	DAT

In terms of Clause 26(e) of the Municipal Supply Chain Management Policy, tenderers must ensure that they are up-to-date with their payments of municipal accounts. The tenderer shall attach to this page, a Municipal Accounts Tender Clearance Certificate, which provides proof that his payment of Municipal accounts is up-to-date. These certificates are obtainable from the Local Municipality.

Should the tenderer not be based in the Municipality, he/she must submit a Rates Clearance Certificate issued by the municipality in which he is based.

#### The tenderer is referred to the added Clause F2.31 of the Conditions of tender:

Accept that no contract will be awarded to a tenderer who is in arrears (or who fails to make suitable arrangements to settle the arrears) in respect of municipal rates and other charges due to any municipality.

# **T2.1.3: TAX CLEARANCE CERTIFICATE**

It is a condition of bid that the taxes of the successful bidder must be in order, or that satisfactory arrangements have been made with the South African Revenue Service (SARS) to meet with the bidders tax obligations.

- 1. In order to meet this requirement bidders are required to complete in full the TCC 001 form, Application for a Tax Clearance Certificate (TCC)" and submit it to any SARS branch office nationally. The TCC requirements are also applicable top foreign bidders / individuals who wish to submit bids.
- 2. SARS will then furnish the bidder with a TCC that will be valid for a period of one (1) year from the date of approval.
- 3. The tenderer must attach to this page an **valid** TCC issued by SARS in respect of his/her company, close corporation or partnership. Failure to submit the original and valid TCC will result in the invalidation of the bid. Certified copies of the TCC will not be accepted.

Alternatively, the tenderer must submit a Tax Compliance Status PIN to allow Supply Chain Management to verify the real-time compliance status.

Tax Compliance Status PIN	
	•••••

- 4. In the case of a joint venture between two or more firms, the tenderer shall attach the TCC for each of the joint venture partners.
- 5. Copies of the TCC 001 form are available from any SARS branch office nationally or on the website, <a href="https://www.sars.gov.za">www.sars.gov.za</a>
- 6. Applications for the TCC may also be made via eFiling. In order to use this provision, taxpayers will need to register with SARS as eFilers through the website, www.sars.gov.za.

Signed	 Date	
Name	 Position	
Tenderer	 	

# T2.1.4 : PROOF OF REGISTRATION WITH THE NATIONAL TREASURY CENTRAL SUPPLIER DATA BASE

All businesses and suppliers wishing to conduct business with the Local Municipality must register on the National Treasury Central Supplier Database.

confirmation of registration.		
Γ		
T2.1.5 : BUSINESS REGISTRATION DOCUMENTS		

The database is administered by National Treasury and the tenderers must attach to this page a copy of their

Attach as part of your tender submission proof of valid registration to the companies and intellectual property commission documents of incorporation of company, close corporation, partnership, sole proprietor or a joint venture.

In the case of a joint venture, the tenderer shall include all the documents of all the entities involved in the joint venture.

bidders tax clearance of	•	only required	to submit a cop	by or their iden	uncation docum	ieni and
T2.1.7 : VAT REGIS	STRATION CER	RTIFICATE				
Tenderers must attach	hereto a copy of	their VAT regis	tration as proof	that they are a	VAT vendor. In	the case
of a joint venture a VAT	Γ registration cert	ificate must be	submitted for th	e registered joi	nt venture.	

## T2.1.8: BROAD BASED BLACK ECONOMIC EMPOWERMENT (BBBEE) CERTIFICATE

Valuation of preference points is based on tenderers' scorecards in accordance with the Construction Sector Codes of Practice promulgated in Gazette 41287 on 1 December 2017. In terms of Government Notice 931 of 2017, only BBBEE Verification Certificates issued by Accredited Verification Agencies or Verification Agencies that are in possession of a valid pre-assessment letter from the South African National Accreditation System (SANAS) will be valid.

1. Tenderers shall therefore submit their company's scorecard by attaching to this page a BBBEE Verification Certificate. The BBBEE Verification Certificate must indicate the OWNERSHIP (Bo) details.

- 2. The Verification Certificate must be current, meaning that it must have been issued more recently than 12 (twelve) months prior to the tender closing date.
- 3. In the event of a Joint Venture (JV), a consolidated BBBEE Verification Certificates must be submitted for the JV or a score of zero points will be applied.

Signed	 Date	
Name	 Position	
Tenderer	 	

# T2.1.9: JOINT VENTURE (JV) AGREEMENT (Where Applicable)

In the case of a joint venture, Tenderers must attach hereto a signed copy of the joint venture agreement.

# T2.1.10 : PREFERENCE SCHEDULE: BROAD BASED BLACK ECONOMIC EMPOWERMENT STATUS

This preference form must form part of all bids invited. It contains general information and serves as a claim form for preference points for Broad-Based Black Economic Empowerment (B-BBEE) Status Level of Contribution

NB: BEFORE COMPLETING THIS FORM, BIDDERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF B-BBEE, AS PRESCRIBED IN THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017.

#### 1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to all bids:

- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
- the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

1.2

- a) The value of this bid is estimated to not exceed R50 000 000 (all applicable taxes included) and therefore the 80/20 preference point system shall be applicable; or
- 1.3 Points for this bid shall be awarded for:
  - (a) Price; and
  - (b) B-BBEE Status Level of Contributor.
- 1.4 The maximum points for this bid are allocated as follows:

	POINTS
PRICE	80
B-BBEE STATUS LEVEL OF CONTRIBUTOR	20
Total points for Price and B-BBEE must not exceed	100

- 1.5 Failure on the part of a bidder to submit proof of B-BBEE Status level of contributor together with the bid, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.
- 1.6 The purchaser reserves the right to require of a bidder, either before a bid is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the purchaser.

#### 2. DEFINITIONS

- (a) **"B-BBEE"** means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;
- (b) "B-BBEE status level of contributor" means the B-BBEE status of an entity in terms of a code of good practice on black economic empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;
- (c) "bid" means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of goods or services, through price quotations, advertised competitive bidding processes or proposals;
- (d) "Broad-Based Black Economic Empowerment Act" means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- (e) "EME" means an Exempted Micro Enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
- (f) "functionality" means the ability of a tenderer to provide goods or services in accordance with specifications as set out in the tender documents.
- (g) "prices" includes all applicable taxes less all unconditional discounts;
- (h) "proof of B-BBEE status level of contributor" means:
  - 1) B-BBEE Status level certificate issued by an authorized body or person;
  - 2) A sworn affidavit as prescribed by the B-BBEE Codes of Good Practice;

- 3) Any other requirement prescribed in terms of the B-BBEE Act;
- (i) "QSE" means a qualifying small business enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
- (j) "rand value" means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;

#### 3. POINTS AWARDED FOR PRICE

#### 3.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

A maximum of 80 or 90 points is allocated for price on the following basis: 80/20 or 90/10

$$Ps = 80\left(1 - \frac{Pt - P\min}{P\min}\right)$$
 or  $Ps = 90\left(1 - \frac{Pt - P\min}{P\min}\right)$ 

Where

Ps = Points scored for price of bid under consideration

Pt = Price of bid under consideration

Pmin = Price of lowest acceptable bid

#### 4. POINTS AWARDED FOR B-BBEE STATUS LEVEL OF CONTRIBUTOR

4.1 In terms of Regulation 6 (2) and 7 (2) of the Preferential Procurement Regulations, preference points must be awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the table below:

B-BBEE Status Level of Contributor	Number of points (90/10 system)	Number of points (80/20 system)
1	10	20
2	9	18
3	6	14
4	5	12
5	4	8
6	3	6
7	2	4
8	1	2
Non-compliant contributor	0	0

#### 5. BID DECLARATION

- 5.1 Bidders who claim points in respect of B-BBEE Status Level of Contribution must complete the following:
- 6. B-BBEE STATUS LEVEL OF CONTRIBUTOR CLAIMED IN TERMS OF PARAGRAPHS 1.4
  AND 4.1

6.1	B-BBEE Status Level of Contributor: . =(maximum of 10 or 20 points)			
	(Points claimed in respect of paragraph 7.1 must be in accordance paragraph 4.1 and must be substantiated by relevant proof of B-BBEE			
7.	SUB-CONTRACTING- COMPULSORY (minimum 30%)			
7.1	Will any portion of the contract be sub-contracted?			
	(Tick applicable box)			
	YES NO			
The Depa	artment has identified the following category for sub- contacting ate box.	. Specify, by	ticking the	
Designa	ted Group: An EME or QSE which is at last 51% owned by:	,		
Dioden	copie with dischilities	√		
	eople with disabilities eople who are military veterans			
Diagn po	ropic wife are minutly recording			
8.	DECLARATION WITH REGARD TO COMPANY/FIRM			
8.1	Name of company/firm:			
8.2	VAT registration number:			
8.3	Company registration number:			
8.4	TYPE OF COMPANY/ FIRM			
	□ Partnership/Joint Venture / Consortium			
	□ One person business/sole propriety			
	□ Close corporation			
	□ Company			
	□ (Pty) Limited			
	[TICK APPLICABLE BOX]			
8.5	DESCRIBE PRINCIPAL BUSINESS ACTIVITIES			
8.6	COMPANY CLASSIFICATION			
	□ Manufacturer			
	□ Supplier			
	□ Professional service provider			
	☐ Other service providers, e.g. transporter, etc. [TICK APPLICABLE BOX]			

8.7	MUNICIPAL INFORMATION				
	Municipality where business is situated:				
	Re	gistere	d Account Number:		
	Sta	and Nur	mber:		
8.8	Tot	tal numb	per of years the company/firm has	been in business:	
8.9	tha 1.4	t the po	oints claimed, based on the B-BBI	orised to do so on behalf of the company/firm, certify status level of contributor indicated in paragraphs ifies the company/ firm for the preference(s) shown	
	1.	The in	formation furnished is true and co	rrect;	
	2.		reference points claimed are in acagraph 1 of this form;	ecordance with the General Conditions as indicated	
	3.	1.4 an		as a result of points claimed as shown in paragraphs ired to furnish documentary proof to the satisfaction rect;	
	4.	or any		has been claimed or obtained on a fraudulent basis e not been fulfilled, the purchaser may, in addition to	
		(a)	disqualify the person from the b	idding process;	
	<ul><li>(b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;</li></ul>			es it has incurred or suffered as a result of	
		(c)		y damages which it has suffered as a result ble arrangements due to such cancellation;	
	(d) recommend that the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted by the National Treasury from obtaining business from any organ of state for a period not exceeding 10 years, after the audi alteram partem (hear the other side) rule has been applied; and			ctors who acted on a fraudulent basis, be ury from obtaining business from any organing 10 years, after the audi alteram partem	
		(e)			
WITNESS	SES				
1				SIGNATURE(S) OF BIDDERS(S)	
2				DATE:	

## **T2.1.12: STATUS OF CONCERN SUBMITTING TENDER**

#### 1. General

State whether the tenderer is a company, a closed corporation, a partnership, a sole practitioner, a joint venture or a co-operative:

(Mark the appropriate option below)  Public Company	
Private Company	
Closed Corporation	
Partnership	
Sole Proprietary	
Joint Venture	
Co-operative	

## 2. Information To Be Provided

	If the Tendering Entity is a:	Documentation to be submitted with the tender	
1	Closed Corporation, incorporated under the Close Corporation Act, 1984, Act 69 of 1984.	CIPRO CK1 or CK2 (Copies of the founding statement) and list of members.	
2	Private Company incorporated with share capital, under the companies Act, 1973, Act 61of 1973. (Including Companies incorporated under Art 53 (b)).	Copies of:  a) CIPRO CM 1 - Certificate of Incorporation b) CIPRO CM 29 – Contents of Register of Directors, Auditors and Officers c) Shareholders Certificates of all Members of the Company.	
3	Private Company incorporated with share capital, under the companies Act, 1973, Act 61of 1973 in which any, or all, shares are held by another Closed Corporation or company with, or without, share capital.	Copies of documents referred to in 1 and/or 2 above in respect of all such Closed Corporations and/or Companies.	

	If the Tendering Entity is a:	Documentation to be submitted with the tender	
4	Public Company incorporated with share capital, under the companies Act, 1973, Act 61of 1973 (Including Companies incorporated under Art 21)	A signed statement of the Company's Secretary confirming that the Company is a public Company.  Copy of CM 29.	
5	Sole Proprietary or a Partnership	Copy of the Identity Document of:  a) Such Sole Proprietary, or b) Each of the Partners in the Partnership Copy of the Partnership agreement.	
6	Co-operative	CIPRO CR2 - Copies of Company registration document. (The percentage of work to be done by each partner must clearly be indicated on Form RDB1 (or RDB2 as applicable) of the tender document: SBD6.1 Preference Points Claim Form in terms of the Preferential Procurement Regulations 2001).	
7	Joint Venture	All the documents (as described above) as applicable to each partner in the JV as well as a copy of the Joint Venture agreement. (The percentage of work to be done by each partner of the joint venture must clearly be indicated in the Joint Venture Agreement).	

## Note:

- 1. If the shares are <u>held in trust</u> provide a copy of the Deed of Trust (only the front page and pages listing the trustees and beneficiaries are required) as well as the Letter of Authority as issued by the Master of the Supreme Court, wherein trustees have been duly appointed and authorised, must be provided.
- 2. Include a copy of the Certificate of Change of Name (CM9) if applicable.

(Make an X in the appropriate space below)

3. Re	aistered for	Vat Purposes i	n Terms of the	Value-Added Tax	Act. (Act No.	. 89 of 1991
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# T2.1.13: PROOF OF REGISTRATION WITH THE CONSTRUCTION INDUSTRY DEVELOPMENT BOARD (CIDB)

Tenderers shall attach to this page, proof of Registration with the Construction Industry Development Board, or other such documentation which records the Tenderer's name, CIDB grading and CRS number for verification by the municipality.

CRS number		
Signed	Date	
Name	Position	
Tenderer		

## SBD4

T2.1.14: DECLARATION OF INTEREST IN TENDER OF PERSONS IN SERVICE OF STATE

# **DECLARATION OF INTEREST**

1. Any legal person, including persons employed by the state¹, or persons having a kinship with persons employed by the state, including a blood relationship, may make an offer or offers in terms of this Page 56 of 336

invitation to bid (includes a price quotation, advertised competitive bid, limited bid or proposal). In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons employed by the state, or to persons connected with or related to them, it is required that the bidder or his/her authorised representative declare his/her position in relation to the evaluating/adjudicating authority where-

- the bidder is employed by the state; and/or
- the legal person on whose behalf the bidding document is signed, has a relationship with persons/a person who are/is involved in the evaluation and or adjudication of the bid(s), or where it is known that such a relationship exists between the person or persons for or on whose behalf the declarant acts and persons who are involved with the evaluation and or adjudication of the bid.

2.	In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.
2.1	Full Name of bidder or his or her representative:
2.2	Identity
2.3	Position occupied in the Company (director, trustee, shareholder²):
2.4	Company Registration Number:
2.5	Tax Reference Number
2.6	VAT Registration Number:
2.6.1	The names of all directors / trustees / shareholders / members, their individual identity numbers, tarreference numbers and, if applicable, employee / persal numbers must be indicated in paragraph below.
1"State" me	<ul> <li>(a) any national or provincial department, national or provincial public entity or constitutional institution within the meanin of the Public Finance Management Act, 1999 (Act No. 1 of 1999);</li> <li>(b) any municipality or municipal entity;</li> <li>(c) provincial legislature;</li> <li>(d) national Assembly or the national Council of provinces; or</li> <li>(e) Parliament.</li> </ul>
	der" means a person who owns shares in the company and is actively involved in the management of the enterprise of and exercises control over the enterprise.

YES / NO

Are you or any person connected with the bidder

presently employed by the state?

2.7

2.7.1	if so, turnish the following particulars:	
	Name of person / director / trustee / shareholder/ member: Name of state institution at which you or the person connected to the bidder is employed : Position occupied in the state institution:	
	Any other particulars:	
2.7.2	If you are presently employed by the state, did you obtain the appropriate authority to undertake remunerative work outside employment in the public sector?	YES / NO
2.7.2.1	If yes, did you attached proof of such authority to the bid document?	YES / NO
	(Note: Failure to submit proof of such authority, where applicable, may result in the disqualification of the bid.	
2.7.2.2	If no, furnish reasons for non-submission of such proof:	
2.8 Di	d you or your spouse, or any of the company's directors / trustees / shareholders / members or their spouses conduct business with the state in the previous twelve months?	YES / NO
2.8.1	If so, furnish particulars:	
2.9 Do	o you, or any person connected with the bidder, have any relationship (family, friend, other) with a person employed by the state and who may be involved with	YES / NO
2.9.1lf	the evaluation and or adjudication of this bid? so, furnish particulars.	
awa	ou, or any person connected with the bidder, are of any relationship (family, friend, other) between other bidder and any person employed by the state  Page <b>58</b> of <b>336</b>	YES/NO

2.10

the evaluation and or a	djudication			
erest in any other related		YES/NO		
itees / members / shar	eholders.			
Identity Number	Personal Reference Number	Tax	State Number Number	Employee / Persa
D (NAME)				
NFORMATION FURNIS E STATE MAY REJE THE GENERAL COND	SHED IN PARAGRAP CT THE BID OR A	HS 2 and	d 3 ABOVE I AINST ME	S CORRECT
	Identity Number  O (NAME)	A trustees / shareholders / members erest in any other related companies and for this contract?    Identity	Tidentity Personal Reference Number Number Number  O (NAME)  NFORMATION FURNISHED IN PARAGRAPHS 2 and IE STATE MAY REJECT THE BID OR ACT AGATHE GENERAL CONDITIONS OF CONTRACT SHO	s / trustees / shareholders / members YES/NO prest in any other related companies ang for this contract?    Identity   Personal   Tax   State     Reference   Number   Number     Number   Number   Number   Number     Number   Number   Number   Number     Number   Number   Number   Number     Number   Number   Number   Number     Number   Number   Number   Number   Number     Number   Number   Number   Number   Number   Number     Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   Number   N

May 201

# **T2.1.15: COMPULSORY DECLARATION**

The following particulars must be furnished. In the case of a joint venture, separate declaration in respect of each partner must be completed and submitted.

Section 1: Enterprise Details					
Name of enterprise:					
Contact person:					
Email:					
Telephone:					
Cell no					
Fax:					
Physical address					
Postal address					
Section 2: Particulars of compan	ies and close corporat	tions			
Company / Close Corporation reg	gistration number				
Section 3: SARS Information					
Tax reference number					
VAT registration number:			State Not Registered if not registere	ed for VAT	
Section 4: CIDB registration num	ber				
CIDB Registration number (if appli	cable)				
Section 5: National Treasury Cent	ral Supplier Database				
Supplier number					
Unique registration reference nui	nber				
Section 6: Particulars of principals principal: means a natural person who is Companies Act of 2008 (Act No. 71 of 20	a partner in a partnership,				
(Act No. 69 of 1984).					
Full name of principal	Identity number		Personal tax reference number	]	
Attach separate page if necessary					

## Section 7: Record in the service of the state

Indicate by marking the relevant boxes with a cross, if any principal is currently or has been within the last 12 months in the service of any of the following:

an official of any municipality entity me of family member	Name of institu	ition, public office, board or and position held	Status of s (tick appro column)	service	
entity	Name of institu	ition, public office, board or	Status of s (tick appro	service opriate Within last	
entity	Name of institu	ition, public office, board or	Status of s	service	
• • •			л а ргочно	nai iogiolataro	
		ar employee of Familianient c	n a provinc	nai logiolataro	
a member of the board of direct municipal entity	ctors of any		r o provinc	ial legislature	
National Council of Province	•	☐ a member of an accounting	authority o	f any national	or
a member of any provincial leg	gislature	the meaning of the Public Fi			
a member of any municipal co	uncil				
			pal as defir	ned in section 5	is curren
				law, domestic par	tner in a c
	nber in the serv	vice of the state			
ert separate page if necessary					
			1		
				- Inolitio	
			Current	Within last	
			Status of service (tick appropriate column)		
					1
an official of any municipality entity	or municipal				
a member of the board of dimunicipal entity	rectors of any		r a provinc	ial legislature	
National Council of Province		☐ a member of an accounting authority of any national provincial public entity			or
		of the Public Finance Manaç of 1999)	agement Act of 1999 (Act No. 1		
•		public entity or constitutiona	l institution	within the mear	ning
	a member of any provincial leg a member of the National Ass National Council of Province a member of the board of dir municipal entity an official of any municipality entity by of the above boxes are man me of principal  art separate page if necessary tion 8: Record of family men by member: a person's spouse, when, or child, parent, brother, sister, who cate by marking the relevant box as been within the last 12 month a member of any municipal co a member of any provincial leg a member of the National Ass National Council of Province a member of the board of direct	a member of the board of directors of any municipal entity an official of any municipality or municipal entity by of the above boxes are marked, disclose to the of principal  Name of institution of state and positive of	a member of any provincial legislature a member of the National Assembly or the National Council of Province a member of the board of directors of any municipal entity an official of any municipality or municipal entity an official of any municipality or municipal entity by of the above boxes are marked, disclose the following:  Mame of institution, public office, board or organ of state and position held  In the separate page if necessary  Ition 8: Record of family member in the service of the state  Ity member: a person's spouse, whether in a marriage or in a customary union according to h, or child, parent, brother, sister, whether such a relationship results from birth, marriage or attack by marking the relevant boxes with a cross, if any family member of a principal sabeen within the last 12 months been in the service of any of the following:  a member of any municipal council a member of any provincial legislature a member of the National Assembly or the National Council of Province a member of the board of directors of any	a member of any provincial legislature a member of the National Assembly or the National Council of Province a member of the board of directors of any municipal entity an official of any municipality or municipal entity and of state and position held  Name of institution, public office, board or organ of state and position held  Name of institution, public office, board or organ of state and position held  Name of institution, public office, board or organ of state and position held  Turrent  In separate page if necessary  Ition 8: Record of family member in the service of the state  Ity member: a person's spouse, whether in a marriage or in a customary union according to indigenous and the public remaining of the public remaining of the Public Finance Man (Act 1 of 1999)  an employee of Parliament or a provincial depa provincial public entity or constitution the meaning of the Public Finance Man (Act 1 of 1999)  an employee of Parliament or a provincial depa provincial public entity or constitution the meaning of the Public Finance Man (Act 1 of 1999)  an employee of any provincial depa provincial public entity or constitution the meaning of the Public Finance Man (Act 1 of 1999)  an employee of Parliament or a provincial public entity or constitution the meaning of the Public Finance Man (Act 1 of 1999)  an employee of Parliament or a provincial public entity or constitution the meaning of the Public Finance Man (Act 1 of 1999)  an employee of Parliament or a provincial public entity or constitution the meaning of the Public Finance Man (Act 1 of 1999)  an employee of Parliament or a provincial public entity or constitution the meaning of the Public Finance Man (Act 1 of 1999)  an employee of Parliament or a provincial public entity or constitution the m	a member of any provincial legislature a member of the National Assembly or the National Council of Province a member of the board of directors of any municipal entity an official of any municipality or municipal entity  yof the above boxes are marked, disclose the following:  Mame of principal  Name of institution, public office, board or organ of state and position held  Name of institution, public office, board or organ of state and position held  Att separate page if necessary  tion 8: Record of family member in the service of the state by member: a person's spouse, whether in a marriage or in a customary union according to indigenous law, domestic pan, or child, parent, brother, sister, whether such a relationship results from birth, marriage or adoption cate by marking the relevant boxes with a cross, if any family member of a principal as defined in section 5 as been within the last 12 months been in the service of any of the Public Finance Management Act of 1999 (Act N. of 1999)  a member of an accounting authority of any national provincial public entity or constitutional institution with the mean of the Public Finance Management Act of 1999 (Act N. of 1999)  a member of the National Assembly or the National Council of Province  Public entity or constitutional institution with the mean of the Public Finance Management Act of 1999)  a member of an accounting authority of any national approvincial public entity or constitutional institution with the meaning of the Public Finance Management Act of 1999)  a member of an accounting authority of any national approvincial public entity or constitutional institution with the meaning of the Public Finance Management Act of 1999)

Section 9: Record of termination of previous contracts with an organ of state
Was any contract between the tendering entity including any of its joint venture partners terminated during the past 5 years for reasons other than the employer no longer requiring such works or the employer failing to make payment in terms of the contract.
☐ Yes ☐ No (Tick appropriate box)
If yes, provide particulars (interest separate page if necessary)
Section 10: Declaration
The undersigned, who warrants that he / she is duly authorised to do so on behalf of the tendering entity confirms that the contents of this Declaration are within my personal knowledge, and save where stated otherwise in an attachment hereto, are to the best of my belief both true and correct, and:
i) neither the name of the tendering entity or any of its principals appears on:
<ul> <li>a) the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004 (Act No. 12 of 2004)</li> </ul>
b) National Treasury's Database of Restricted Suppliers (see www.treasury.gov.za)
ii) neither the tendering entity of any of its principals has within the last five years been convicted of fraud or corruption by a court of law (including a court outside of the Republic of South Africa);
iii) any principal who is presently employed by the state has the necessary permission to undertake remunerative work outside such employment (attach permission to this declaration);
iv) the tendering entity is not associated, linked or involved with any other tendering entities submitting tender offers
v) has not engaged in any prohibited restrictive horizontal practices including consultation, communication, agreement, or arrangement with any competing or potential tendering entity regarding prices, geographical areas in which goods and services will be rendered, approaches to determining prices or pricing parameters, intentions to submit a tender or not, the content of the submission (specification, timing, conditions of contract etc) or intention to not win a tender;
vi) has no other relationship with any of the tenderers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest;
vii) neither the tenderer or any of its principals owes municipal rates and taxes or municipal service charges to any municipality or a municipal entity and are not in arrears for more than 3 months;
viii) SARS may, on an on-going basis during the term of the contract, disclose the tenderer's tax compliance status to the Employer and when called upon to do so, obtain the written consent of any subcontractors who are subcontracted to execute a portion of the contract that is entered into in excess of the threshold prescribed by the National Treasury, for SARS to do likewise.

Signed

Date

Name

Position

Enterprise name

NOTE 1 The Standard Conditions of Tender contained in SANS 10845-3 prohibits anticompetitive practices (clause 3.1) and requires that tenderers avoid conflicts of interest, only submit a tender offer if the tenderer or any of his principals is not under any restriction to do business with employer (4.1.1) and submit only one tender either as a single tendering entity or as a member in a joint venture (clause 4.13.1). Clause 5.7 also empowers the Employer to disqualify any tenderer who engages in fraudulent and corrupt practice. Clause 3.1 also requires tenderers to comply with all legal obligations.

NOTE 2: Section 30(1) of the Public Service Act, 1994, prohibits an employee (person who is employed in posts on the establishment of departments) from performing or engaging remunerative work outside his or her employment in the relevant department, except with the written permission of the executive authority of the department. When in operation, Section 8(2) of the Public Administration Management Act, 2014, will prohibit an employee of the public administration (i.e. organs of state and all national departments, national government components listed in Part A of Schedule 3 to the Public Service Act, provincial departments including the office of the premier listed in Schedule 1 of the Public Service Act and

provincial departments listed in schedule 2 of the Public Service Act, and provincial government components listed in Part B of schedule 3 of the Public Service Act) or persons contracted to executive authorities in accordance with the provisions of section 12A of the Public Service Act of 1994 or persons performing similar functions in organs of state from conducting business with the State or to be a director of a public or private company conducting business with the State. The offence for doing so is a fine or imprisonment for a period not exceeding 5 years or both. It is also a serious misconduct which may result in the termination of employment by the employer.

NOTE 3: Regulation 44 of Supply Chain Management regulations issued in terms of the Municipal Finance Management Act of 2003 requires that organs of state and municipal entities not award a contract to a person who is the service of the state, a director, manager or principal shareholder in the service of the state or who has been in the service of the state in the previous twelve months.

NOTE: 4: Regulation 45 of Supply Chain Management regulations requires a municipality or municipal entity to disclose in the notes to the annual statements particulars of any award made to a close family member in the service of the state.

NOTE: 5 Corrupt activities which give rise to an offence in terms of the Prevention and Combating of Corrupt Activities Act of 2004) include improperly influencing in any way the procurement of any contract, the fixing of the price, consideration or other moneys stipulated or otherwise provided for in any contract and the manipulating by any means of the award of a tender.

NOTE: 6 Section 4 of the Competition Act of 1998 prohibits restrictive horizontal practice including agreements between parties in a horizontal relationship which have the effect of substantially preventing or lessening competition, directly or indirectly fixing prices or dividing markets or constitute collusive tendering. Section 5 also prohibits restrictive vertical practices. Any restrictive practices that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties.

# T2.1.16 : DECLARATION OF TENDERER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

- 1 This Municipal Bidding Document must form part of all bids invited.
- 2 It serves as a declaration to be used by municipalities and municipal entities in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.
- 2. The tender of any Tenderer may be rejected if that Tenderer, or any of its directors have:
  - a. abused the Municipality's / Municipal entity's supply chain management system or been guilty of any improper conduct in relation to such system;
  - b. been convicted for fraud or corruption during the past five years;
  - c. wilfully neglected, reneged on or failed to comply with any government, Municipal or other public sector contract during the past five years; or
  - d. been listed in the Register for Tender Defaulters in terms of Section 29 of the Prevention and Combating of Corrupt Activities Act, 2004 (Act 12 of 2004).
- 3. In order to give effect to the above, this form and the questionnaire must be completed in full and signed. Failure to comply will result in the tender being disqualified.

ITEM	QUESTION	RESPONSE (TICK)
	Is the Tenderer or any of its directors listed on the National Treasurer's database as a company or persons prohibited from doing business with the public sector?	Yes
	(Companies or persons who are listed on this Database were informed in writing of this restriction by the Accounting Officer/Authority of the institution that imposed the restriction after the audi alteram partem rule was applied).  The Database of Restricted Suppliers now resides on the National Treasury's website(www.treasury.gov.za) and can be accessed by clicking on its link at the bottom of the home page.	No
	If so, furnish particulars:	
4.2	Is the Tenderer or any of its directors listed on the Register for Tender Defaulters in terms of Section 29 of the Prevention and Combating of Corrupt Activities Act, 2004 (Act 12 of 2004)?	Yes
	(To access this Register enter the National Treasury's website, <a href="https://www.treasury.gov.za">www.treasury.gov.za</a> , click on the icon "Register for Tender Defaulters" or submit your written request for a hard copy of the Register to facsimile number 012-326-5445)	No
	If so, furnish particulars:	
4.3	Was the Tenderer or any of its directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud	Yes
	or corruption during the past five years?	No
	If so, furnish particulars:	
4.4	Was any contract between the Tenderer and the Municipality / Municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes
	on account of familiary to position on or comply with the contract?	No
	If so, furnish particulars:	,

4.5	Does the tenderer or any of its directors owe any Municipal rates and taxes or Municipal charges to the Municipality/Municipal entity, or to any other Municipality/Municipal entity, that is in arrears for more than three months?		
	If so, furnish particulars:		
	CERTIFICATION		
I, THE	UNDERSIGNED (FULL NAME)CE	RTIFY T	HAT THE
	PT THAT, IN ADDITION TO CANCELLATION OF A CONTRACT, ACTION ST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.	I MAY B	E TAKEN
Signatu	ire Date		
Position	Name of Bidder		

T2.1.17 : DECLARATION CONCERNING FULFILMENT OF THE CONSTRUCTION REGULATIONS, 2014

In terms of the Construction Regulations, 2014 (hereinafter referred to as the Regulations), promulgated on 07 February 2014 in terms of the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) the Employer shall not appoint a contractor to perform construction work unless the Contractor can satisfy the Employer that his/her firm has the necessary competencies and resources to carry out the work safely and has allowed adequately in his/her tender for the due fulfilment of all the applicable requirements of the Act and the Regulations.

Tl	-111		41		L
Tenderers	snaii	answer	tne c	guestions	below:

						YES	(Tic
						NO	
(Tick)		actant in tarma a	f the Populatio	na (rofor to C	holow)		
Own	resources, comp	betent in terms o	i ille Regulatio	ris (reier to s	below)		
		o be hired and/o		•		)	
Own	resources, still to	'	r trained (until	competency		)	
Own	resources, still to	o be hired and/o	r trained (until	competency		)	

J.	of the Contract team as specified in the Regulations (CVs to be attached):
4.	Provide details of proposed training (if any) that will be undergone:

5. List potential key risks identified and measures for addressing risks:

7N	$T^{\alpha}$	1	1	100	22	$^{1}$	r 4	
	1 20	"	н.	/ / 1	1//	ונו		T

		•••••			
6.	I have fully included in my tendered rates and prices (in t the Schedule of Quantities) for all resources, actions, trai due fulfilment of the Regulations for the duration of the co	ining and any othe	er costs i	required for	
				(Tick)	
			YES		
			NO		
SIGNAT	URE OF PERSON(S) AUTHORISED TO SIGN THIS TENI	DER:			
1		ID NO:			
(Name in	n Print):				
2		ID NO:			
(Name in	n Print):				

# **T2.1.18: CERTIFICATE OF INDEPENDENT BID DETERMINATION**

1. This Standard Bidding Document (SBD) must form part of all bids¹ invited.

- 2. Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).<sup>2</sup> Collusive bidding is a *pe* se prohibition meaning that it cannot be justified under any grounds.
- 3. Municipal Supply Regulation 38 (1) prescribes that a supply chain management policy must provide measures for the combating of abuse of the supply chain management system, and must enable the accounting officer, among others, to:
  - a. take all reasonable steps to prevent such abuse;
  - b. reject the bid of any bidder if that bidder or any of its directors has abused the supply chain management system of the municipality or municipal entity or has committed any improper conduct in relation to such system; and
  - c. cancel a contract awarded to a person if the person committed any corrupt or fraudulent act during the bidding process or the execution of the contract.
- 4. This SBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.
  In order to give effect to the above, the attached Certificate of Bid Determination (SBD 9) must be completed and submitted with the bid:

#### CERTIFICATE OF INDEPENDENT BID DETERMINATION

Page <b>69</b> of <b>336</b>	
I, the undersigned, in submitting the accompanying bid:	

<sup>&</sup>lt;sup>1</sup> Includes price quotations, advertised competitive bids, limited bids and proposals.

<sup>&</sup>lt;sup>2</sup> Bid rigging (or collusive bidding) occurs when businesses, that would otherwise be expected to compete, secretly conspire to raise prices or lower the quality of goods and / or services for purchasers who wish to acquire goods and / or services through a bidding process. Bid rigging is, therefore, an agreement between competitors not to compete.

#### (Contract number and title)

In response to the invitation for the bid made by:
(Name of Municipality)
Do hereby make the following statement that I certify to be true and complete in every respect:
l certify, on behalf of:, that:
(Name of bidder)

- 1. I have read and I understand the contents of this certificate;
- 2. I understand that the accompanying bid will be disqualified if this certificate is found not to be true and complete in every respect;
- 3. I am authorized by the bidder to sign this certificate, and to submit the accompanying bid, on behalf of the bidder:
- 4. Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign, the bid, on behalf of the bidder;
- 5. For the purposes of this certificate and the accompanying bid, I understand that the word "competitor" shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:
  - a) Has been requested to submit a bid in response to this bid invitation;
  - b) Could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
  - c) Provides the same goods and services as the bidder and/or is in the same line of business as the bidder
- 6. The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture consortium<sup>3</sup> will not be construed as collusive bidding.
- 7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
  - a) Prices;
  - b) Geographical area where product or service will be rendered (market allocation)
  - c) Methods, factors or formulas used to calculate prices
  - d) The intention or decision to submit or not to submit, a bid;
  - e) The submission of a bid which does not meet the specifications and conditions of the bid; or
  - f) Bidding with the intention not to win the bid.

- 8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.
  - \*Joint venture or consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.
- The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
- 10. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition act no. 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the prevention and combating of Corrupt Activities Act no. 12 of 2004 or any other applicable legislation.

Signed	Date	
Name	Position	
Tenderer		

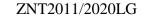
#### **T2.1.19: DECLARATION OF INDEMNITY**

<sup>&</sup>lt;sup>3</sup> Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

l,	, the undersigned for an on behalf of
to as "the Contractor'	") indemnify and safeguard COGTA KZN and its Employees against all action, suits
proceedings, claims, o	demands, costs and expenses whatsoever which may be instituted, brought or sent, or
may be incurred or be	payable by the Council arising out of or in connection with any damage, death or injury
caused or alleged to	have been caused by or as a result of any act, omission by the contractor and/or the
Contractors Employee contract.	es or Employees arising out of work done in connection with or arising out of the following
Contract number	·
Contract description	:
	:
	:
	i
Full name and Surnar	ne: Signature:
Place:	Date:
Capacity:	
For and on benait of:	
To completed by a Co I hereby declare that t	ommissioner of Oath: The above Declaration was made before me.
Full Name and Surnar	me of Commissioner of Oath:
ID number:	
Signature:	

# **T2.1.21: RECORD OF ADDENDA TO TENDER DOCUMENTS**

No.	Date		Title or Det	tails
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
Attach add	itional pages if mor	e space is required.		
The unde	ersigned, who v	warrants that he / she is duly auth	norised to do so d	on behalf of the enterprise, confirms
				are to the best of my belief both true
and corre	ect.			
Signed			Date	
Name			Position	
Tandarai				



#### **T2.1.22: PROPOSED AMENDMENTS**

The Tenderer should record any deviations or qualifications he may wish to make to the tender documents in this Returnable Schedule. Alternatively, a tenderer may state such deviations and qualifications in <u>a covering</u> <u>letter to his tender and reference such letter in this schedule.</u>

The Tenderer's attention is drawn to clause 5.8 of the SANS 10845-3 regarding the employer's handling of materials deviations and qualifications.

Page	Clause or item	Proposal
		she is duly authorised to do so on behalf of the enterprise, confirms that the contents of this ge and are to the best of my belief both true and correct.

Signed	 Date	
Name	 Position	
Tenderer	 	

### T2.1.23: SCHEDULE OF WORK SATISFACTORILY CARRIED OUT BY THE TENDERER FOR PRIVATE CLIENTS OR ORGANS OF STATE

(Organs of State include any Local, Provincial or National Government Authority)

The following	is a	statement	of	similar	work	successfully	executed	by	myself/ourselve	s:

Employer, contact person and telephone number	Description of Contract	Value of Work Inclusive of VAT (Rand)	Date Completed

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Signed	 Date	
Name	 Position	
Tenderer	 	

#### T2.1.24: SCHEDULE OF PLANT AND EQUIPMENT

The following are lists of major items of relevant equipment that I/we **presently** own or lease and will have available for this contract or will acquire or hire for this contract if my/our tender is accepted.

	Quantity	Description, Size, Capacity, etc			
Attach a	dditional pages if	more space is required.			
	Details of major acceptable.	equipment that will be hired, or acquired for this contract if my/our tend			
	Quantity	Description, Size, Capacity, etc			
	ditional pages if more				
ındersigne	ed, who warrants that				
ındersigne dule are w	ed, who warrants that vithin my personal kno	he / she is duly authorised to do so on behalf of the enterprise, confirms that the contents of this			

#### T2.1.31: SCHEDULE OF PROPOSED SUBCONTRACTORS

We notify you that it is our intention to employ the following subcontractors to work on the contract.

If we are awarded the contract we agree that this notification does not change the requirement for us to submit the names of proposed subcontractors in accordance with requirements in the contract for such appointments. If there are no such requirements in the contract, then your written acceptance of this list shall be binding between us.

No.	Name and address of proposed subcontractor	Nature and extent of work	Previous experience with subcontractor
1.			
2.			
3.			
4.			
5.			
6.			
7.			

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Signed		Date	
Name		Position	
Tenderer			
This is to c	ertify that		
			(Tenderer)
of			(address)
was repres	sented by the person(s) named below at the compuls	sory meetin	ng held for all tenderers at

ZNT2011/2020LG

	(location) on	(	date), starting at
matters incid	edge that the purpose of the meeting was to acquain dental to doing the work specified in the tender of ecessary when compiling our rates and prices included	locuments in c	order for us to take account of
Particulars of	f person(s) attending the meeting:		
Name		Signature	
Capacity			
Name		Signature	
Capacity			
Attendance o	of the above persons at the meeting is confirmed by	the Employer	's representative, namely:
Name		Signature	
Capacity		Date & Time	

**T2.2.1: STANDARD DECLARATION AND RETURNABLE DOCUMENTS** 

The following particulars must be furnished in relation to tenders for municipalities and municipal entities where:

- consultancy services are required; and
- goods, services or a combination thereof where the estimated total of the prices exceeds R 10 million b) including VAT.

In the case of a joint venture, separate municipal declarations and returnable documents shall be submitted in

espect of each partner.			3 Shan be Subhilited
ection 1: Enterprise Details			
Name of enterprise:			
Contact person:			
Email:			
Telephone:			
Cell no			
Fax:			
Physical address			
Postal address			
ection 2: Declaration for consultancy ne enterprise has been awarded the follears.		vices by an organ of state	during the last five
Name of organ of state	Estimated number of contracts	Nature of service, e,g, quantity surveying	Service similar to required service (yes / no) ?
tach separate page as necessary	,	1	
ection 3 Goods, services or a combin illion including VAT	nation thereof where t	he estimated total of the	prices exceeds R
we certify that			
(tick one of the boxes):			
☐ the enterprise <b>is not</b> required	by law to prepare appl	ual financial statements for	auditing

		e financial yea	annual financial statements and attached the audited ars, or since the establishment as the enterprise			
2)	the enterprise and its directors has / have no undisputed commitments for municipal services towards a municipality or other service provider in respect of which payment is overdue for more than 30 days (ie: all municipal accounts are paid up to date);					
3)	source of goods and / or services :					
	(tick one of the boxes and insert percentages if applicable):					
	goods and / or services are source	ed only from	within the Republic of South Africa			
			or services will be sourced from outside the fayment from the municipality or municipal entity			
	which is expected to be transferre	ed out of the F	Republic is			
last fiv			ed to the enterprise by an organ of state during the ompliance or dispute concerning the execution of			
Name	e of organ of state	Estimated number of contracts	Nature of contracts			
Attach	separate page as necessary					
the co			behalf of the tendering entity, hereby declare that edge, and save where stated otherwise are to the			
T2.2.	2 : FINANCIAL REFERENCES					

The tenderer shall attach to this form a letter from the bank at which he/she declares he/she conducts his/her account. The contents of the bank's letter must state the credit rating that it, in addition to the information required below, accords to the tenderer for the business envisaged by this tender. **NOTE: Failure to provide the required letter with the submission may render the tenderer's offer unresponsive in terms of the tender condition F3.8.** 

The tenderers banking details as they appear below shall be completed.

In the event that the tenderer is a joint venture enterprise, details of all members of the joint venture shall be similarly provided and attached to this form.

Description	Details
Name of account holder	
Account number	
Name of bank	
Branch name	
Branch code	
Bank rating (current rating, attach letter from bank)	
Bank and branch details	
The undersigned, who warrants that he / she is duly authorised to schedule are within my personal knowledge and are to the best o	o do so on behalf of the enterprise, confirms that the contents of this f my belief both true and correct.
Signed	Date
Name	Position
Tenderer	

T2.2.3: ESTIMATED MONTHLY CASH-FLOW

The Tenderer shall state below the estimated value of work to be completed every month, based on his preliminary programme, his tendered unit rates and submission of his Payment certificate to the Employer. The amounts for Contingencies and Contract Price Adjustment must not be included. The Tenderer must make note of any cash-flow restrictions.

	Amount (VAT Included)						
Payment Certificate	а	В		a-b			
No.	Payments Received	Expenditure		Net cash flow		Cumulative cash flow	
1	None		d		j=d		
2			е		k=j+e		
3			f		l=k+f		
4			g		m=l+g		
5			h		n=m+h		
6			etc		etc		
7							
8							
9							
10							
11							
12							
13							
etc							
	Maximum negative cash flow: take the largest negative number in the last column and write it here						
				t (e.g. funds internally			
partner (his source), etc.)							
=				I to do so on behalf of the el t of my belief both true and		nfirms that the contents of this	
Signed Date							
Name				. Position			
Tenderer							

## **T2.2.4: PERSONNEL SCHEDULE**

Tenderer to insert n	umber of personnel he p	roposes er	nploying on this contract
Job Description	Permanent Staff	:	Temporary staff from local community
Contract Manager			
Site Agent			
Quantity Surveyor			
Surveyors			
General Foreman			
Foremen			
Community Officers			
Clerks			
Operators			
Bricklayers			
Learner Bricklayers			
Steel fixers			
Watchmen			
Gang Bosses			
Pipe Layers			
Labourers			
* Other			
To be filled in by Tenderer		<u>l</u>	
signed		Date	
lame		Position	

#### **T2.2.5: QUALITY MANAGEMENT SYSTEMS**

Briefly describe the construction quality system incorporated by the tenderer in his organisation and which will be applicable to this Contract.

	Internal	External	Name of responsible C Person give years' e	company /or Person (In case of experience and qualification)
Survey: Setting out of the works and control				
SANAS accredited Testing Laboratory				
Additional quality systems				
Signed			Date	
Name			Position	

## T2.2.6: PRELIMINARY PROGRAM OF THE WORKS

The tenderer must attach to this page the preliminary program of the works.

## T2.2.7: COMPANY PROFILE

The tenderer must attach to this page the company profile.

#### T2.2.8: CONTRACT ORGANOGRAM

The tenderer must attach to this page the organogram for the contract of the personnel he intends using. Failure to submit the organogram will result in the tenderer scoring zero for key personnel in both qualifications and experience.

Refer to paragraph no. 41 of the Tender data.

TO O O LICELY DEDOCABLEL	A COLONIED TO	THE CONTRACT
T2.2.9: KEY PERSONNEL	ASSIGNED TO	THE CONTRACT

Curriculum vitae (CV) and certified qualifications must be submitted for each of the key personnel proposed in the table below. The CV must specifically include the qualifications, years of experience, courses completed and experience in construction contracts of a similar value and higher and nature. Contactable referees must also be provided.

Each key person shall be cross referenced to and labelled to correspond to the organogram as per schedule T2.2.8 so as to indicate which role the person in question is proposed to fulfil in the Contract.

Job Description	Full Name	Qualification	Years of Experience
Contracts Manager			
Site Agent			
General Foreman			
Health and Safety Representative			
*			
*			
*			
*			
*			
*			

<sup>\* -</sup> To be filled in by Tenderer

Refer to paragraph no. 36 of the Tender data.

Signed	 Date	
Name	 Position	
Tenderer		

## **TECHNICAL EVALUATION REQUIREMENTS**

TAI	BLE 1. MANDATORY CRITERI	A AND RETURNABLE		
Crit	teria	Returnable	Further Notes	Minimum
1)	Employment of MV	MV (ELW002 to ELW010) Training certificate	<b>Certified Copy of a valid Certificate:</b> This evidence is for a	2 Training
	Line Construction	per resource from EAL o Accredited External	resource that has done only the MV Training OR has	Certificates
	Resources	Training Facility (TET, Power Pro, JMG) or Line	completed the combined MV & LV training.	
		Mechanic Qualification (Line Construction) to	The LV training will be allocated accordingly to the criteria	AND
		demonstrate	below.	
		compliant training		2 Affidavits
			Affidavit: The affidavit template provided must be used	
		AND	as the returnable. This affidavit will be used as	Note: One resource is
			confirmation of	needed at all times. The
		An affidavit per employee, in the	employment of the resources	other must be on stand-by
		template provided (see Annexure A2),	named on the certificates, at the tendering company	
		completed by the resources named on the	during the tender period. This affidavit will be used for	
		certificates and certified by a Commissioner of Oaths.	the evidence below where the resource also holds the LV	
		Oaths.	training.	
		AND	Register: The register will be	
			used as a summarised piece of data for quick reference.	
		A completed linesman register as per Annexure	assa as a samma issa process a acta for quiest reneral	
		A1.		
2)	Employment of LV	LV (ELW011 and ELW012) Training certificate	Certified Copy of a valid Certificate: This evidence is for a	2 Training
	Line Construction	from EAL or Accredited External Training	resource that has done only the LV Training OR has completed	Certificates
	Resources	Facility (TET, Power Pro, JMG) or Line Mechanic	the combined MV & LV training. The MV training will be	
		Qualification	allocated accordingly to the criteria above.	AND
			Affidavit: The affidavit template provided must be used as the	
			returnable. This affidavit will be used as confirmation of	2 Affidavits
			employment of the resources named on the certificates, at the	
			tendering company during the tender period. This affidavit will	Note: One resource is
			be	needed at all times. The

			used for the evidence above where the resource also holds the MV training.  Register: The register will be used as a summarised piece of data for quick reference.	other must be on stand-by
3)	CIDB Rating	Valid CIDB Certificate:  Abaqulusi Ward 1 Electrification: 4 EP Abaqulusi Ward 2 Electrification: 5 EP Abaqulusi Ward 3 Electrification: 4 EP Abaqulusi Ward 4 Electrification: 5 EP Jozini Ward 4 Electrification: 5 EP	None	Only 1 Valid Certificate  Note: submit certificate that relates to the ward/ wards been tendered for
	SHE Certificates	Certified copy of a valid relevant SHE Certificates	None	Minimum = 1  Qualified Safety Officer required to be part of the team
4)	Truck Mounted Crane Operator	Certified copy of a valid Crane Operating Permit/Certificate	None	Minimum = 1

5)	Truck Mounted Drill Operator	Certified copy of a valid Truck Drill Operation Permit/Certificate	None	Minimum = 1
6)	Prepayment Meter Training	Certified copy of a valid Training Certificates (OTO 06G, OTO 06C, OTO 06A)	None	Minimum = 1
7)	MV Cable Jointing and Terminations	Certified copy of a valid Training Certificates for MV Cable terminations and jointing	None	Minimum = 1
	Criteria	Returnable	Further Notes	Minimum
8)	Vehicle Register (List of required vehicles: see Table 2 below)	Completed and signed Vehicle Register	Important note: If the vehicle register is not signed, it will not be accepted as valid evidence	1 Register

Criteria	Returnable	Quantity
Bakkies	Proof of ownership on Vehicle List e.g. proof of purchase, logbook etc OR Hire Letter from Bona Fide hiring company to be included if hired.	Minimum = 3
Truck with mounted Crane - 3T minimum	Proof of ownership on Vehicle List e.g proof of purchase, logbook OR Hire Letter from Bona Fide hiring company to be included if hired.	Minimum = 2
Staff transport vehicle	Proof of ownership on Vehicle List e.g proof of purchase, logbook OR Hire Letter from Bona Fide hiring company to be included if hired.	Minimum = 1
Truck with Rock Drilling Machine (for pole and stay holes) (or standalone rock drilling machine)	Vehicle Mounted Proof of ownership on Vehicle List e.g. proof of purchase.  OR  Hire Letter from Bona Fide hiring company to be included if hired. For standalone: Ownership or Hire Letter from Bona Fide hiring company to be included.	Minimum = 1

## **FUNCTIONALITY CRITERIA**

Please note: Bidders are required to attain at least 70 points to qualify for the next stage of the bid process.

	Table 3: Functionality Evaluation Scorecard		1		
No	Description Items	Max. Potential Score	Points Claimed (Technical)	Bid Evaluation Committee Scores	Page Ref. No.
1	The company has successfully completed other electrification projects of similar nature: 1-3 projects (10) 4-6 projects (20)	30			
2	7-10 projects (30) (evidence = signed appointment letters and completion certificates)				
	Experience of any site personnel with at least a minimum qualification of trade test in electrical engineering (preferably Eskom Approved) 1-3 years' experience in construction (10) 4-6 years of experience in construction(15) 7 years or more of experience in construction(30)	30			
	(evidence = trade test certificate and CV's with contactable references)				

3	Business is registered on the Eskom database	10			
4	Proximity of Service Provider.  1.1 Service Provider with offices located within the Local Municipality where project is being implemented (30)  1.2 Service Provider with offices located within the District where project is being implemented (20)  1.3 Service Provider with offices located within the KZN Province. (10)  (Evidence= Proof of Location e.g Municipal Bill	30			
	TOTAL SCORED	100	100	100	

## **PLEASE NOTE**

Inclusion of the following items would be advantageous as further evidence/proof of competency of bidders:

- Approach and Methodology for the Management of Electrification and Reticulation Projects.
- Work Program / Schedule for project implementation.

#### T2.2.10: CURRICULUM VITAE OF CONTRACTS MANAGER

The tenderer shall attach to page the Curriculum vitae (CV) and certified qualifications as stipulated in the Tender Data for the Contracts Manager.

Page **96** of **336** 

## T2.2.11: CURRICULUM VITAE OF SITE AGENT

The tenderer shall attach to page the Curriculum vitae (CV) and certified qualifications as stipulated in the Tender Data for the Site Agent.

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## T2.2.12: CURRICULUM VITAE OF GENERAL FOREMAN

The tenderer shall attach to page the Curriculum vitae (CV) and certified qualifications as stipulated in the Tender Data for the General Foreman.

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## T2.2.13: CURRICULUM VITAE OF HEALTH AND SAFETY REPRESENTATIVE

The tenderer shall attach to page the Curriculum vitae (CV) and certified qualifications as stipulated in the Tender Data for the Health and Safety Representative.

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#### **COGTA KZN**

**TENDER NUMBER: ZNT2011/2020LG** 

ELECTRIFICATION OF THE ABAQULUSI WARD 1 (63 CONNECTIONS), ABAQULUSI WARD 2 (200 CONNECTIONS), ABAQULUSI WARD 3 (69 CONNECTIONS), ABAQULUSI WARD 4 (101 CONNECTIONS) & JOZINI WARD 4 (213 CONNECTIONS)

# CONTRACT

PART 1 (OF 4): AGREEMENT AND CONTRACT DATA

C1.1	Form of Offer and Acceptance
C1.2	Contract Data
C1.3	Form of Guarantee
C1.4	Draft Health and Safety Agreement
C1.5	Pro Forma Disclosure Statement
C1.6	Pro Forma Adjudication Board Member Agreement

#### C1.1: FORM OF OFFER AND ACCEPTANCE - ABAQULUSI WARD 1 ELECTRIFICATION PROJECT (63 CONNECTIONS)

#### OFFER

The employer, identified in the acceptance signature block, has solicited offers to enter into a contract for the procurement of:

	Area	CIBD Grading	Indicate (x)
A)	Electrical engineering contractor to implement the Abaqulusi ward 1	4EP	
	electrification project (63 connections)		

The tenderer, identified in the offer signature block, has 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 authorized, 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.

		PRICES INCLUSIVE OF		-			
		Rand (in words);					
and returning tender data, v	one copy of this do	employer by signing the ocument to the tenderer becomes the party nadata.	pefore the end of	the period of validity	stated in the		
Signature(s) o	f authorized agents:						
Name(s) (in bloo	ck letters)						
Capacity of auth	orized agents:						
for Tenderer	and	on	behalf	of	the		
renderer	(Name and address of organization)						
Witness:	(Name)	(Full name – ir	block letters – and signatu	re)			
	(Signature <sub>)</sub>	)					
Date:							
CONTRACT	at and contract data	Page <b>101</b> of	336				

#### C1.1: FORM OF OFFER AND ACCEPTANCE - ABAQULUSI WARD 2 ELECTRIFICATION PROJECT (200 CONNECTIONS)

#### 2 OFFER

The employer, identified in the acceptance signature block, has solicited offers to enter into a contract for the procurement of:

	Area	CIBD Grading	Indicate (x)
B)	Electrical engineering contractor to implement the Abaqulusi ward 2	5EP	
	electrification project (200 connections)		

The tenderer, identified in the offer signature block, has 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 authorized, 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 OFFERI	ED TOTAL OF THE	PRICES INCLUSIVE	OF VALUE-ADDED	ΓAX IS:	
		Rand (in words);			
and returning tender data, v	one copy of this do	employer by signing th cument to the tendere rer becomes the party lata.	r before the end of the	ne period of validity	stated in the
Signature(s)	of authorized agents:				
Name(s) (in bloo	ck letters)				
Capacity of auth	norized agents:				
for	and	on	behalf	of	the
Tenderer	(Name and addr	ess of organization)			
Witness:	(Name)	(Full name	– in block letters – and signature	<del>)</del> )	
	(Signature)				
		Page <b>102</b>	of <b>336</b>		

CONTRACT

Part C1: Agreement and contract data

С	Date:		
	C1.1 : FORM OF	OFFER AND ACCEPTANCE - AB	AQULUSI WARD 3 ELECTRIFICATION PROJECTIONS)

#### 3 OFFER

The employer, identified in the acceptance signature block, has solicited offers to enter into a contract for the procurement of:

	Area	CIBD Grading	Indicate (x)
C)	Electrical engineering contractor to implement the Abaqulusi ward 3	4EP	
	electrification project (69 connections)		

The tenderer, identified in the offer signature block, has 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 authorized, 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.

		PRICES INCLUSIVE O			
		Rand (in words);			
and returning o tender data, wh	ne copy of this do	e employer by signing the ocument to the tenderer erer becomes the party r data.	before the end of t	he period of validity	stated in the
Signature(s) of a	uthorized agents:				
Name(s) (in block I	etters)				
Capacity of authori	zed agents:				
for Tenderer	and (Name and add	on dress of organization)	behalf	of	the
Witness:	(Name)	(Full name –	in block letters – and signatur	e)	

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CONTRACT

Part C1: Agreement and contract data

		(Signature)				
Date:	:					
C1	1.1 : FORM	OF OFFER AND		ABAQULUSI WARD 4 ELE	CTRIFICAT	FION PROJECT
4 C	OFFER					
	employer, id urement of:	lentified in the ac	ceptance signature	e block, has solicited offers to	o enter into	a contract for the
			Area		CIBD	Indicate
D)		engineering cor		ent the Abaqulusi ward 4	Grading 5EP	(x)
contra amou	act including unt to be det	g compliance with termined in accor	all its terms and co	ne obligations and liabilities onditions according to their transitions of Contract identified view of VALUE-ADDED TAX	rue intent a I in the Cor	nd meaning for an
			Rand (in word	ds); R		(in figures)
and r	eturning on er data, whe	e copy of this do	cument to the tend rer becomes the pa	ng the acceptance part of this derer before the end of the p arty named as the contractor	eriod of va	lidity stated in the
Signa	ature(s) of auth	horized agents:				
Name	e(s) (in block let	ters)				
Capa	city of authorize	ed agents:				
for Tand	lavav	and	on	behalf	of	the
i ella	nderer(Name and address of organization)					
Witne	ess:	(Name)	(Full r	name – in block letters – and signature)		
CONT	RACT		Page	104 of 336		

Part C1: Agreement and contract data

	(Signature)		
Date:			
C1	.1 : FORM OF OFFER AND ACCEPTANCE - JOZINI WARD 4 ELECTRIF CONNECTIONS)	FICATION I	PROJECT (213
5 O	FFER		
	mployer, identified in the acceptance signature block, has solicited offers to ement of:	enter into	a contract for the
	Area	CIBD	Indicate
E)	Electrical engineering contractor to implement the Jozini ward 4 electrification project (213 connections)	Grading 5EP	(x)
accep contra amou	representative of the tenderer, deemed to be duly authorized, signing this tance, the tenderer offers to perform all of the obligations and liabilities ct including compliance with all its terms and conditions according to their tropic to be determined in accordance with the Conditions of Contract identified OFFERED TOTAL OF THE PRICES INCLUSIVE OF VALUE-ADDED TAX	of the Con ue intent ar in the Con	tractor under the nd meaning for an
	Rand (in words); R		(in figures)
and retende	ffer may be accepted by the employer by signing the acceptance part of this turning one copy of this document to the tenderer before the end of the party data, whereupon the tenderer becomes the party named as the contractor ct identified in the contract data.	eriod of val	idity stated in the
Signa	ure(s) of authorized agents:		
Name	(S) (in block letters)		
Capa	ity of authorized agents:		
for	and on behalf	of	the
Tende	(Name and address of organization)		
Witne	SS: (Full name – in block letters – and signature)		
CONTR Part C1:	Page <b>105</b> of <b>336</b> ACT Agreement and contract data		

## ZNT2011/2020LG

	(Name)
	(Signature)
Date:	

#### 6 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 C1: Agreements and contract data (which includes this agreement)

Part C2 : Pricing data
Part C3 : Scope of work
Part C4 : 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, as listed in the returnable 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 agreement. No amendments to or deviations from said documents are valid unless contained in this schedule.

The tenderer shall, within two weeks after receiving a completed copy of this agreement including the schedule of deviation (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 insurance and any other documentation to be provided in terms of the conditions of contract identified in the contract data. Failure to fulfil any of the 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 original copy of this document, including the schedule of deviations (if any). Unless the tenderer (now contractor), within five (5) working days of the date of such receipt, notifies the employer in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the parties.

#### For and on behalf of the Employer:

Signature(s) of authorized a	agent(s)	Date:	
Witness:	(Full name – in block letters – and s	signature)	
	(Signature)		
Date:			

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CONTRACT
Part C1: Agreement and contract data

#### 7 SCHEDULE OF DEVIATIONS

#### Notes:

- 1. The extent of deviations from the tender documents issued by the employer before the tender closing date is limited to those permitted in terms of the conditions of tender.
- 2. A tenderer's covering letter shall not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid, be the subject of agreements reached during the process of offer and acceptance, the outcome of such agreement shall be recorded here.
- 3. Any other matter arising from the process of offer and acceptance either as a confirmation, clarification or change to the tender documents, and which it is agreed by the parties becomes an obligation of the contract, shall also be recorded here.
- 4. Any change or addition to the tender documents arising from the above agreements and recorded here, shall also be incorporated into the final draft of the contract.

A tenderer's covering letter shall not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid, be the subject of agreements reached during the process of offer and acceptance, the outcome of such agreement shall be recorded here.

1.	Subject
	Details
2.	Subject
	Details
3.	Subject
	Details
4.	Subject
	Details
5.	Subject
	Details
	Details

By the duly authorized representatives signing this schedule of deviations, the employer and the tenderer agree to and accept the foregoing schedule of deviations as the only deviations from and amendments to the documents listed in the tender data and addenda thereto as listed in the returnable 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 Agreement shall have any meaning or effect in the contract between the parties arising from this agreement.

for Tenderer	and	on	behalf	of	the		
	(Name and address of organization)						
Witness:	(Name)	(Full na	me – in block letters – and signature)				
			•				
		Page 1	.08 of 336				

CONTRACT

Part C1: Agreement and contract data

	(Signature)	
Date:		
For and on behalf of	the Employer:	
Signature(s) of authorized a	agent(s)	Date:
Witness:	(Full name – in block letters – and s	ignature)
	(Signature)	
Date:		

### C1.2: CONTRACT DATA (PART 1)

The General Conditions of Contract for Construction Works, Third Edition, (2015) published by the South African Institution of Civil Engineering (SAICE), Private Bag X200, Halfway House, 1685, is applicable to this contract and is obtainable from <a href="https://www.saice.org.za">www.saice.org.za</a>

Copies of these conditions of contract may be obtained on the tenderer's own cost from the SAICE Tel: 011-805 5947

### PART 1: CONTRACT SPECIFIC DATA PROVIDED BY THE EMPLOYER

The following contract specific data, referring to the General Conditions of Contract for Construction Works, Third Edition, 2015, are applicable to this Contract:

No.	Clause	Description
1	1.1.1.13	The Defects Liability Period is <b>12 months</b> , measured from the date of the Certificate of Completion.
2	1.1.1.14	The time for achieving Practical Completion is 6 Months, calculated from the Commencement Date.
3	1.1.1.15	Name of Employer is: COGTA KZN
4	1.1.1.16	The Employer's Agent is a member of the firm Focus Project Management
5	1.1.1.26	The pricing strategy is: Re-measurement Contract
6	1.2.1.2	The Employer's address for receipt of communications and notices is:  Name: Focus Project Management  Address: 37 Island Circle Island Office Park, Riverhorse Valley, Durban, 4001  Tel: (031) 312 2093  E-mail: jason@focuspm.co.za.

No.	Clause	Description
7	3.2.3	The Employer's Agent shall obtain specific approval from the Employer before executing any of his functions or duties according to the following Clauses of the General Condition of Contract:  1. New Clause 3.2.3.1 "For expenditure on the Contract to exceed the Contract Price";
		2. Existing Clauses:
		3.2.1 - Nomination of person as Employer's Agent's Representative.
		5.6 – Approval of the programme
		5.7.2 - Work at night as well as by day
		5.8 – Non-working times
		5.12 - Granting of extension of time excluding Clause 5.12.2.2 (Abnormal climatic conditions)
		5.13 - Reduction of penalty for delay.
		5.14.2 - The issue of a Certificate of Practical Completion.
		5.14.4 - The issue of a Certificate of Completion.
		5.16.1 - The issue of a Final Approval Certificate.
		6.3 – Variations in respect of Variations which are not small (R20 000)
		6.6 - Instruction to expend on Provisional and Prime Cost Sums
		6.11 - Adjustment of General Items & Approval of Claims
		8.2.2.2 - Order to repair and make good damage arising from any "excepted" risk.
8	3.2.4	Occupational Health, Safety & Wellness Sub Directorate – Public Health and the duly appointed H&S Officials has been appointed as Client Agents on this contract, in terms of Clause 5(5) of the Construction Regulations, 2014 as promulgated in terms of Section 43 of the Occupational Health and Safety Act, 1993. The Principal Contractor shall perform a preliminary assessment of the project generated H&S plan and submit such to Occupational Health, Safety & Wellness Sub Directorate – Public Health for legal compliance reassessment & verification / approval prior to to any works commencing. The duly appointed H&S Officials will be responsible for further monitoring and the auditing of the approved H&S plan for legal compliance.
9	3.4	Add the following new Sub-Clause 3.4:
		The Employer may, at his sole discretion, provide technical support services to the Contractor or Sub Contractor(s).
		The technical team providing such support services will be appointed and remunerated by the Employer. In the case of EPWP Contractor Learner ship Programmes, support services may be provided by the Department of Public Works. The technical team will consist of the Employer's Agent and a person or persons acting as Training, Construction and Materials Managers or Construction Mentor, depending on the services to be provided and the scope of the functions to be executed.
		3.4.1 In addition to his duties and functions in terms of 3.2.1, the Employer's Agent will co-ordinate the work of the technical team providing the support services.

No.	Clause	Description	n
		3.4.2	The Construction Manager acts as mentor to the Contractor in respect of the following functions, which are described fully in the CESA document, Guideline Contract Specific Data C4- Construction Management Services of the Form of Agreement for Consulting Services for Labour -Intensive Construction Projects:
			i) Programming the execution of the works.
			ii) Interpretation of drawings, specifications and related contractual matters.
			iii) Workforce structuring, employment and management.
			iv) Guidance to expedite work progress/ improve productivity.
			v) Setting out of works.
			vi) Safety measures and legislation requirements.
			vii) Materials handling.
			viii) Tools and equipment needs.
			ix) Financial matters.
			x) Training requirements.
			xi) Security aspects.
			xii) Quality control systems.
		3.4.3	The Materials Manager is responsible for the following functions which are described fully in the CESA document, <u>Guideline Contract Specific Data C5-Materials Procurement Services</u> of the <u>Form of Agreement for Consulting Services</u> for Labour -Intensive Construction Projects on the Contract:
			i) Establishment of stores.
			ii) Determination of store administration procedures.
			iii) Determination of requirements of store staff.
			iv) Employment of store staff.
			v) Staff guidance, supervision and training.
			vi) Acquisition of materials.
			vii) Issue of materials.
			viii) Upholding of an assets register.
			ix) Insurance of assets.
		3.3.4	The main role of the Mentor is to support the Learner Contractor and to impart knowledge that will enable the Contractor to compete independently as soon as

No.	Clause	Description
		possible. The Mentor provides a wide range of support and advice functions, including but not limited to advice with regard to:
		(i) Finance and dealing with banks
		(ii) Business management
		(iii)Contract management
		(iv)Procurement of materials and other required services
		(v) Technical and engineering
		(vi)Construction Planning and Management
		(vii) Fulfilling of statutory and tax obligations
		(viii) Labour and human resource advice
10	4.3.1	Add the following to the clause:
		"For conventional construction works the Basic Conditions of Employment Act of 1997 (Act No 75 of 1997) shall apply and the minimum employment conditions which will apply shall be guided by the latest Sectorial Determination: Civil Engineering Sector published from time to time.
		Compliance with the National Environmental Management Act ( <b>NEMA</b> ), <b>Act</b> 107 of 1998.
		Basic Conditions of Employment Act of 1997 (Act No 75 of 1997) as per Government Notice R63 of 25 January 2002, shall apply to works described in the Scope of Work as being labour intensive and which are undertaken by unskilled or semi-skilled workers."
		"The Contractor shall comply with the Occupational Health and Safety Specification prepared by the Employer in terms of the Construction Regulations, 2014 promulgated in terms of Section 43 of the Occupational Health and Safety Act (Act No. 85 of 1993).
		Without limiting the Contractor's obligations in terms of the Contract, the Contractor shall before commencement of the Works or any part thereof, be in the possession of an approved Health and Safety Plan."
11	4.3.3	Add the following new clause:
		"Contractor's Designer
		The Contractor and his designer shall accept full responsibility and liability to comply with the Occupational Health and Safety Act, 1993 (Act 85 of 1993) and the Construction Regulations, 2014 for the design of the Temporary Works and those part of the Permanent Works which the Contractor is responsible to design in terms of the Contract"
12	4.5	Add the following new Sub-Clauses:
		4.5.5 On the request of the Contractor, the Employer may, at his sole discretion, provide a support service to the Contractor in the giving of notices and in obtaining requisite consents, permissions and permits.
		4.5.6 On the request of the Contractor and certified by the Employer's Agent as payable by the Contractor, the Employer may, in his sole discretion, advance funds to the Contractor in the form of a cheque in favour of the relevant institution or body, to facilitate the Contractor in complying with the provisions of this Clause.

No.	Clause	Description
		The Contractor shall provide proof to the Employer's Agent of all payments effected by him.
		The Employer will deduct the sums advanced by the Employer and adjusted in accordance with the Contract Price Adjustment Formula or other rise-and-fall provision applicable to the Contract, from future payment certificates of the Contractor, if such sums are payable by the Contractor in the ordinary course of his business.
		The Employer will not advance funds in respect of cyclic sums payable by the Contractor in the ordinary course of his business.
13	4.11.3	Add the following to Clause 4.11
		Notwithstanding the wording of this Clause, on request of the Contractor the Employer may at his sole discretion, provide trade-skills training to the Contractor's employees to improve their competency and efficiency commensurate with the requirements of the Works.
14	5.3.1	The documentation required before Commencement of the Works are:
		Health and Safety Plan (Refer to Clause 4.3)
İ		Initial Programme (Refer to Clause 5.6) Security (Refer to Clause 6.2)
		Insurance (Refer to Clause 8.6)
15	5.3.2	The Contractor is required, within 14 days of the Commencement Date, to submit the documents listed below to the Employer's Agent for his approval.
		Health and Safety Plan The Contractor shall deliver his health and safety plan, in terms of Clause 7(1a) of the Construction Regulations, 2014.
		Initial Programme The Contractor shall deliver his Initial Programme of work in term of Clause 5.6
		Security Submit a guarantee of an Insurance Company or Bank to be jointly and severally bound with the Contractor for an amount equal to ten per cent (10%) of the Contract Price. The wording of the Guarantee shall be identical to the pro forma provided in Part C1.3 of this tender document.
		Insurance
		Submit copies of receipts of registration, or payment for the premiums for the following insurances, as required by the new Clause 8.6 in this Contact Data.
		(a) Proof of registration with the Department of Labour as an employer, in terms of the Compensation for Occupational Injuries and Diseases Act 1993, as amended
		(b) Common Law Liability Insurance for the duration of the Contract Period and with a minimum Limit of Indemnity of not less than R1 000 000 for any one accident;
		(c) Insurance on an All Risks basis for construction plant, equipment and other things (except those intended to incorporation into the works) brought onto the site to the full value of such construction plant, equipment and other things;
		(d) Motor Vehicle Liability Insurance, comprising a minimum of Balance of Third Party motor risks, including Passenger Liability, subject to a minimum limit of R2,5 million;

No.	Clause	Description
		(e) Where the Contract involves manufacturing and/or fabrication of the works or part thereof at premises other than the site, the Contractor shall satisfy the employer that all materials and equipment for incorporation in the works are adequately insured during manufacture and/or fabrication. In the event of the Employer having an insurable interest in such works during manufacture or fabrication, then such interest shall be noted by endorsement to the Contractor's Policies of Insurance.
		(f) Imported equipment or component parts or materials to be supplied in terms of this Contract which require any process of assembly or finishing in South Africa prior to delivery to the site are to be insured by the Contractor up to the commencement of transit to site of the assembled or finished equipment, component parts or materials, unless special arrangements are made with the Employer.
		These insurances shall be maintained in force for the duration of the Contract, including any Defects Liability Period and in respect of Sub-Contractors, the Contractor shall be deemed to have complied with the provisions of the requirements relating to insurance by ensuring that the Sub-Contractors have effected such insurance.
16	5.4.2	The access and possession of Site shall not be exclusive to the Contractor but as set out in the Site Information.
		The Contractor shall bear all costs and charges for special and temporary rights of way required by him in connection with access to the Site. The Contractor shall also provide at his own cost any additional facilities outside the Site required by him for the purposes of the Works.
17	5.8.1	Delete the words "between sunset and sunrise" in the first line and replace with "outside normal working hours".
		Normal working hours shall be those as stated in the applicable Sectoral Determination applicable to a 5 (five) day week  Non-working days are Saturdays and Sundays and special non-working days are public holidays and official builder's holidays.
18	5.8.1.5	Add the following additional Clause to Clause 5.8 "The cost of supervision by the Employer's Agent or his representatives outside of normal (Monday to Friday) working hours in accordance with this Clause, shall be to the Contractor's account".
19	5.12.2.2	Add to Clause 5.12.2.2:
		The time period specified as the time for completion includes allowances for those days on which it is expected that work, on the critical path items of the works, would be prevented due to weather conditions such as wind, rain falling or the subsequent waterlogged condition. Based on average weather conditions of wind, rain and sunshine the allowances are:
		3 working days per month for the months of May to October
		2 working days per month for the months of November to April
		If the Contractor has been prevented by these weather conditions from working on the critical path items of the works, then he must notify the Employer's Agent in writing. The submission shall be made within five calendar days of the resumption of work. The Employer's Agent shall upon considering all the relevant factors determine the extension of time to be granted on the basis that an extension of time to the contract will only be granted if the total number of days upon which work on the critical items was prevented, exceeds the total number of days calculated in terms of the above allowance and considering the official contract period as a whole.
		The tendered sums of the appropriate time-related items shall be increased to take account of the extensions of time granted.
20	5.12.5	Add the following to Clause 5.12
		5.12.5 Critical Path Provision

No.	Clause	Description
		A delay in so far as extension of time is concerned, will be regarded as a delay only if, on a claim by the Contractor in accordance with the General Conditions of Contract, the Employer's Agent rules that all progress on an item or items of work on the critical path of the approved programme for the execution of the Works by the Contractor, has been brought to a halt. Delays on normal working days only, based on a working week, of five normal working days, will be taken in account for the extension of time.
21	5.13.1	The penalty for failing to complete the Works is R 1500 per day
22	5.16.3	The latent defect period is 10 years.
23	5.14.5.5	Delete Clause 5.14.5.5 and replace with: Insurance of the works shall continue until the expiration of the Defects Liability Period, in terms of the new Clause 8.6 contained in this Contract Data.
24	6.2.1	Replace the wording "as selected" in Clause 6.2.1 with "as stated".
		The security to be provided by the Contractor shall be:
		<ul> <li>a performance guarantee of ten per cent (10%) of the Contract Sum, plus</li> <li>retention money amounting to five per cent (5%) of the Contract Price.</li> </ul>
		Retention monies due shall be subjected to Clauses 6.10.1.3 and 6.10.3.
		The performance guarantee shall be from an approved Insurance Company or Bank to be jointly and severally bound with the Contractor, in accordance with the provisions of the Form of Guarantee. A Retention Money Guarantee is not permitted.
		The wording of the performance guarantee shall be identical to the pro-forma provided under Clause C1.3: Form of Guarantee of the Contract Data."
25	6.2.2	Replace the entire contents of Clause 6.2.2 with the following:
		"If the Contractor fails in his obligations to provide the stated security within the period stated in Clause 5.3.2, or if the performance guarantee shall differ from the pro-forma provided under Clause C1.3: Form of Guarantee of the Contract Data, the Employer may terminate the Contract in terms of Clause 9.2."
26	6.2.3	Replace the entire contents of Clause 6.2.3 with the following:
		"The Contractor shall ensure that the performance guarantee remain valid and enforceable until the issue of the Certificate of Completion."
27	6.8.2	Contract Price Adjustment will not apply
28	6.10.1.5	The percentage advance on materials on site not yet built into the Permanent Works is 80%.
29	6.10.3	Replace the entire contents of Clause 6.10.3 with the following:
		"Payment of the amounts referred to in Clauses 6.10.1.1, 6.10.1.2, 6.10.1.3 and 6.10.1.4 shall be subject to a retention by the Employer of an amount (called the" retention money"), being the percentage retention stated in the Contract Data, of the said amounts due to the Contractor, until the retention money reaches the "Limit of retention money" stated in the Contract Data."
		The percentage retention shall be <b>ten per cent (10%)</b> of payments due up to the "Limit of retention money" which shall be <b>five per cent (5%)</b> of the Contract Price, excluding Value Added Tax.
30	6.10.4	Replace the wordings "within 7 days" and "within 28 days" in Clause 6.10.4 with the wording "within 5 working days: and "within 30 days".

No.	Clause	Description	
31	6.10.6.2	Replace Clause 6.10.6.2 with the following new Clause 6.10.6.2:	
		6.10.6.2 No interest shall be payable to the Contractor upon any moneys retained or overdue in terms of the Contract.	
32	8.6	Delete Clause 8.6 and replace it with:	
		(1) Without limiting his obligations in terms of the Contract, the Contractor shall before commencement of the Works effect and maintain the following insurances covering the respective interests of the Contractor and the Employer.	
		(a) Insurance of the Works and of all the movables of the Site intended for incorporating in the Works against damage or physical loss from whatsoever cause arising (other than causes set out in Clause 8.3.1)	
		(i) for the period for which the Contractor is responsible for the Works in terms of Clause 8.2, and	
		(ii) for a sum insured which shall, unless otherwise specified in the Contract, be the aggregate of	
		<ul> <li>(aa) the Contract Price,</li> <li>(bb) a sum to cover the value (specified at the time of deliver to the Contractor) of materials supplied by the Employer for incorporation in the Works and not included in the Contract Price, and</li> <li>(cc) a sum to cover professional fees, not included in the Contract Price, payable in respect of the repair or reinstatement of damage to the Works or said</li> </ul>	
		movables.	
		(b) A Coupon Policy for Special Risks Insurance issued by the South African Special Risks Insurance Association is required.	
		(c) Public Liability Insurance from the Commencement Date to the date of the Certificate of Completion or the end of the Defects Liability Period (if any) for a minimum limit of indemnity of R 5 000 000, with no limitation on the number of accidents in any one year covering the Employer and the Contractor against their respective liability for the death of or injury to any person or loss of or damage to any property (other than property while it is insured in terms of paragraph (a)) arising out of or in the course of the performance of the Contract:	
		Provided that	
		<ul> <li>(i) the insurance shall not be required to cover any liability arising out of any of the matters referred to in the proviso of Clause 8.3.1, and</li> <li>(ii) the insurance shall include a cross-liability clause such that the insurance shall apply to the Contractor and to the Employer as separate insured parties.</li> </ul>	
		(2) Save as otherwise provided in the Contract, nothing herein contained shall oblige the Contractor to effect any insurance which is not generally obtainable from a registered insurer in the Republic of South Africa.	
		(3) The insurances referred to in Sub-Clause (1) shall be effected with an insurance company registered in the Republic of South Africa and the terms thereof shall be subject to approval by the Employer, which approval shall not be unreasonably withheld.	
		(4) The Contractor shall produce to the Employer the policies by which the insurances are effected and proof of the due payment of all premiums thereunder and of the continuity of the policies for the required period within 14 days of receipt of the Letter of Acceptance.  Page 117 of 336	

No.	Clause	Description
		(5) The Contractor and the Employer shall comply with the terms and conditions of the insurance policies.
		(6) If the Contractor shall fail to effect and keep in force any of the insurances referred to in Sub-Clause (1), the Employer may effect and keep in force such insurance and pay such premium or premiums as may be necessary for the purpose and the Contractor shall refund the amounts of such premiums to the Employer.
		(7) The Contractor shall provide proof that he has paid all contributions required in terms of the Compensation for Occupational Injuries and Diseases Act, No. 130 of 1993, and that he has complied with the provisions of the Occupational Health and Safety Act, No. 85 of 1993.
33	9.1.4	Replace Clause 9.1.4 with the following:
		Up to the time of termination of the contract by either party in terms of this Clause, or until the Contractor gives notice in terms of this Clause to terminate the contract and the Contractor is precluded from exercising his right to terminate the contract because the Employer agrees to bear any resultant additional costs provided for in Clause 9.1.2.2 hereof, the Contractor:
		a) will be entitled to an extension of calendar time for working days lost as may be approved by the Employer's Agent, and
		b) will be reimbursed the cost of delays per working day, where the number of working days will be determined pro rata the effect the delays have on the progress of the work as agreed with the Employer's Agent. Payment in full and final settlement will be made at the rates tendered for the payment items specially provided in the Bill of Quantities.
		Where the circumstances described in Clauses 9.1.1 and 9.1.2 are applicable only to a certain portion of the contract, the Employer's Agent will decide after consulting the Contractor, to what extent the contract as a whole is affected and whether or not a claim in terms of this Clause can be submitted.
		No payment will be made in terms of this Clause after the expiry of the due completion date.
34	10.1.1.1	Add the following to Clause 10.1.1.1.1
	.1	Should the claim be related to work stoppages by either the EMEs or the local community, no extension of time will be granted without a South Africa Police Service case number for threats or intimidation against the parties involves.
35	10.3.2	Amicable settlement in terms of Clause 10.4 shall be contemplated for all disputes prior to referring any dispute to adjudication or arbitration.
36	10.5.1	Dispute resolution shall be by ad-hoc adjudication
37	10.5.3	The number of Adjudication Board Members to be appointed one (1).
38	10.7.1	The determination of disputes which are unresolved in terms of Clause 10.5.3 shall be by arbitration.
39	11.	Add the following additional clause:
		Details to be confidential
		The Contractor shall treat the details of the Works comprised in this Contract as private and confidential (save in so far as may be necessary for the purposes hereof) and shall not publish or disclose the same or any particulars thereof in any trade or technical paper elsewhere without the prior written consent of the Employer's Agent.

# C1.2 : CONTRACT DATA (PART 2)

### PART 2: DATA PROVIDED BY THE CONTRACTOR

No.	Clause	Description
1	1.1.1.9	The Contractor is:
	1.2.1.2	
		Telephone: Facsimile:
		Address (Postal) : Address (Physical) :
2	6.5.1.2.3	The percentage allowance to cover overhead charges is%

### **C1.3: FORM OF GUARANTEE**

### **PERFORMANCE GUARANTEE**

For use with the General Conditions of Contract for Construction Works, Third Edition, 2015.

### **GUARANTOR DETAILS AND DEFINITIONS**

"Guarantor" means:
Physical address:
"Employer" means:
"Contractor" means:
"Engineer" means:
"Works" means:
"Site" means:
"Contract" means: The Agreement made in terms of the Form of Offer and Acceptance and such amendments or additions to the Contract as may be agreed in writing between the parties.
"Contract Sum" means: The accepted amount inclusive of tax of R
Amount in words:
"Guaranteed Sum" means: The maximum aggregate amount of R
Amount in words:
"Expiry Date": This Performance Guarantee shall have no expiry date, refer to Clause 2 underneath.

### **CONTRACT DETAILS**

Engineer issues: Interim Payment Certificates, Final Payment Certificate and the Certificate Completion of the Works as defined in the Contract.

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CONTRACT

Part C1: Agreement and contract data

Reference no: ZNT2011/2020LG

ZNT2011/2020LG

### PERFORMANCE GUARANTEE

- 1. The Guarantor's liability shall be limited to the amount of the Guaranteed Sum.
- 2. The Guarantor's period of liability shall be from and including the date of issue of this Performance Guarantee and up to and including the date of issue by the Engineer of the Certificate of Completion of the Works or the date of payment in full of the guaranteed Sum, whichever occurs first unless the Guarantor is advised in writing by the Employer of his intention to institute claims, and the particulars thereof, in which event this guarantee shall remain in full force and effect until all such claims have been paid or liquidated. The Engineer and/or the Employer shall inform the Guarantor in writing of the date on which the Certificate of Completion of the Works has been issued.
- 3. The Guarantor hereby acknowledges that:
- any reference in this Performance Guarantee to the Contract is made for the purpose of convenience and shall not be construed as any intention whatsoever to create an accessory obligation or any intention whatsoever to create a suretyship;
- 3.2 its obligation under this Performance Guarantee is restricted to the payment of money.
- 4. Subject to the Guarantor's maximum liability referred to in 1, the Guarantor hereby undertakes to pay the Employer the sum certified upon receipt of the documents identified in 4.1 to 4.3:
- 4.1 A copy of a first written demand issued by the Employer to the Contractor stating that payment of a sum certified by the Engineer in an Interim or Final Payment Certificate has not been made in term of the Contract and failing such payment within (7) seven calendar days, the Employer intends to call upon the Guarantor to make payment in terms of 4.2;
- 4.2 A first written demand issued by the Employer to the Guarantor at the Guarantor's physical address with a copy to the Contractor stating that a period of seven (7) days has elapsed since the first written demand in terms of 4.1 and the sum certified has still not been paid;
- 4.3 A copy of the aforesaid payment certificate which entitles the Employer to receive payment in terms of the Contract of the sum certified in 4.
- 5. Subject to the Guarantor's maximum liability referred to in 1, the Guarantor undertakes to pay to the Employer the Guaranteed Sum of the full outstanding balance upon receipt of a first written demand from the Employer to the Guarantor at the Guarantor's physical address calling up this Performance Guarantee, such demand stating that:
- 5.1 the Contract has been terminated due to the Contractor's default and that this Performance Guarantee is called up in terms of 5; or
- a provisional or final sequestration or liquidation court order has been granted against the Contractor and that the Performance Guarantee is called up in terms of 5; and
- 5.3 the aforesaid written demand is accompanied by a copy of the notice of termination and/or the provisional/final sequestration and/or the provisional liquidation court order.
- 6. It is recorded that the aggregate amount of payments required to be made by the Guarantor in terms of 4 and 5 shall not exceed the Guarantor's maximum liability in terms of 1.

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- 7. Where the Guarantor has made payment in terms of 5, the Employer shall upon the date of issue of the Final Payment Certificate submit an expense account to the Guarantor showing how all monies received in terms of this Performance Guarantee have been expended and shall refund to the Guarantor any resulting surplus. All monies refunded to the Guarantor in terms of this Performance Guarantee shall not bear (zero percent) interest.
- 8. Payment by the Guarantor in terms of 4 or 5 shall be made within seven (7) calendar days upon receipt of the first written demand to the Guarantor.
- 9. Payment by the Guarantor in terms of 5 will only be made against the return of the original Performance Guarantee by the Employer.
- 10. The Employer shall have the absolute right to arrange his affairs with the Contractor in any manner which the Employer may deem fit and the Guarantor shall not have the right to claim his release from this Performance Guarantee on account of any conduct alleged to be prejudicial to the Guarantor.
- 11. The Guarantor chooses the physical address as stated above for the service of all notices for all purposes in connection herewith.
- 12. This Performance Guarantee is neither negotiable nor transferable. The original of this Guarantee shall be returned to the Guarantor upon the Issue of the Certificate of Completion of the Works by the Engineer, unless the Guarantor is advised in writing by the Employer of his intention to institute claims, and the particulars thereof, in which event this guarantee shall remain in full force and effect until all such claims have been paid or liquidated.
- 13. This Performance Guarantee, with the required demand notices in terms of 4 or 5, shall be regarded as a liquid document for the purposes of obtaining a court order.
- 14. Where this Performance Guarantee is issued in the Republic of South Africa the Guarantor hereby consents in terms of Section 45 of the Magistrate's Courts Act No 32 of 1944, as amended, to the jurisdiction of the Magistrate's Court of any district having jurisdiction in terms of Section 28 of the said Act, notwithstanding that the amount of the claim may exceed the jurisdiction of the Magistrate's Court.

Signed at
Date
Guarantor's signatory (1)
Capacity
Guarantor's signatory (2)
Capacity
Witness signatory (1)

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W	Vitness signatory (2)
	C1.4 : HEALTH AND SAFETY AGREEMENT

# ARTICLE OF AGREEMENT IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL SAFETY ACT, 1993 BETWEEN COGTA KZN

(Hereinafter referred to as the "EMPLOYER")

AND

Herein represented by	in h	nis/her capacity as	duly	authorised
by virtue of a resolution	dated		,	Attached
hereto Annexure A, of th	e said ·····			
		(herein after referred	to as the "CONTRACTC	DR")
<b>WHEREAS</b> the CONTRACT	TOR is the mandatory of th	ne EMPLOYER as conten	nplated in an agreemen	it in respect 
		Contract	number	

**AND WHEREAS** section 37 of the Occupational Health and Safety act, 1993 (Act 85 of 1993, hereinafter referred to as the "ACT"), imposes certain powers and duties upon the EMPLOYER.

AND WHEREAS the parties have agreed to enter into an agreement in terms of section 37(2) of the ACT.

**NOW THEREFORE** the parties agree as follows:

- (a) The CONTRACTOR undertakes to acquaint the appropriate officials and employees of the CONTRACTOR with all relevant provisions of the ACT and the regulations promulgated in terms thereof.
- (b) The CONTRACTOR undertakes that all relevant duties, obligations and prohibitions imposed in terms of the ACT and Regulations will be fully complied with. Provided that should the EMPLOYER

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prescribe certain arrangements and procedures, that same shall be observed and adhered to by the CONTRACTOR, his officials and employees. The CONTRACTOR shall bear the onus of acquainting himself/herself/itself with such arrangements and procedures.

- (c) The CONTRACTOR hereby accepts sole liability for such due compliance with the relevant duties, obligations, prohibitions, arrangements and procedure, if any, imposed by the ACT and Regulations and the EMPLOYER expressly absolves the EMPLOYER from itself being obliged to comply with any of the aforesaid duties, obligations, prohibitions, arrangements and procedure as the case may be.
- (d) The CONTRACTOR agrees that any duly authorised officials of the EMPLOYER shall be entitled, although not obliged, to take such steps as may be necessary to ensure that the CONTRACTOR has complied with the undertakings as more fully set out in paragraphs 1 and 2 above, which steps may include, but shall not be limited to, the right to inspect any appropriate site or premises occupied by the CONTRACTOR, or to inspect any appropriate records held by the CONTRACTOR or to take such steps it may deem necessary to remedy the default of the CONTRACTOR at the cost of the CONTRACTOR.
- (e) The CONTRACTOR shall be obliged to report forthwith to the EMPLOYER any investigations, complaint or criminal charge which may arise as a consequence of the provisions of the ACT and Regulations, pursuant to work performed in terms of this agreement, and shall, on written demand, provide full details in writing of such an investigation, complaint or criminal charge as the case may be.

Signature(s)			of			authorized
agents:						
Name(s)			(in			block
letters)						
Capacity agents:			of			authorized
for Tandarar	and	on	behalf		of	the
renderer	(Name and addre	ess of organization	)	••••••	•••••	••••••
Name(s) letters) Capacity agents:	(Name)	·····(Full name – in b	llock letters – and signature	2)		
	(Signature)			Date:		

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# (Name) Date: Witness: (Full name – in block letters – and signature) (Name) (Signature)

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CONTRACT

Part C1: Agreement and contract data

Reference no: ZNT2011/2020LG

For and on behalf of the Employer:

### **C1.5: DISCLOSURE STATEMENT**

	PRO FORMA		
Date:	:		
Conti	ract:		
Conti	ractor:		
Empl	oyer:		
Engir	neer:		
Dear	Sirs		
I am	willing and available to serve as ad-hoc Adjudication Board Member in the ab	bove mentioned Contrac	t.
	cordance with the General Conditions of Contract for Construction Works ing to the disclosure statements by selected or nominated persons to the a	-	
1.	I shall act with complete impartiality and know of nothing at this tim impartiality.	ne, which could affect r	ny
2.	I have had no previous involvements in this project.		
3. 4.	I do not have any financial interest in this project. I am not currently employed by the Contractor, Employer or Engineer.		
5.	I do not have any financial connections with the Contractor, Employer or I	Engineer.	
6.	I do have or have not had a personal relationship with any authoritive n Employer or the Engineer which could affect my impartiality.	_	or,
7.	I undertake to immediately disclose to the parties any changes in the al affect my impartiality or be perceived to affect same.	bove position which cou	ıld
Shou	ld there be any deviation from the foregoing statements, details shall be give	en.	
	her declare that I am experienced in the work which is carried out under the Contract documentation.	Contract and in interpreti	ng
Name	e in full:		

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Signature:

CONTRACT

Part C1: Agreement and contract data

Reference no: ZNT2011/2020LG

### **C1.6: ADJUDICATION BOARD MEMBER AGREEMENT**

### **PRO FORMA**

This Agreement is entered into between:

Adjudication Board Member:	
Name:	
Physical Address:	
Postal Address:	
E-mail Address:	
Facsimile Number:	
Telephone Number:	
Mobile Number:	
Contractor:	
Name:	
Physical Address:	
Postal Address:	
E-mail Address:	
Facsimile Number:	
Telephone Number:	
Mobile Number:	
Employer:	
Name:	
Physical Address:	
Postal Address:	
E-mail Address:	
Facsimile Number:	
Telephone Number:	
Mobile Number:	
The parties entered into a Contract for	

	(name of project) which provides at a dispute under or in connection with the General Conditions of Contract for Construction Works, Third
Eai	tion 2015 (GCC), must be referred to ad-hoc adjudication.
	e undersigned natural person has been appointed to serve as Adjudication Board Member and together the undersigned Parties agree as follows:
8.	The Adjudication Board Member accepts to perform his duties in accordance with the terms of the Contract, the GCC, Adjudication Board Rules and this Agreement.
9.	The Adjudicator undertakes to remain independent and impartial of the Contractor, Employer and Engineer for the duration of the Adjudication Board proceedings.
10.	The Adjudication Board Member agrees to serve for the duration of the Adjudication Board proceedings.
11.	The parties may at any time, without cause and with immediate effect, jointly terminate this Agreement.
12.	Unless the Parties agree, the Adjudication Board Member shall not act as arbitrator or representative of either Party in any subsequent proceedings between the Parties under the Contract. No Party may call the Adjudication Board Member as a witness in any such subsequent proceedings.
13.	notice from the Parties of their joint decision to disband the Adjudication Board.
14.	adjudication including time spent travelling:
1.	A monthly retainer of(amount) for(number of months), and/or
2. 3.	A daily fee of(amount) based on a(number) hour day, and/or A hourly fee of(amount), and/or
4.	A non-recurrent appointment fee of(amount) which shall be accounted for in the final sums payable.
15.	• •
	Contractor's signature:
	Contractor's Name:
	Place:
	Date:
	Employer's signature:
	Employer's Name:
	Place:
	Date:

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Adjudication Board Member's signature:

Adjudication Board Member's Name:\_\_\_\_\_

Date:		
C1.7 : CONFIRM	MATION OF RECEIPT OF CONTRACT (PR	O FORMA)
CONFIRMATION OF RECEIPT		
The Tenderer, (now Contractor), ident the Employer, identified in the Accep this Agreement, including the Schedul	tance part of this Agreement, of on	· · · · · · · · · · · · · · · · · · ·
The(day) c	of(month)	(year)
At		(place)
It is hereby agreed that the official co	mmencement date of the contract v	vill be:
The(day) c	of(month)	(year)
SIGNED ON BEHALF OF/BY THE CONT	RACTOR:	
NAME SIGNED BY WITNESS:	SIGNATURE	CAPACITY
OIGINED DE MILINESS:		

**SIGNATURE** 

NAME

### **COGTA KZN**

**TENDER NUMBER: ZNT2011/2020LG** 

ELECTRIFICATION OF THE ABAQULUSI WARD 1 (63 CONNECTIONS), ABAQULUSI WARD 2 (200 CONNECTIONS), ABAQULUSI WARD 3 (69 CONNECTIONS), ABAQULUSI WARD 4 (101 CONNECTIONS) & JOZINI WARD 4 (213 CONNECTIONS)

CONTRACT	
PART 2 (OF 4) : PRICING DATA	
, , , , , , , , , , , , , , , , , , , ,	

# KWAZULU – NATAL PROVINCE DEPARTMENT OF COOPERATIVE GOVERNANCE AND TRADITIONAL AFFAIRS

## PART 2

# ELECTRICAL ENGINEERING CONTRACTOR TO IMPLEMENT THE ABAQULUSI WARD 2 ELECTRIFICATION PROJECT (200 CONNECTION

# **Pricing Data**

Vuyo Sogoni (Project Manager) Pricing Instructions		Xolani Banda (Electrical Engineer)
Signe	d:	
C2.3:	DAYWORK SCHEDULE	
	PRICING INSTRUCTIONS BILL OF QUANTITIES	

### 1. General

The pricing instructions describe the criteria and assumptions which will be assumed in the Contract that the Bidder has taken into account when developing his prices. The Bills of Quantities record the SERVICE PROVIDER's rates for providing supplies, services, engineering and construction works in accordance with the Scope of Work.

The terms of payment and the provisions for price adjustment, if applicable, are established in the Contract Data. These items are not described in the Pricing Data.

The Bidder's obligations in pricing the Bid offer and the Employer's undertakings in the checking and correction of arithmetical errors are dealt with in the Standard Conditions of Bid contained in Annexure F of SANS 294, as amended in and read in conjunction with the Bid Data.

### 2. Documents Mutually Explanatory

The documents forming the Contract are to be taken as mutually explanatory of one another. The Bill of Quantities forms an integral part of the Contract Documents and shall be read in conjunction with the Bid Data, Contract Data, Scope of Work, Site Information General and Special Conditions of Contract, the Specifications and the Drawings.

### 3. **Definitions**

For the purpose of this Bill of Quantities, the following words shall have the meanings hereby assigned to them:

Unit: The unit of measurement for each item of work as defined in the Scope of Work and

Site Information.

Quantity: The number of units of work for each item.

Rate: The payment per unit of measurement at which the SERVICE PROVIDER contracts to do the work.

Amount: The product of the quantity and the rate Bided for an item.

Sum: An amount contracted for an item, the extent of which is described in the Bill of

Quantities, the specifications or elsewhere but the quantity of work of which is not

measured in any units.

### 4. Descriptions

Descriptions in the Bill of Quantities are abbreviated and comply generally with those in the Standardised Specifications. Clause 8 of each Standardised Specification, read together with the relevant clauses of the Scope of Work, set out what ancillary or associated activities are included in the rates for the operations specified. Should any requirements of the measurement and payment clause of the applicable Standardised Specification, or the Scope of Work, conflict with the terms of the Bill, the requirements of the Standardised Specification or Scope of Work, as applicable, shall prevail.

### 5. References

The clauses in a specification in which further information regarding the schedule item can be obtained appear under "Reference clause" in the Bill. The reference clauses indicated are not necessarily the only sources of information in respect of scheduled items. Further information and specifications may be found elsewhere in the contract documents. Standardised Specifications are identified by the letter or letters which follow SABS in the SABS 1200 series of specifications, eg. G for SABS 1200 G.

### 6. Units of Measurement

The units of measurement indicated in the Bill of Quantities are metric units.

The following abbreviations are used in the Bill of Quantities:

% = per cent h hour = ha = hectare kg kilogram = kilolitre kl = kilometre km km-pass kilometre-pass =

 $\begin{array}{ccccc} kW & = & kilowatt \\ l & = & litre \\ m & = & metre \\ mm & = & millimetre \\ MN & = & meganewton \end{array}$ 

MN-m = meganewton-metre

 $\begin{array}{lll} MPa & = & megapascal \\ m^2 & = & square metre \\ m^3 & = & cubic metre \end{array}$ 

m³-km = cubic metre-kilometre m²-pass = square metre-pass

no = number

PC sum = Prime Cost sum Prov Sum = Provisional Sum

 $\begin{array}{rcl} sum & = & lump \ sum \\ t & = & ton (1 \ 000 \ kg) \end{array}$ 

### 7. Net Measurements

Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance is made for off-cuts and waste.

### 8. Quantities

The quantities set out in the Bill of Quantities are the estimated quantities of the Contract Works, but the SERVICE PROVIDER will be required to undertake whatever quantities may be directed by the Engineer from time to time. The Contract Price for the completed contract shall be computed from the actual quantities of work accepted and certified for payment.

### 9. Currency

All rates and sums of money quoted in the Bill of Quantities shall be in Rand and whole cents. Fractions of a cent shall be discounted.

### 10. Value Added Tax

Value Added Tax shall be excluded from the rates and sums contracted for the various items of work included in the Bill of Quantities. VAT will be added as a single entry to the summary.

### 11. Rates and Prices

### 1.1.General

- 1 The SERVICE PROVIDER must price each item in the Bill of Quantities in BLACK INK. Reproduced computer printouts of the Bills of Quantities will not be acceptable.
- The rates and prices to be inserted in the Bill of Quantities shall cover all the services and incidentals for the work described under the several items. Such prices and rates shall cover all costs and expenses that may be required in and for the execution of the work described, and shall cover the cost of all general risks, liabilities and obligations set forth or implied in the documents on which the Bid is based, as well as overhead charges and profit. Reasonable prices shall be inserted as these will be used as a basis for assessment of payment for additional work that may have to be carried out.
- 3 Where the SERVICE PROVIDER is required to furnish detailed drawings and designs or other information in terms of the Contract Data, all costs thereof shall be deemed to have been provided for and included in the unit rates and sum amounts contracted for the items scheduled in the Bill of Quantities. Separate additional payments will not be made.
- 4 A price or rate is to be entered against each item in the Bill of Quantities, whether the quantities are stated or not. An item against which no price is entered will be considered to be covered by the other prices or rates in the Bill. The SERVICE PROVIDER will not be paid for items against which no rate or lump sum has been entered in the Bill of Quantities.
- 5 Should the SERVICE PROVIDER group a number of items and contract one lump sum for such group of items, this single lump sum shall apply to that group of items and not to each individual item.
- 6 Should the SERVICE PROVIDER indicate against any item that compensation for such item is included in another item, the rate for the item included in another item shall be deemed nil.
- A submission may be regarded as non-responsive if any rates or lump sums in the Bill of Quantities are, in the opinion of the Employer, unreasonable or out of proportion.

### 1.2."Rate only" items

The SERVICE PROVIDER shall fill in a rate (in the rate column) against all items where the words "rate only" appear in the Amount column, which rate will constitute payment for work which may be done in terms of this item. Such "rate-only" items are used where it is estimated that little or no

work will be required under the item or where the item is to be considered as an alternative to another item for which a quantity is given.

### 1.3. Arithmetic

Excepting where Sum Amounts are required or where Provisional Sums have been indicated, the SERVICE PROVIDER shall enter an applicable rate in the Rate Column of the Bill of Quantities for each scheduled item. He shall also enter an appropriate sum in the Amount column for each scheduled item, by determining in the applicable line item the product of the Quantity and the Unit Rate.

If there is an error in the line item resulting from the product of the unit rate and the quantity, the rate shall be binding and the error of extension as entered in the Bid offer will be corrected by the Employer in determining the Contract Price.

Where there is an error in addition, either as a result of other corrections required by this checking process or in the Bidder's addition of prices, such error will be corrected by the Employer in determining the Contract Price.

### 12. Variation in Text

No alteration, erasure or addition is to be made in the text of the Bill of Quantities. Should any alteration, erasure or addition be made, it will not be recognized; the original wording of the Bill of Quantities will be adhered to.

### 13. Construction

- **14.** Attention is drawn to Clause 44.1 of the General Conditions of Contract and the SERVICE PROVIDER must not order the quantities of materials stated in the Bill of Quantities until he has confirmed from the construction drawings or measurement on Site that such quantities are in fact the correct quantities.
- **15.** Items marked "L" in the Bill of Quantities shall be carried out using labour intensive methods.

# **Bill of Quantities**

	BILL NO 1	- PRELIN	/INAR	AND GENE	ERAL			
	ABAQULUSI WARD 2	ENQUIR DD/F		DETAIL BOQ				
	Description	Detail Reference		Fixed Charge	Time Related	Install F	Rate	Total Price (R)
	Conditions of Contract							
1.1	Contractural requirements  Contractual requirements including, amongst others, Insurance of Works, Transport & Residence, Preparation of Site Camp, maintenance of fire-breaks, Dismantling of Site Camp & restoration to original condition, Attendance to meetings, liaison & co-ordination with TSC, roads authority, SAPS for outages, Handing Over as per TQRRP020, weekly stats reporting, monthly man hours reporting, etc		Item					
	Site Store and Office							
1.2	The Electrical contractor shall provide for a temporary site office, for his own use where all drawings and specifications shall be kept in accordance with the provisions of the specifications, as well as provision of safe and adequate storage space for all material and the removal of such on completion.(Erection of Sign board also to be catered for)		ltem					
	Materials Management							
1.3	Allow for co-ordination, receipt and handling of materials, including the transport, loading & offloading, safekeeping & storage and the maintenance of a record keeping system to track the issue of materials for incorporation into the works.		Item					
1.4	Provision for compliance to new safety regulations, OHSA Act.							
1.4.2 1.4.2 1.4.3	*Legal and contractual compliance *Personal protective Equipment *Fall arrest system/Ladders/Climbing Irons Provison for compliance to Construction Regulations. EPWP as specified in Works Order.		Item Item Item Item					
1.5	Other							
1.5.1	Provision for Community Liason Officer (CLO)		Month	4				
1.5.2	Site Securitiy		Month	4				
1.5.3	Site Ablution Facilities		Month	4				
1.5.4	Marketing (Detail)		Conns	R 200.0				
	TOTAL : Carried forward to summary							R -

	BILL NO 2 - MEDIUM VOLTAGE SWITCH	GEAR, SEC	TIONALIS	ERS, TR	RANSFORM	ERS, ETC		
ABAQULUSI WARD 3		ENQUIRY NO:						
Item	Description	Detail Reference	Unit	Tender Quantity	Supply Rate	Install Rate	Total Price	(R)
	Transformers							,
	Supply and install on appropriate structure and secure as required including the termination of cables and conductors, the provision of suitable lugs for 35, 50 or 70mm conductor as required. Excluding cable, conductors, and the transformer structure.							
2.1	Transformer 16kVA, 22kV	DDT 3021	No	13			R	-
2.2	Transformer 32kVA, 22kV	DDT 3021	No	11			R	-
2.3	Transformer 50kVA, 22kV	DDT 3021	No	2			R	-
	Medium Voltage Surge Arrestors							
	Supply, deliver, off load on site and safely store on site the following surge arrestors, complete with galvanised steel mounting brackets for securing the surge arrestor, nuts, bolts, washers and lock washers as specified. Secure the surge arrestors and brackets to the transformer as specified including the termination of conductors. Excluding the conductors and transformer. NOTE: Two sets of surge arrestors per transformer bushing inclu support bracket and accessories.							
2.4	22kV, 10kA Surge arrestor with double surge arrestor brackets	DDT 3100	No	82			R	-
	Medium Voltage Sectionalisers and Links							
	Supply and install link isolators as detailed including the installation of crossarm brackets and the termination of conductors and including the drilling of holes in wooden poles as required							
	Dual Phase Fuse Links ( Including 1866/65B Structures)	DDT 1848	Set of 2	24			R	-
2.5	Three Phase Fuse Links (Including 1866/65B structures)	DDT 1848	Set of 3	2			R	-
2.6	Dual Phase Solid Links (Including 1866B Structures)	DDT 1848	Set of 2	2			R	-
2.7	Three Phase Solid Links (Including 1866B structures)	DDT 1848	Set of 3	9			R	-
2.0	MV Auto Reclosers							
	Take delivery of, off load on site and safely store a recloser with platform and control box as supplied as free issue by Eskom. Transport to site of works and install recloser unit and control box on platform structure and secure as required including termination of cables and/or conductors. Structure measured elsewhere.							
2.9	22kV Recloser complete with platform and control box	DDT1829B	No	1			R	-
	Neutral Surge Arrestor							
2.10	Supply and install a LV surge arrestor including lugs and galvanised bolts	DDT 1860	No	26			R	-
<u> </u>	Surge arrestor						R	_
	Amount carried over to pay page					<u> </u>	<u>  '`                                   </u>	
	Amount carried over to next page							

Item	Description	Detail Reference	Unit	Tender Quantity	Supply Rate	Install R	ate	Total Price (R)
	Amount brought forward from previous page							R -
<b>7</b> 2.11	Transformer Earthing  Supply and install all materials for the complete earthing of transformer structures for ABC networks as specified. Included in the rate shall be all required spikes, insulated copper conductor, galvanised conduits, staples, bare copper, excavations, backfilling, etc. The rate shall allow for one MV earth electrode only, consisting of four earth spikes in accordance with the specifications. Additional earth spikes/conductor shall be measured elsewhere if required.  MV Earth		No	26				R -
	TOTAL : Carried forward to summary	-	-					R -

	BILL NO 3 - MEDIUM VOLT	TAGE OVERI	HEAD	DISTR	IBUTION S	YSTE	M	
	ABAQULUSI WARD 2	ENQUIRY N	IO:					
Item	Description	Detail Reference	Unit	Tender Quantity	Supply Rate	Install	Rate	Total Price (R)
	Conductor -ACSR FOX							
	Supply, safely store on sealed drums with ends adequately secured and transport to site conductor as specified. String conductor as specified including splices, jumper conductor ties, strain clamps, suspension clamps, tensioning, sagging, etc.							
Note	The following dimensions will all be "Line Length"							
-	ACSR FOX Three Phase		m	12,210				R -
3.1.1	Dual Phase		m	3,300				R -
	Medium Voltage Structures							
Note	Allow for the following structures and insulator assemblies in accordance with the specifications as shown in the drawings. Include the drilling of holes and treating of such holes, the provision of the U-nails and earthwire in accordance with Eskom specifications. The supply and installation of 15m of 3/3.35x1100MPa steel wire for a BIL for each pole structure as per Eskom specification. Exclude the supply and planting of poles, stays and struts which are measured elsewhere.							
	Supply and install all material as specified for the construction of the following MV structures. Including bonding of hardware and earthing. All excavations, poles, crossarms and stays are measured elsewhere							
3.2	Phase / phase - Delta / 2,5m Wood X-arm - Intermediate - 0° Deviation	DDT-1340B	No	6				R -
3.3	Phase / phase - Delta / 2,5m Wood X-arm - Intermediate - 0° Deviation - 10KN RX	DDT-1340B RX	No	2				R -
3.4	Phase / phase - Delta / 2,5m Wood X-arm - Strain - 0° Deviation	DDT-1343	No	6				R -
3.4	Phase / phase - Delta / 2,5m Wood X-arm - Strain - 0° Deviation - 10KN RX	DDT-1343 RX	No	1				R -
3.5	Phase / phase - Delta / 2,5m Wood X-arm - Strain - Medium (1°-60°) Deviation	DDT-1344	No	6				R -
- 3.5	Phase / phase - Delta / 2,5m Wood X-arm - Strain - Medium(1°-60°) Deviation - 10KN RX	DDT-1344 RX	No	3				R -
3.6	Phase / phase - Delta / 2,5m Wood X-arm - Strain - Terminal	DDT-1346	No	5				R -
	Amount carried over to next page							R -

Item	Description	Detail Reference	Unit	Tender Quantity	Supply Rate	Install R	ate	Total Price (R)
	Amount brought forward from previous page							R -
3.7	3 Phase - Delta / 2,5m Wood X-arm - Intermediate - 0° Deviation	DDT-1740B	No	10				R -
3.8	3 Phase - Delta / 2,5m Wood X-arm - Intermediate - 0deg Deviation - ( With Raptor Protector) Including 10KN Cap Insulators	D-DT-1740B RX	No	2				R -
3.9	3 Phase - Delta / 2,5m Wood X-arm - 0° Deviation	DDT-1743	No	9				R -
3.9	3 Phase - Delta / 2,5m Wood X-arm - 0° Deviation - 10KN RX	DDT-1743 RX	No	5				R -
3.10	3 Phase- Delta / 2,5m Wood X-arm - Strain - Medium(1°-60°) Deviation	DDT-1744	No	15				R -
3.10	3 Phase - Delta / 2,5m Wood X-arm - Strain - Medium(1°-60°) Deviation - 10KN RX	DDT-1744 RX	No	4				R -
3.11	3 Phase - Delta / 2,5m Wood X-arm - Strain - Terminal	DDT-1746	No	5				R -
3.11. 1	3 Phase - Delta / 2,5m Wood X-arm - Strain - Terminal 10KN RX	DDT-1746 RX	No	6				R -
3.14	3 Phase - H-Pole / 3,5m Wood X-arm - Strain - 0deg Deviation	DDT-1763	No	4				R -
3.19	3 Phase - H-Pole / 4,5m Wood X-arm - Strain - 0° Deviation	DDT-1773	No	7				R -
3.20	3 Phase - H-Pole / 4,5m Wood X-arm - Medium - 1 - 60deg Deviation	D-DT-1774	No	6				R -
3.13	3 Phase Take-off - 2.5m Wooden X-arm	D-DT-1804	No	8				R -
3.15	3 Phase Take-off - H-Pole (3,5m Wooden X-arm)	DDT-1806	No	3				R -
3.17	Phase / phase Take-off - 2,5m Wooden X-arm	DDT-1814	No	4				R -
3.18	Transformer - Single pole mount - 16-100kVA - General arrangement	DDT-1860/1	No	12				R -
3.19	Transformer - 16-50kVA - General arrangement, complete with connection. Standard out-line transformer - Links measured elsewhere	D-DT-1866B	No	12				R -
3.20	Transformer - 4 pole platform mount - Out of line (100kVA - 200kVA)	D-DT-1865B	No	2				R -
3,21	Section Breaker Out of line structure - General arrangement	D-DT-1829B	No	1				R -
	Testing							
	Allowance shall be made for the complete testing and commissioning of the Medium Voltage overhead distribution system							
3.21	MV Test		No	26				R -
	TOTAL : Carried forward to summary							R -

	ABAQULUSI WARD 2	ENQUIRY NO:						
tem	Description	Detail Reference	Unit	Tender Quantity	Supply Rate	Install Rate	Total Price (R)	
	Poles and Crossarms							
lote	Poles for service connections are measured elsewhere							
	Supply and install pole in excavated hole, including cutting and scafing, kicking blocks, bonding, treating, etc. Excavations and compaction are measured elsewhere.							
.1	Pole, Wood 7,0m x 120-139 Top Dia.	DDT-055	No	203			R	
.2	Pole, Wood 9,0m x 140-159 Top Dia.	DDT-055	No	63			R	
1.3	Pole, Wood 9,0m x 170-189 Top Dia.	DDT-055	No	12			R	
1.4	Pole, Wood 10,0m x 160-189 Top Dia.	DDT-055	No				R	
1.5	Pole, Wood 11,0m x 160-179 Top Dia.	DDT-055	No	1			R	
.6	Pole, Wood 11,0m x 180-199 Top Dia.	DDT-055	No	77			R	
.8	Pole, Wood 12,0m x 180-199 Top Dia.	DDT-0053	No	1			R	
.11	X-arm, Wood 2.5m x 140-159 Top Dia	DDT-061	No	125			R	
.12	X-arm, Wood 3.5m x 140-159 Top Dia	DDT-061	No	7			R	
.13	X-arm, Wood 4.5m x 140-159 Top Dia	DDT-061	No	13			R	
.14	6m, 160-179mm Diameter		No	12			R	
	Stays, Flying Stays and Anti-Climbing Devices							
	The unit price for a standard stay and an aerial stay shall exclude the wooden poles, but include the stay wire, stay rods, insulators, stay plate, stay guards, bitumastic paint, guy grip dead end, earthing of stay, line splice, precast concrete slabs, pole clamp, nuts bolts and washers etc.							
	The following stays shall be in accordance with the specification and shall include a stay plate							
.15	LV Stay	DDT-0341	No	272			R	
.16	MV Stay	DDT-0341	No	234			R	
	The following struts shall be in accordance with the specification							
.17	7m Strut	DDT-1167	No	1			R	
.18	11m Strut	DDT-0342	No	1			R	
	Amount carried over to next page			<u> </u>			R	=

ltem	Description	Detail Reference	Unit	Tender Quantity	Supply Rate	Install Rate	Total Price (R)
	Amount brought forward from previous page						R -
	The following flying stays shall be in accordance with the specifications and shall exclude poles						
4.19	LV Flying Stay	DDT-1168	No		-	-	R -
4.20	MV Flying Stay	DDT-0343	No		-	-	R -
	The following anti-climbing devices shall include barbed wire as specified						
4.21	Equipment anti climbing device	DDT	No	36			R -
	Excavations and Compaction						
Note	The excavations for service connections are measured elsewhere						
	Determination of pole positions, excavate, and supply a mechanical boring device if required. The rate shall include backfilling, compaction to 93% MOD AASHTO density, and where necessary the supply and transportation of suitable ground as may be required to receive the desired compaction, except where cement is specified. Any damage to existing services shall be made good by the Contractor at his own expense and to the approval or the PM(C).						
4.22	Hole for 7m pole - 1.4m deep		No	203			R -
4.23	Hole for 9m pole - 1.6m deep		No	63			R -
4.24	Hole for 10m pole - 1.6m deep		No				R -
4.25	Hole for 11m pole - 1.8m deep		No	78			R -
4.26	Hole for 12m pole - 2.0m deep		No				R -
4.27	Hole for 13m pole - 2.2m deep		No				R -
4.28	Hole for LV stay - 1.4m deep		No	272			R -
4.29	Hole for MV stay - 1.5m deep		No	234			R -
4.30	Hole for LV strut		No	1			R -
4.31	Hole for MV strut		No	1			R -
4.32	Blasting - per hole (Provisional Amount, Blasting as per Eskom standrard, approved Eskom blasting contractor)		No	256			R -
4.33	Mechanical excavation - (Provisional) - Up to 2.2m deep		No	256			R -
	Amount carried over to next page						R -

				Tender		Install		
Item	Description	Detail Reference	Unit	Quantity	Supply Rate	Rate		Price (R)
	Amount brought forward from previous page						R	-
	Pole Labels  Supply and install labels on all poles (Transformers, links, LV fuses, pole boxes etc.) in accordance with the specifications including the provision of all fixing materials							
4.34	Equipment labels		No	61			R	-
	Vibration Dampers Supply and vibration dampers on conductor in accordance with the specifications							
4.35	Vibration Dampers		No		-	-	R	-
	Pistol Grips Supply and pistol grips on line hardware in accordance with the specifications							
4.36	Pistol Grips		No		-	-	R	-
4.37	Spark Gap Device		No					
4.38	Bird Flight Divertors		No				R	-
	Concrete							
	Ready mix concrete slabs for pole bases as required							
4.39	Concrete bases		No	10			R	-
	Supply and mix cement on site into material excavated from pole hole, including the provision of water to ensure the correct moisture content of the backfill material.							
4.40	Cement mixture per hole		No	10			R	-
	Line Route Clearing							
4.41	Clearing of trees from a servitude (As per Eskom standard), including the stacking or disposal of cuttings and debris, as directed by eskom, and the poisioning of stumps with an approved poison. Three quotations to be provided by Eskom approved bush clearing contractors. (Provisional).		Prov				R	500,000.00
4.42	Bush Clearing Permits (All permits required for Bush Clearing) Obtaining of permits is the responsibility of the contractor		No	Sum	5,000.00		R	5,000.00
	Survey							
4.43	Set out pole and stay positions as indicated on rough detail sketches by tape measure and sighting rods where survey was not done by Eskom; per peg		Rate		-	-	R	-
	TOTAL : Carried forward to summary							
		l .					L	

	BILL NO 4.1 - DI	SMANTLIN	IG	-			
	ABAQULUSI WARD 2	ENQUIR'					
		Detail	IVI	Tender		1	
Item	Description	Reference	Unit	Quantity	Install Rate	Total F	Price (R)
	Conductor						
	Dismantle the follwing conductor						
	2 ionia no monoming contactor						
	The following dimensions will all be "Route Length"						
Note							
4.1.1	Fox Conductor	D3136	m	1000		R	-
	400	D0400	01114				
4.1.2	ABC	D3136	SUM	1000		В	
		D3136	m	1000		R	-
4.1.3	Dismantle Existing LV cable	D3136	m			R	-
	Medium Voltage Structures						
	Allow for the dismantling of the following structures and insulator assemblies						
4.1.4	LV structures (Existing) - To be dismantled						
	Single phase LV structures (Intermediate)	DDT1153	No				
	Single phase LV structures (intermediate) Single phase LV structures -Strain 0-60 deg	DDT1155	No				
	Single phase LV structures -Strain 0-00 deg	DDT1156	No				
	Single Phase LV structure - Terminal	DDT1154	No				
	Airdac stubby poles		No				
	Dismantling- Existing house connections -Complete		No				
	CWED Churchings Commel annual						
	SWER Structures General arrangements					_	
	SWER - Intermediate - 0 deg Deviation	DDT1340B	No			R	-
	SWER - Medium(1°-60°) Deviation	DDT1343	No			R	-
	Three Phase Structures General arrangements						
	Sectional Links (Cut-Outs) - 1804	D-DT-1804	No				
	Sectional Links (Cut-Outs) - 1848	DDT1848	No				
	3 Phase - Delta / 2.5m Wood X-arm- Strain - Terminal	DDT1746	No				
4.1.5	Transformer/Recloser_						
	Dismantle existing Eskom transformer on (NETWORK NAME)		No				
	Dismantle existing Eskom Section Breaker on (NETWORK NAME)		No				
445							
4.1.6	Dismantling, loading, safe storage, transport, offloading to Eskom or as						
	required of transformers, poles, conductor etc. Sign JMC69 document						
	and submit to Eskom/Consultant.		No		Provisional Sum	R	3,500.00
	TOTAL: Carried forward to cumman:						
	TOTAL : Carried forward to summary						

	BILL NO 5 - LV OVE	RHEADI	DISTI	RIBUTION	LINES		
	ABAQULUSI WARD 2	ENQUIRY	NO:				
	Description	Detail Reference	Unit	Tender Quantity	Supply Rate	Install Rate	Total Price (R)
	LV ABC						
	The LV insulated aerial bundle conductor system shall be in accordance with SABS 1418 and insulated in accordance with SABS 0198 and the Distribution Standard Part 3.  The unit rate per meter shall include the tensioning and stringing of the bundle in accordance with the sag and stress tables provided by the manufacturer with all plant, equipment and accessories required to erect an LV overhead bundled distribution line i.e.						
	Drum trailer, winch, wind-off pulleys, pulling rope/cable with connection, dynamometer, slide-lock, sheathed synthetic-fibre belt, woven snatch belt, snatch block, tackle, shackle, etc.						
	Measured lengths for stringing shall be net line route lengths and unit rates shall include for sag, off-cuts, etc.						
	Contractor to, safely store and transport to site and string. The conductor will be delivered on sealed drums and adequate allowance shall be made for the correct handling thereof.						
5.1	Single phase ABC (35mm <sup>2</sup> insulated)		m	8,050			R -
5.2	Dual phase ABC (35mm <sup>2</sup> insulated)		m	8,970			R -
5.3	Three phase ABC (35mm <sup>2</sup> insulated)		m	2,588			R -
5.4	Three phase ABC (70mm <sup>2</sup> insulated)		m	100			R -
	LV STRUCTURES						
	Allow for the assembly of the following LV strain and suspension assemblies in accordance with the specifications shown in the drawings. Including all earthing, drilling of holes and treating of drilled holes. All LV ABC hardware, line connectors, PVC cable ties, nuts, bolts, washers, lock washers shall be allowed for in the appropriate item below. Excluding the supply and planting of poles, stays and struts, which are measured elsewhere.						
	Amount carried over to next page						R -
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Item	Description	Detail Reference	Unit	Tender Quantity	Supply Rate	Install Rate	Total Price (R)
	Amount brought forward from previous page						R -
	Supply and install all the materials as specified for the following  LV STRUCTURES SINGLE PHASE						
5.6	ABC Suspension Assembly 0-30	DDT-1153	No	68			R -
5.7	ABC Terminal Assembly	DDT-1154	No	82			R -
5.8	ABC Strain Assembly (0-60°)	DDT-1155	No	37			R -
5.9	ABC Strain Assembly (60-90°)	DDT-1156	No	7			R -
5.10	ABC T-off from Intermediate	DDT-1157	No	13			R -
5.11	ABC T-off from Strain	DDT-1159	No	9			R -
	LV STRUCTURES DUAL PHASE						
5.12	ABC Suspension Assembly 0-30	DDT-1145	No	85			R -
5.13	ABC Terminal Assembly	DDT-1146	No	60			R -
5.14	ABC Strain Assembly (0-60°)	DDT-1147	No	30			R -
5.15	ABC Strain Assembly (60-90°)	DDT-1148	No	4			R -
5.16	ABC T-off from Intermediate	DDT-1149	No	14			R -
5.17	ABC T-off from Strain	DDT-1151	No	5			R -
	Amount carried over to next page						R -

Item	Description	Detail Reference	Unit	Tender Quantity	Supply Rate	Install Rate	Total Price (R)
	Amount brought forward from previous page			,			R -
	LV STRUCTURES THREE PHASE						
5.18	ABC Suspension Assembly 0-30	DDT-1100	No	37			R -
5.19	ABC Terminal Assembly	DDT-1120	No	26			R -
5.20	ABC Strain Assembly (0-60°)	DDT-1121	No	36			R -
5.21	ABC Strain Assembly (60-90°)	DDT-1122	No	3			R -
5.22	ABC T-off from Intermediate	DDT-1140	No	3			R -
5.23	ABC T-off from Strain	DDT-1142	No	6			R -
	LV Fuse Switch Units						
	Supply, deliver to site, off load on site and safely store. The fused switch shall be supplied complete with the pole mounting bracket, nuts, bolts, washers, etc. for securing the unit to the wooden pole. The fuses shall be supplied with the fuse switch unit. Fuse ratings shall be as shown on the drawings. Install the on load fused disconnecting switch on the transformer structure including the drilling of holes as required, including the termination of the LV ABC to the unit.						
5.24	63A Load disconnecting switch similar to MORSDORPHER 63A		No	59			R -
5.25	80A Load disconnecting switch similar to MORSDORPHER 160A		No	12			R -
	Amount carried over to next page						R -

Item	Description	Detail Reference	Unit	Tender Quantity	Supply Rate	Install Rate	Total Price (R)
	Amount brought forward from previous page						R -
	LV Pole Mounted Service Boxes						
	Supply and install on a wooden and/or concrete pole a pole mounted distribution box as specified complete with pole mounting brackets, cable ties, PG clamps, miniture circuit breaker(s), neutral, phase and earth bars, insulated copper tails for connecting to LV ABC, insulation piercing connectors and factory installed cable openings. Included shall be the stainless steel strapping and buckles and terminations of the tails onto the LV ABC.						
5.27	2 - 4 York type box, complete with insulated copper tails, insulation piercing connectors and nylon compression glands.	DDT-3055	No	200			R -
5.28	4 - 8 York type box, complete with insulated copper tails, insulation piercing connectors and nylon compression glands.	DDT-3055	No				R -
	Earthing of LV Network						
Note	All MV transformer earthing is measured elsewhere and all LV earths per structure are meaured with the structure. This section is intended for LV earths at transformers						
	Allowance shall be made for the testing of the earth resistance for the entire reticulation system in accordance with the TN-C-S earthing system as defined in the Distribution Standard Part 2 and any earth tests which may be required in terms of the standard and detailed specifications.						
5.29	LV Earth	DDT-0637	No	26			R -
	Testing						
	Allowance shall be made for the testing of each LV ABC distributor on accordance with the project specification. Included shall be the provision of test certificates and all documentation as required.						
5.30	LV Test		No	26			R -
	TOTAL : Carried forward to summary						R -

	BILL NO 6 - F	HOUSE CON	NEC.	TIONS			
	ABAQULUSI WARD 2	ENQUIRY N	IO:				
Item	Description	Detail Reference	Unit	Tender Quantity	Supply Rate	Install Rate	Total Price (R)
	House Connections  House Connections (Type A), test and commissioning complete including IC's, supply and install house labelling, completion of PCS file, sealing of meters and as built drawings on completion. Poles and excavation are measured						
6.1	elsewhere.  Type A  House Connections (Type B), test and commissioning complete including IC's, supply	DDT 0360	No				R -
	and install house labelling, completion of PCS file, sealing of meters and as built drawings on completion. Poles and excavation are measured elsewhere.						
6.2	Type B	DDT 0361	No	200			R -
	Conductor						
Note	Measured lengths for stringing shall be net line route lengths and unit rates shall include for sag, cut-offs etc.						
	Contractor to <u>supply</u> , safely store, transport to site and string. Installation includes all glands, lugs, shrouds, termination and connections as required.						
6.3	CABLE 1KV 2C 6mm SQ CONCENTRIC CU		m	10000			R -
	Sundry Items						
	Supply and install pole in excavated hole, including cutting and scafing, kicking bolts, bonding, treating, etc. Excavations and compaction are measured elsewhere.						
6.5	5m Pole, 80-99mm top diameter	DDT 0058	No	200			R -
6.6	7m Pole, 120-139mm top diameter	DDT 0050	No	20			R -
	Amount carried over to next page						R -

		Detail		Tender	Supply	Install	
Item	Description	Reference	Unit	Quantity	Rate	Rate	Total Price (R)
	Amount brought forward from previous page						R -
	Determination of pole positions, excavate, and supply a mechanical boring device if required. The rate shall include backfilling, compaction to 93% MOD AASHTO density, and where necessary the supply and transportation of suitable ground as may be required to receive the desired compaction, except where cement is specified. Any damage to existing services shall be made good by the Contractor at his own expense and to the approval or the PM(C).						
6.7	Hole for 5m service pole - 1m deep		No	200			R -
6.8	Hole for 7m service pole - 1.4m deep		No	20			R -
	Meters and readyboards						
6.9	METER,SPLIT PLC 20A + CIU		No	200			R -
6.10	PASSIVE BASE UNIT, ECU WITH RAIL + READY BOARD		No	200			R -
	TOTAL : Carried forward to summary						R -



## ELECTRIFICATION OF 200 CONNECTIONS IN ABAQULUSI WARD 2, THOLAKELE & ESIHLENGENI VILLAGES

#### XXXXXXXX 2021

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#### 1. DESCRIPTION OF WORKS

The project includes the following aspects:

- the erection of the installation, as per the approved design
- the testing and commissioning of the entire installation
- the provision of acceptable marked up signed, stamped and dated "as-built" drawings, sag and tension charts, compliance and hand over procedure.
- Making good of house walls where ready board has been installed.
- the handing over of the installation in a working order with all the necessary administration
- The contractor will fix marketing labels as per the labelling standard, TQCSS005.
- ♦ Completing of PCS file for uploading of connections to be done immediately after energization and registering of all connected customers on the Eskom customer management system within 7 days after energization.
- Sealing of all installed customer meters
- ◆ The completion of all the necessary administration work in providing the works. (SACS, Planning, Survey, Project Engineering)
- Installation certificate to be completed by a competent resource and to be submitted within 7 days after energization.

#### The scope of works includes the following:

The provision of electrical infrastructure complete including compilation of all information to successfully upload the PCS files as required for reporting of energized connections for the Area of the Abaqulusi Local Municipality of the Eskom Eastern Region.

#### 2. WORK TO BE PERFORMED BY THE CONTRACTOR FOR THE WORKS

#### SCOPE

Connections are to be made with 6mm2 concentric cable from the nearest pole top box, low voltage bundle is to be constructed as shown on the drawing. The new transformer zones are to be constructed as per

the scope of works for the Abaqulusi Ward 2 Electrification project. The following LV infrastructure is required to cater for the 200 new connections.

- Build 7000m of 35mm2 Single phase LV ABC
- Build 7800 m of 35mm2 Dual phase LV ABC
- Build 2250 m of 35mm2 Three phase LV ABC
- 9000 m of 6mm2 Airdac
- Installation of 6x16kVA, 7x32kVA & 2x50kVA transformers on Vaalkrans NB9
- Installation of 7x16kVA, 4x32kVA transformers on Louwsburg NB189
- Install 200 meters and bases

### ELECTRICAL ENGINEERING CONTRACTOR TO IMPLEMENT THE ABAQULUSI WARD 3 ELECTRIFICATION PROJECT (69 CONNECTIONS)

Pricing Data	
C2.1: PRICING INSTRUCTIONS	
C2.2: BILL OF QUANTITIES C2.3: DAYWORK SCHEDULE	
Signed:	
Vuyo Sogoni (Project Manager)	Xolani Banda (Electrical Engineer)

	BILL NO 1 - PR	ELIMINA	RY ANI	O GENERAL	•		
	ABAQULUSI WARD 3	ENQUIR DD/F			DETAIL	BOQ	
	Description	Detail Reference	Unit	Fixed Charge	Time Related	Install Rate	Total Price (R)
	Conditions of Contract						
1.1	Contractural requirements Contractual requirements including, amongst others, Insurance of Works, Transport & Residence, Preparation of Site Camp, maintenance of fire-breaks, Dismantling of Site Camp & restoration to original condition, Attendance to meetings, liaison & co-ordination with TSC, roads authority, SAPS for outages, Handing Over as per TQRRP020, weekly stats reporting, monthly man hours reporting, etc		Item				
	Site Store and Office						
	The Electrical contractor shall provide for a temporary site office, for his own use where all drawings and specifications shall be kept in accordance with the provisions of the specifications, as well as provision of safe and adequate storage space for all material and the removal of such on completion. (Erection of Sign board also to be catered for)		ltom				
			ltem				
	Materials Management						
	Allow for co-ordination, receipt and handling of materials, including the transport, loading & offloading, safekeeping & storage and the maintenance of a record keeping system to track the issue of materials for incorporation into the works.		Item				
	Provision for compliance to new safety regulations, OHSA Act.						
1.4.2 1.4.2 1.4.3	*Legal and contractual compliance *Personal protective Equipment *Fall arrest system/Ladders/Climbing Irons Provison for compliance to Construction Regulations. EPWP as specified in Works Order.		Item Item Item Item				
1.5	Other						
1.5.1	Provision for Community Liason Officer (CLO)		Month	4			
1.5.2	Site Securitiy		Month	4			
1.5.3	Site Ablution Facilities		Month	4			
1.5.4	Marketing (Detail)		Conns	R 69.0			
	TOTAL : Carried forward to summary	Page <b>153</b> of	336				R -

	BILL NO 2 - MEDIUM VOLTAGE SWIT	CHGEAR,	SECTION	ALISERS	, TRANSFORM	IERS, ETC		
	ABAQULUSI WARD 3	ENQUIF	RY NO:					_
Item	Description	Detail Reference	Unit	Tender Quantity	Supply Rate	Install Rate	Total Price (R)	
	Transformers							
	<u>Supply</u> and install on appropriate structure and secure as required including the termination of cables and conductors, the provision of suitable lugs for 35, 50 or 70mm conductor as required. Excluding cable, conductors, and the transformer structure.							
2.1	Transformer 16kVA, 22kV	DDT 3021	No	4			R -	
2.2	Transformer 32kVA, 22kV	DDT 3021	No	4			R -	
	Medium Voltage Surge Arrestors							
	Supply, deliver, off load on site and safely store on site the following surge arrestors, complete with galvanised steel mounting brackets for securing the surge arrestor, nuts, bolts, washers and lock washers as specified. Secure the surge arrestors and brackets to the transformer as specified including the termination of conductors. Excluding the conductors and transformer. NOTE: Two sets of surge arrestors per transformer bushing inclu support bracket and accessories.							
2.4	22kV, 10kA Surge arrestor with double surge arrestor brackets	DDT 3100	No	24			R	_
	Medium Voltage Sectionalisers and Links							
	Supply and install link isolators as detailed including the installation of crossarm brackets and the termination of conductors and including the drilling of holes in wooden poles as required							
2.5	Dual Phase Fuse Links (Including 1866/65B Structures)	DDT 1848	Set of 2	1			R -	
2.6	Three Phase Fuse Links ( Including 1866/65B structures)	DDT 1848	Set of 3	-			R -	
2.7	Dual Phase Solid Links (Including 1866B Structures)	DDT 1848	Set of 2				R -	
2.8	Three Phase Solid Links ( Including 1866B structures)	DDT 1848	Set of 3	8			R -	
	MV Auto Reclosers							
	Take delivery of, off load on site and safely store a recloser with platform and control box as supplied as free issue by Eskom. Transport to site of works and install recloser unit and control box on platform structure and secure as required including termination of cables and/or conductors. Structure measured elsewhere.							
2.9	22kV Recloser complete with platform and control box	DDT1829B	No	-			R -	
	Neutral Surge Arrestor							
	Supply and install a LV surge arrestor including lugs and galvanised	DDT 1860	No	8			R -	
2.10	bolts	22. 1000						
	Surge arrestor  Transformer Earthing							
2.11								
	Supply and install all materials for the complete earthing of transformer structures for ABC networks as specified. Included in the rate shall be all required spikes, insulated copper conductor, galvanised conduits, staples, bare copper, excavations, backfilling, etc. The rate shall allow for one MV earth electrode only, consisting of four earth spikes in accordance with the specifications. Additional earth spikes/conductor shall be measured elsewhere if required.							
	MV Earth	DDT 1860	No	8			R -	
	TOTAL : Carried forward to summary						R -	

	BILL NO 3 - MED	IUM VOLTA	GE C	VERHE	AD DISTRIBUTION	ON SYSTEM	
	ABAQULUSI WARD 3	ENQUIRY N	Ю:				
Item	Description	Detail Reference	Unit	Tender Quantity	Supply Rate	Install Rate	Total Price (R)
	Conductor -ACSR FOX						
	Supply, safely store on sealed drums with ends adequately secured and transport to site conductor as specified. String conductor as specified including splices, jumper conductor ties, strain clamps, suspension clamps, tensioning, sagging, etc.						
L	The following dimensions will all be "Line Length"  ACSR FOX						
	Three Phase		m	15,840			R -
3.1.1	Dual Phase		m	-			R -
	Medium Voltage Structures						
Note	Allow for the following structures and insulator assemblies in accordance with the specifications as shown in the drawings. Include the drilling of holes and treating of such holes, the provision of the U-nails and earthwire in accordance with Eskom specifications. The supply and installation of 15m of 3/3.35x1100MPa steel wire for a BIL for each pole structure as per Eskom specification. Exclude the supply and planting of poles, stays and struts which are measured elsewhere.						
	Supply and install all material as specified for the construction of the following MV structures. Including bonding of hardware and earthing. All excavations, poles, crossarms and stays are measured elsewhere						
3.2	Phase / phase - Delta / 2,5m Wood X-arm - Intermediate - 0° Deviation	DDT-1340B	No	-			R -
3.3	Phase / phase - Delta / 2,5m Wood X-arm - Intermediate - 0° Deviation - 10KN RX	DDT-1340B RX	No	-			R -
3.4	Phase / phase - Delta / 2,5m Wood X-arm - Strain - 0° Deviation	DDT-1343	No	-			R -
3.4	Phase / phase - Delta / 2,5m Wood X-arm - Strain - 0° Deviation - 10KN RX	DDT-1343 RX	No	-			R -
3.5	Phase / phase - Delta / 2,5m Wood X-arm - Strain - Medium (1°-60°) Deviation	DDT-1344	No	-			R -
3.5	Phase / phase - Delta / 2,5m Wood X-arm - Strain - Medium (1°-60°) Deviation - 10KN RX	DDT-1344 RX	No	-			R -
3.6	Phase / phase - Delta / 2,5m Wood X-arm - Strain - Terminal	DDT-1346	No	-			R -
	Amount carried over to next page						R -

Item	Description	Detail Reference	Unit	Tender Quantity	Supply Rate	Install Rate	Total Price (R)
	Amount brought forward from previous page				- app. ,		R -
3.7	3 Phase - Delta / 2,5m Wood X-arm - Intermediate - 0° Deviation	DDT-1740B	No	18			R -
3.8	3 Phase - Delta / 2,5m Wood X-arm - Intermediate - 0deg Deviation - ( With Raptor Protector) Including 10KN Cap Insulators	D-DT-1740B RX	No	2			R -
3.9	3 Phase - Delta / 2,5m Wood X-arm - 0° Deviation	DDT-1743	No	13			R -
3.9	3 Phase - Delta / 2,5m Wood X-arm - 0° Deviation - 10KN RX	DDT-1743 RX	No	1			R -
3.10	3 Phase- Delta / 2,5m Wood X-arm - Strain - Medium (1°-60°) Deviation	DDT-1744	No	9			R -
3.10	3 Phase - Delta / 2,5m Wood X-arm - Strain - Medium(1°-60°) Deviation - 10KN RX	DDT-1744 RX	No	1			R -
3.11	3 Phase - Delta / 2,5m Wood X-arm - Strain - Terminal	DDT-1746	No	6			R -
	3 Phase - Delta / 2,5m Wood X-arm - Strain - Terminal 10KN RX	DDT-1746 RX	No	1			R -
3.12	3 Phase - Delta / 4,5m Wood X-arm - Intermediate - 0° Deviation	DDT-1750	No	1			R -
3.13	3 Phase - Delta / 4,5m Wood X-arm - strain - 0° Deviation	DDT-1753	No	1			R -
3.14	3 Phase - H-Pole / 3,5m Wood X-arm - Strain - 0deg Deviation	DDT-1763	No	3			R -
3.14. 1	3 Phase - H-Pole / 3,5m Wood X-arm - Strain - Medium 1 - 60deg Deviation	DDT-1764	No	1			R -
3.15	3 Phase - H-Pole / 3,5m Wood X-arm - Strain - Medium 1 - 60deg Deviation	D-DT-1766	No				R -
3.16	3 Phase - H-Pole / 2x3,5m Wood X-arm - Strain - 0deg Deviation	D-DT-1767	No				R -
3.17	3 Phase - H-Pole / 2x3,5m Wood X-arm - Strain - Medium 1 - 60deg Deviation	D-DT-1768	No				R -
3.18	3 Phase - H-Pole / 2x3,5m Wood X-arm - Strain - Terminal	D-DT-1769	No				R -
3.19	3 Phase - H-Pole / 2 x 4,5m Wood X-arm - Strain - 0° Deviation	DDT-1777	No				R -
3.20	3 Phase - H-Pole / 2 x 4,5m Wood X-arm - Medium - 1 - 60deg Deviation	D-DT-1778	No				R -
3.21	3 Phase - Delta / 3,5m Wood X-arm - Intermediate - 0° Deviation	D-DT-1790	No				R -
3.22	3 Phase - H-Pole / 2 x 4,5m Wood X-arm - Strain- Large- (61°-90°) Deviation	D-DT1873	No				R -
3.13	3 Phase Take-off - 2.5m Wooden X-arm	D-DT-1804	No	7			R -
3.14	3 Phase Take-off - 2 x 2,5m Wooden X-arm	DDT-1805	No	-			R -
L	3 Phase Take-off - H-Pole (3,5m Wooden X-arm)	DDT-1806	No	-			R -
L	3 Phase Take-off - H-Pole (2 x 3,5m Wooden X-arm)	DDT-1807	No	-			R -
3.17	Phase / phase Take-off - 2,5m Wooden X-arm	DDT-1814	No	-			R -
3.18	Transformer - Single pole mount - 16-100kVA - General arrangement	DDT-1860/1	No	7			R -
3.19	Transformer - 16-50kVA - General arrangement, complete with connection. Standard out-line transformer - Links measured elsewhere	D-DT-1866B	No	1			R -
3.20	Transformer - 4 pole platform mount - Out of line (100kVA - 200kVA)	D-DT-1865B	No	-			R -
3,21	Section Breaker Out of line structure - General arrangement	D-DT-1829B	No	-			R -
	Testing						
Part (	Allowance shall be made for the complete testing and commissioning of the Medium Voltage Description System 33: Scope of works	P		56 of 336	i	C3.4 Construction	
3.21	MV Test		No	8			R -

	ABAQULUSI WARD 3	ENQUIRY NO:						
tem	Description	Detail Reference	Unit	Tender Quantity	Supply Rate	Install Rate	Total Price (R	)
	Poles and Crossarms							
lote	Poles for service connections are measured elsewhere							
	Supply and install pole in excavated hole, including cutting and scafing, kicking blocks, bonding, treating, etc. Excavations and compaction are measured elsewhere.							
.1	Pole, Wood 7,0m x 120-139 Top Dia.	DDT-055	No	145			R	
.2	Pole, Wood 9,0m x 140-159 Top Dia.	DDT-055	No	14			R	
1.3	Pole, Wood 9,0m x 170-189 Top Dia.	DDT-055	No	1			R	
1.4	Pole, Wood 10,0m x 160-189 Top Dia.	DDT-055	No	1			R	
1.5	Pole, Wood 11,0m x 160-179 Top Dia.	DDT-055	No	1			R	
.6	Pole, Wood 11,0m x 180-199 Top Dia.	DDT-055	No	62			R	
	Supply, off load and install the following wooden cross arms.							
.11	X-arm, Wood 2.5m x 140-159 Top Dia	DDT-061	No	62			R	
.12	X-arm, Wood 3.5m x 140-159 Top Dia	DDT-061	No	4			R	
.13	X-arm, Wood 4.5m x 140-159 Top Dia	DDT-061	No	2			R	
.14	6m, 160-179mm Diameter		No	1			R	
	Stays, Flying Stays and Anti-Climbing Devices							
lote	The unit price for a standard stay and an aerial stay shall exclude the wooden poles, but include the stay wire, stay rods, insulators, stay plate, stay guards, bitumastic paint, guy grip dead end, earthing of stay, line splice, precast concrete slabs, pole clamp, nuts bolts and washers etc.							
	The following stays shall be in accordance with the specification and shall include a stay plate							
.15	LV Stay	DDT-0341	No	89			R	
.16	MV Stay	DDT-0341	No	93			R	
	The following struts shall be in accordance with the specification							
.17	7m Strut	DDT-1167	No	1			R	
.18	11m Strut	DDT-0342	No	1			R	
	Amount carried over to next page						R	_
	Amount carried over to next page						R	

ltem	Description	Detail Reference	Unit	Tender Quantity	Supply Rate	Install Rate	Total Price (R)
	Amount brought forward from previous page						R -
	The following flying stays shall be in accordance with the specifications and shall exclude poles						
4.19	LV Flying Stay	DDT-1168	No		-	-	R -
4.20	MV Flying Stay	DDT-0343	No		-	-	R -
	The following anti-climbing devices shall include barbed wire as specified						
4.21	Equipment anti climbing device	DDT	No	9			R -
	Excavations and Compaction						
Note	The excavations for service connections are measured elsewhere						
	Determination of pole positions, excavate, and supply a mechanical boring device if required. The rate shall include backfilling, compaction to 93% MOD AASHTO density, and where necessary the supply and transportation of suitable ground as may be required to receive the desired compaction, except where cement is specified. Any damage to existing services shall be made good by the Contractor at his own expense and to the approval or the PM(C).						
4.22	Hole for 7m pole - 1.4m deep		No	145			R -
4.23	Hole for 9m pole - 1.6m deep		No	14			R -
4.24	Hole for 10m pole - 1.6m deep		No	1			R -
4.25	Hole for 11m pole - 1.8m deep		No	63			R -
4.26	Hole for 12m pole - 2.0m deep		No				R -
4.27	Hole for 13m pole - 2.2m deep		No				R -
4.28	Hole for LV stay - 1.4m deep		No	89			R -
4.29	Hole for MV stay - 1.5m deep		No	93			R -
4.30	Hole for LV strut		No	1			R -
4.31	Hole for MV strut		No	1			R -
4.32	Blasting - per hole (Provisional Amount, Blasting as per Eskom standrard, approved Eskom blasting contractor)		No	81			R -
4.33	Mechanical excavation - (Provisional) - Up to 2.2m deep		No	81			R -
	Amount carried over to next page						R -

				Tender		Install		
Item	Description	Detail Reference	Unit	Quantity	Supply Rate	Rate	Total	Price (R)
	Amount brought forward from previous page						R	-
	Pole Labels  Supply and install labels on all poles (Transformers, links, LV fuses, pole boxes etc.) in accordance with the specifications including the provision of all fixing materials							
4.34	Equipment labels		No	17			R	-
	Vibration Dampers Supply and vibration dampers on conductor in accordance with the specifications							
4.35	Vibration Dampers		No		-	-	R	-
	Pistol Grips Supply and pistol grips on line hardware in accordance with the specifications							
4.36	Pistol Grips		No		-	-	R	-
4.37	Spark Gap Device		No					
4.38	Bird Flight Divertors		No				R	-
	Concrete							
	Ready mix concrete slabs for pole bases as required							
4.39	Concrete bases		No	10			R	-
	Supply and mix cement on site into material excavated from pole hole, including the provision of water to ensure the correct moisture content of the backfill material.							
4.40	Cement mixture per hole		No	10			R	-
	Line Route Clearing							
4.41	Clearing of trees from a servitude (As per Eskom standard), including the stacking or disposal of cuttings and debris, as directed by eskom, and the poisioning of stumps with an approved poison. Three quotations to be provided by Eskom approved bush clearing contractors. (Provisional).		Prov				R	250,000.00
4.42	Bush Clearing Permits (All permits required for Bush Clearing) Obtaining of permits is the responsibility of the contractor		No	Sum	5,000.00		R	5,000.00
	Survey							
4.43	Set out pole and stay positions as indicated on rough detail sketches by tape measure and sighting rods where survey was not done by Eskom; per peg		Rate		-	-	R	-
	TOTAL : Carried forward to summary							

	ABAQULUSI WARD 3	ENQUIR' DD/F					
tem	Description	Detail Reference	Unit	Tender Quantity	Install Rate	Tota	al Price (R)
	Conductor						
	Dismantle the follwing conductor						
lote	The following dimensions will all be "Route Length"						
.010							
.1.1	Fox Conductor	D3136	m	2530		R	-
.1.2	ABC	D3136 D3136	SUM	3000		R	
		D3130	111	3000		I.	
.1.3	Dismantle Existing LV cable	D3136	m			R	-
	Medium Voltage Structures						
	Allow for the dismantling of the following structures and insulator						
	assemblies						
	MV structures - To Be Refurbished						
	my sinuctures - to be Returbished					-	
	1740B		No	10			
	1740B-RX		No	1			
	1743 1744		No No	6			
	1744-RX		No	1			
	1746		No	2	Provisonal Sum	R	9 600 (
	1750		No	1	i iovisoriai Suiti	1	3,000.0
	1753 1763		No No	1			9,600
	1764		No	1			
	1804		No	3			
	1866B		No	1			
	LV structures - To Be Refurbished						
			No	36			
	1153		No	19			
	1154 1155		No No	3			
	1156		No	3	Provisonal Sum	R	11,100.
	1157		No	2			
	1159 1145		No No	6			
	1146		No	2			
	1147						
	LV structures (Existing) - To be dismantled						
	Single phase LV structures (Intermediate)	DDT1153	No				
	Single phase LV structures -Strain 0-60 deg Single phase LV structures -Strain 60-90 deg	DDT1155 DDT1156	No No			1	
	Single Phase LV structure - Terminal	DDT1154	No			1	
	Airdac stubby poles		No				
	Dismantling- Existing house connections -Complete		No				
	SWER Structures General arrangements						
	SWER - Intermediate - 0 deg Deviation	DDT1340B	No			R	-
	SWER - Medium(1°-60°) Deviation	DDT1343	No			R	-
	Three Phase Structures Consul arrange						
	Three Phase Structures General arrangements Sectional Links (Cut-Outs) - 1804	D-DT-1804	No				
	Sectional Links (Cut-Outs) - 1848	DDT1848	No			1	
	3 Phase - Delta / 2.5m Wood X-arm- Strain - Terminal	DDT1746	No				
1.5	Transformer/Recloser_						
	11 41 31 01 11161 / RECIUSEI					-	
	Dismantle existing Eskom transformer on (NETWORK NAME)		No				
	Dismantle existing Eskom Section Breaker on (NETWORK NAME)		No				
1.6							
	Dismantling, loading, safe storage, transport, offloading to Eskom or as						
	required of transformers, poles, conductor etc. Sign JMC69 document						
	and submit to Eskom/Consultant.		No		Provisional Sum	R	3,500.0
						-	
_	TOTAL : Carried forward to summary Page	160 of 336					
		100 01 220					

	BILL NO 5 - LV OVE	RHEAD	DISTI	RIBUTION	LINES		
	ABAQULUSI WARD 3	ENQUIRY	NO:				
	Description	Detail Reference	Unit	Tender Quantity	Supply Rate	Install Rate	Total Price (R)
	LV ABC  The LV insulated aerial bundle conductor system shall be in accordance with SABS 1418 and insulated in accordance with SABS 0198 and the Distribution Standard Part 3.  The unit rate per meter shall include the tensioning and stringing of the bundle in accordance with the sag and stress tables provided by the manufacturer with all plant, equipment and accessories required to erect an LV overhead bundled distribution line i.e. Drum trailer, winch, wind-off pulleys, pulling rope/cable with connection, dynamometer, slide-lock, sheathed synthetic-fibre belt, woven snatch belt, snatch block, tackle, shackle, etc.			Quantity			
	Measured lengths for stringing shall be net line route lengths and unit rates shall include for sag, off-cuts, etc.  Contractor to, safely store and transport to site and string. The conductor will be delivered on sealed drums and adequate allowance shall be made for the correct handling thereof.						
5.1	Single phase ABC (35mm <sup>2</sup> insulated)		m	6,750			R -
5.2	Dual phase ABC (35mm <sup>2</sup> insulated)		m	3,680			R -
5.3	Three phase ABC (70mm² insulated)  LV STRUCTURES  Allow for the assembly of the following LV strain and suspension assemblies in accordance with the specifications shown in the drawings. Including all earthing, drilling of holes and treating of drilled holes. All LV ABC hardware, line connectors, PVC cable ties, nuts, bolts, washers, lock washers shall be allowed for in the appropriate item below. Excluding the supply and planting of poles, stays and struts, which are measured elsewhere.		m	100			R -
	Amount carried over to next page						R -

Item	Description	Detail Reference	Unit	Tender Quantity	Supply Rate	Install Rate	Total Price (R)
	Amount brought forward from previous page						R -
	Supply and install all the materials as specified for the following  LV STRUCTURES SINGLE PHASE						
5.6	ABC Suspension Assembly 0-30	DDT-1153	No	60			R -
5.7	ABC Terminal Assembly	DDT-1154	No	34			R -
5.8	ABC Strain Assembly (0-60°)	DDT-1155	No	4			R -
5.9	ABC Strain Assembly (60-90°)	DDT-1156	No	1			R -
5.10	ABC T-off from Intermediate	DDT-1157	No	10			R -
5.11	ABC T-off from Strain	DDT-1159	No	2			R -
	LV STRUCTURES DUAL PHASE						
5.12	ABC Suspension Assembly 0-30	DDT-1145	No	47			R -
5.13	ABC Terminal Assembly	DDT-1146	No	17			R -
5.14	ABC Strain Assembly (0-60°)	DDT-1147	No	12			R -
5.15	ABC Strain Assembly (60-90°)	DDT-1148	No	1			R -
5.16	ABC T-off from Intermediate	DDT-1149	No	5			R -
5.17	ABC T-off from Strain	DDT-1151	No	1			R -
	Amount carried over to next page						R -

		Detail		Tender	Supply	Install	
Item	Description	Reference	Unit	Quantity	Rate	Rate	Total Price (R)
	Amount brought forward from previous page						R -
	LV STRUCTURES THREE PHASE						
5.18	ABC Suspension Assembly 0-30	DDT-1100	No				R -
5.19	ABC Terminal Assembly	DDT-1120	No				R -
5.20	ABC Strain Assembly (0-60°)	DDT-1121	No				R -
5.21	ABC Strain Assembly (60-90°)	DDT-1122	No				
5.22	ABC T-off from Intermediate	DDT-1140	No				R -
5.23	ABC T-off from Strain	DDT-1142	No				R -
	LV Fuse Switch Units						
	Supply, deliver to site, off load on site and safely store. The fused switch shall be supplied complete with the pole mounting bracket, nuts, bolts, washers, etc. for securing the unit to the wooden pole. The fuses shall be supplied with the fuse switch unit. Fuse ratings shall be as shown on the drawings. Install the on load fused disconnecting switch on the transformer structure including the drilling of holes as required, including the termination of the LV ABC to the unit.						
5.24	63A Load disconnecting switch similar to MORSDORPHER 63A		No	32			R -
5.25	80A Load disconnecting switch similar to MORSDORPHER 160A		No	-			R -
5.26	125A Load disconnecting switch similar to MORSDORPHER 160A		No	-			R -
	Amount carried over to next page						R -

ltem	Description	Detail Reference	Unit	Tender Quantity	Supply Rate	Install Rate	Total Price (R)
	Amount brought forward from previous page		<u> </u>	Quantity	. tate	- tato	R -
	LV Pole Mounted Service Boxes						
	Supply and install on a wooden and/or concrete pole a pole mounted distribution box as specified complete with pole mounting brackets, cable ties, PG clamps, miniture circuit breaker(s), neutral, phase and earth bars, insulated copper tails for connecting to LV ABC, insulation piercing connectors and factory installed cable openings. Included shall be the stainless steel strapping and buckles and terminations of the tails onto the LV ABC.						
5.27	2 - 4 York type box, complete with insulated copper tails, insulation piercing connectors and nylon compression glands.		No	57			R -
5.28	4 - 8 York type box, complete with insulated copper tails, insulation piercing connectors and nylon compression glands.	DDT-3055	No				R -
	Earthing of LV Network						
Note	All MV transformer earthing is measured elsewhere and all LV earths per structure are meaured with the structure. This section is intended for LV earths at transformers						
	Allowance shall be made for the testing of the earth resistance for the entire reticulation system in accordance with the TN-C-S earthing system as defined in the Distribution Standard Part 2 and any earth tests which may be required in terms of the standard and detailed specifications.						
5.29	LV Earth	DDT-0637	No	8			R -
	Testing						
	Allowance shall be made for the testing of each LV ABC distributor on accordance with the project specification. Included shall be the provision of test certificates and all documentation as required.						
5.30	LV Test		No	8			R -
	TOTAL : Carried forward to summary						R -
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	BILL NO 6 - F	IOUSE CON	NEC.	TIONS			
	ABAQULUSI WARD 3	ENQUIRY N	IO:				
Item	Description	Detail Reference	Unit	Tender Quantity	Supply Rate	Install Rate	Total Price (R)
	House Connections  House Connections (Type A), test and commissioning complete including IC's, supply and install house labelling, completion of PCS file, sealing of meters and as built drawings on completion. Poles and excavation are measured						
6.1	elsewhere.  Type A  House Connections (Type B), test and	DDT 0360	No				R -
	commissioning complete including IC's, supply and install house labelling, completion of PCS file, sealing of meters and as built drawings on completion. Poles and excavation are measured elsewhere.						
6.2	Туре В	DDT 0361	No	69			R -
	Conductor						
Note	Measured lengths for stringing shall be net line route lengths and unit rates shall include for sag, cut-offs etc.						
	Contractor to <u>supply</u> , safely store, transport to site and string. Installation includes all glands, lugs, shrouds, termination and connections as required.						
6.3	CABLE 1KV 2C 6mm SQ CONCENTRIC CU		m	2760			R -
	Sundry Items						
	Supply and install pole in excavated hole, including cutting and scafing, kicking bolts, bonding, treating, etc. Excavations and compaction are measured elsewhere.						
6.5	5m Pole, 80-99mm top diameter	DDT 0058	No	69			R -
6.6	7m Pole, 120-139mm top diameter	DDT 0050	No	7			R -
	Amount carried over to next page						R -

		Detail		Tender	Supply	Install	
Item	Description	Reference	Unit	Quantity	Rate	Rate	Total Price (R)
	Amount brought forward from previous page						R -
	Determination of pole positions, excavate, and supply a mechanical boring device if required. The rate shall include backfilling, compaction to 93% MOD AASHTO density, and where necessary the supply and transportation of suitable ground as may be required to receive the desired compaction, except where cement is specified. Any damage to existing services shall be made good by the Contractor at his own expense and to the approval or the PM(C).						
6.7	Hole for 5m service pole - 1m deep		No	69 1			R -
6.8	Hole for 7m service pole - 1.4m deep		No	7			R -
	Meters and readyboards						
6.9	METER,SPLIT PLC 20A + CIU		No	69			R -
6.10	PASSIVE BASE UNIT, ECU WITH RAIL + READY BOARD		No	69			R -
	TOTAL : Carried forward to summary						R -



## ELECTRIFICATION OF 69 CONNECTIONS IN ABAQULUSI WARD 3, SHANELWENI VILLAGE

#### XXXXXXXX 2021

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#### 1. DESCRIPTION OF WORKS

The project includes the following aspects:

- the erection of the installation, as per the approved design
- the testing and commissioning of the entire installation
- the provision of acceptable marked up signed, stamped and dated "as-built" drawings, sag and tension charts, compliance and hand over procedure.
- Making good of house walls where ready board has been installed.
- the handing over of the installation in a working order with all the necessary administration
- The contractor will fix marketing labels as per the labelling standard, TQCSS005.
- Completing of PCS file for uploading of connections to be done immediately after energization and registering of all connected customers on the Eskom customer management system within 7 days after energization.
- Sealing of all installed customer meters
- ◆ The completion of all the necessary administration work in providing the works. (SACS, Planning, Survey, Project Engineering)
- Installation certificate to be completed by a competent resource and to be submitted within 7 days after energization.

#### The scope of works includes the following:

The provision of electrical infrastructure complete including compilation of all information to successfully upload the PCS files as required for reporting of energized connections for the Area of the Abaqulusi Local Municipality of the Eskom Eastern Region.

#### 2. WORK TO BE PERFORMED BY THE CONTRACTOR FOR THE WORKS

#### SCOPE

Connections are to be made with 6mm2 concentric cable from the nearest pole top box, low voltage bundle is to be constructed as shown on the drawing. The new transformer zones are to be constructed as per

the scope of works for the Abaqulusi Ward 3 Electrification project. The following LV infrastructure is required to cater for the 69 new connections.

- Build 4500m of 35mm2 Single phase LV ABC
- Build 3200 m of 35mm2 Dual phase LV ABC
- 3105 m of 6mm2 Airdac
- Installation of 1x16kVA. 2x32kVA transformers on Uitkoms NB19
- Installation of 3x16kVA, 2x32kVA transformers on Vaalkrans NB9
- Install 69 meters and bases

## KWAZULU – NATAL PROVINCE DEPARTMENT OF COOPERATIVE GOVERNANCE AND TRADITIONAL AFFAIRS

#### PART 2

# ELECTRICAL ENGINEERING CONTRACTOR TO IMPLEMENT THE JOZINI WARD 4 ELECTRIFICATION PROJECT (213 CONNECTIONS

Pricing Data	Pric	ing	Data
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Vuyo Sogoni (Project Manager)

C2.2:	PRICING INSTRUCTIONS BILL OF QUANTITIES DAYWORK SCHEDULE		
Signed	d:		

Xolani Banda (Electrical Engineer)

	BILL NO 1	- PRELIN	MINARY	AND GEN	ERAL		
	Jozini Ward 4	ENQUIR DD/F			DE	TAIL BOQ	
	Description	Detail Reference		Fixed Charge	Time Beleted	Install Date	Total Price (P)
	Description	Relefence	Unit	Fixed Charge	Time Related	Install Rate	Total Price (R)
	Conditions of Contract						
1.1	Contractural requirements Contractual requirements including, amongst others, Insurance of Works, Transport & Residence, Preparation of Site Camp, maintenance of fire-breaks, Dismantling of Site Camp & restoration to original condition, Attendance to meetings, liaison & co-ordination with TSC, roads authority, SAPS for outages, Handing Over as per TQRRP020, weekly stats reporting, monthly man hours reporting, etc		ltem				
	Site Store and Office						
1.2	The Electrical contractor shall provide for a temporary site office, for his own use where all drawings and specifications shall be kept in accordance with the provisions of the specifications, as well as provision of safe and adequate storage space for all material and the removal of such on completion.(Erection of Sign board also to be catered for)		ltem				
	Materials Management						
1.3	Allow for co-ordination, receipt and handling of materials, including the transport, loading & offloading, safekeeping & storage and the maintenance of a record keeping system to track the issue of materials for incorporation into the works.		ltem				
1.4	Provision for compliance to new safety regulations, OHSA Act.						
1.4.2 1.4.2 1.4.3	*Legal and contractual compliance *Personal protective Equipment *Fall arrest system/Ladders/Climbing Irons Provison for compliance to Construction Regulations.		Item Item Item Item				
	EPWP as specified in Works Order .		ltem				
	Other						
	Provision for Community Liason Officer (CLO)		Month	4			
	Site Securitiy		Month	4			
	Site Ablution Facilities		Month	4			
1.5.4	Marketing (Detail)		Conns	R 213.0			
	TOTAL : Carried forward to summary						R -

	BILL NO 2 - MEDIUM VOLTAGE SWITCHGEA	R, SECTIO	NALISERS	, TRANS	FORMERS,	ETC		
	Jozini Ward 4	ENQUIR	RY NO:					
Item	Description	Detail Reference	Unit	Tender Quantity	Supply Rate	Install Rat	e Total Price	(R)
	Transformers							
	<u>Supply</u> and install on appropriate structure and secure as required including the termination of cables and conductors, the provision of suitable lugs for 35, 50 or 70mm conductor as required. Excluding cable, conductors, and the transformer structure.							
2.1	Transformer 16kVA, 22kV	DDT 3021	No	9			R	-
2.2	Transformer 32kVA, 22kV	DDT 3021	No	11			R	-
2.3	Transformer 50kVA, 22kV	DDT 3021	No	3			R	-
	Medium Voltage Surge Arrestors							
	Supply, deliver, off load on site and safely store on site the following surge arrestors, complete with galvanised steel mounting brackets for securing the surge arrestor, nuts, bolts, washers and lock washers as specified. Secure the surge arrestors and brackets to the transformer as specified including the termination of conductors. Excluding the conductors and transformer. NOTE: Two sets of surge arrestors per transformer bushing inclu support bracket and accessories.							
2.4	22kV, 10kA Surge arrestor with double surge arrestor brackets	DDT 3100	No	80			R	-
	Medium Voltage Sectionalisers and Links							
	Supply and install link isolators as detailed including the installation of crossarm brackets and the termination of conductors and including the drilling of holes in wooden poles as required							
0.5	Dual Phase Fuse Links (Including 1866/65B Structures)	DDT 1848	Set of 2	20			R	-
2.5	Three Phase Fuse Links ( Including 1866/65B structures)	DDT 1848	Set of 3	3			R	-
2.6	Dual Phase Solid Links (Including 1866B Structures)	DDT 1848	Set of 2	5			R	-
2.7	Three Phase Solid Links (Including 1866B structures)	DDT 1848	Set of 3	5			R	-
	MV Voltage Regulator and							
	Take delivery of, off load on site and safely store a recloser with platform and control box as supplied as free issue by Eskom. Transport to site of works and install recloser unit and control box on platform structure and secure as required including termination of cables and/or conductors. Structure measured elsewhere.							
2.9	22kV Voltage Regulator complete with platform and control box	DDT1834B	No	1				
2.10	22kV Recloser complete with platform and control box	DDT1829B	No	1			R	-
	Neutral Surge Arrestor							
2.11	Supply and install a LV surge arrestor including lugs and galvanised bolts	DDT 1860	No	23			R	-
	Surge arrestor						<u> </u>	
							R	-
	Amount carried over to next page							

Item	Description	Detail Reference	Unit	Tender Quantity	Supply Rate	Install Rate	Total Price (R)
	Amount brought forward from previous page						R -
	Transformer Earthing  Supply and install all materials for the complete earthing of transformer structures for ABC networks as specified. Included in the rate shall be all required spikes, insulated copper conductor, galvanised conduits, staples, bare copper, excavations, backfilling, etc. The rate shall allow for one MV earth electrode only, consisting of four earth spikes in accordance with the specifications. Additional earth spikes/conductor shall be measured elsewhere if required.  MV Earth		No	23			R -
	TOTAL : Carried forward to summary						R -

	BILL NO 3 - MEDIUM VOLT	TAGE OVERI	HEAD	DISTR	IBUTION S	YSTE	И	
	Jozini Ward 4	ENQUIRY N	IO:					
Item	Description	Detail Reference	Unit	Tender Quantity	Supply Rate	Install	Rate	Total Price (R)
	Conductor -ACSR FOX							
	Supply, safely store on sealed drums with ends adequately secured and transport to site conductor as specified. String conductor as specified including splices, jumper conductor ties, strain clamps, suspension clamps, tensioning, sagging, etc.							
Note	The following dimensions will all be "Line Length"							
-	ACSR FOX Three Phase		m	29,700				R -
3.1.1	Dual Phase		m	-				R -
	Medium Voltage Structures							
Note	Allow for the following structures and insulator assemblies in accordance with the specifications as shown in the drawings. Include the drilling of holes and treating of such holes, the provision of the U-nails and earthwire in accordance with Eskom specifications. The supply and installation of 15m of 3/3.35x1100MPa steel wire for a BIL for each pole structure as per Eskom specification. Exclude the supply and planting of poles, stays and struts which are measured elsewhere.							
	Supply and install all material as specified for the construction of the following MV structures. Including bonding of hardware and earthing. All excavations, poles, crossarms and stays are measured elsewhere							
3.2	Phase / phase - Delta / 2,5m Wood X-arm - Intermediate - 0° Deviation	DDT-1340B	No	-				R -
3.3	Phase / phase - Delta / 2,5m Wood X-arm - Intermediate - 0° Deviation - 10KN RX	DDT-1340B RX	No	-				R -
3.4	Phase / phase - Delta / 2,5m Wood X-arm - Strain - 0° Deviation	DDT-1343	No	-				R -
3.4	Phase / phase - Delta / 2,5m Wood X-arm - Strain - 0° Deviation - 10KN RX	DDT-1343 RX	No	-				R -
3.5	Phase / phase - Delta / 2,5m Wood X-arm - Strain - Medium(1°-60°) Deviation	DDT-1344	No	-				R -
3.5	Phase / phase - Delta / 2,5m Wood X-arm - Strain - Medium(1°-60°) Deviation - 10KN RX	DDT-1344 RX	No	-				R -
3.6	Phase / phase - Delta / 2,5m Wood X-arm - Strain - Terminal	DDT-1346	No	-				R -
	Amount carried over to next page							R -

		Detail		Tender			
Item	Description	Reference	Unit		Supply Rate	Install Rate	Total Price (R)
	Amount brought forward from previous page						R -
3.7	3 Phase - Delta / 2,5m Wood X-arm - Intermediate - 0° Deviation	DDT-1740B	No	39			R -
3.8	3 Phase - Delta / 2,5m Wood X-arm - Intermediate - 0deg Deviation - ( With Raptor Protector) Including 10KN Cap Insulators	D-DT-1740B RX	No	9			R -
3.9	3 Phase - Delta / 2,5m Wood X-arm - 0° Deviation	DDT-1743	No	16			R -
3.9	3 Phase - Delta / 2,5m Wood X-arm - 0° Deviation - 10KN RX	DDT-1743 RX	No	9			R -
3.10	3 Phase- Delta / 2,5m Wood X-arm - Strain - Medium(1°-60°) Deviation	DDT-1744	No	24			R -
3.10	3 Phase - Delta / 2,5m Wood X-arm - Strain - Medium(1°-60°) Deviation - 10KN RX	DDT-1744 RX	No	18			R -
3.11	3 Phase - Delta / 2,5m Wood X-arm - Strain - Terminal	DDT-1746	No	17			R -
3.11. 1	3 Phase - Delta / 2,5m Wood X-arm - Strain - Terminal 10KN RX	DDT-1746 RX	No	6			R -
3.14	3 Phase - Delta / 2x2,5m Wood X-arm - Strain	DDT-1747	No	2			R -
3.19	3 Phase - H-Pole / 4,5m Wood X-arm - Strain - 0° Deviation	DDT-1773	No	-			R -
3.20	3 Phase - H-Pole / 4,5m Wood X-arm - Medium - 1 - 60deg Deviation	D-DT-1774	No	-			R -
3.13	3 Phase Take-off - 2.5m Wooden X-arm	D-DT-1804	No	14			R -
3.15	3 Phase Take-off - H-Pole (3,5m Wooden X-arm)	DDT-1806	No	-			R -
3.17	Phase / phase Take-off - 2,5m Wooden X-arm	DDT-1814	No	-			R -
3.18	Transformer - Single pole mount - 16-100kVA - General arrangement	DDT-1860/1	No	12			R -
3.19	Transformer - 16-50kVA - General arrangement, complete with connection. Standard out-line transformer - Links measured elsewhere	D-DT-1866B	No	8			R -
3.20	Transformer - 4 pole platform mount - Out of line (100kVA - 200kVA)	D-DT-1865B	No	-			R -
3,21	Section Breaker Out of line structure - General arrangement	D-DT-1829B	No	1			R -
3.22	Voltage Regulator Out of line structure - General arrangement Testing	D-DT-1834B	No	1			
	Allowance shall be made for the complete testing and commissioning of the Medium Voltage overhead distribution system						
3.23	MV Test		No	23			R -
	TOTAL : Carried forward to summary						R -

	Jozini Ward 4	ENQUIRY NO:						
tem	Description	Detail Reference	Unit	Tender Quantity	Supply Rate	Install Rate	Total Price (F	!)
	Poles and Crossarms							
lote	Poles for service connections are measured elsewhere							
	<u>Supply</u> and install pole in excavated hole, including cutting and scafing, kicking blocks, bonding, treating, etc. Excavations and compaction are measured elsewhere.							
.1	Pole, Wood 7,0m x 120-139 Top Dia.	DDT-055	No	350			R	
.2	Pole, Wood 9,0m x 140-159 Top Dia.	DDT-055	No	98			R	
.3	Pole, Wood 9,0m x 170-189 Top Dia.	DDT-055	No				R	
.4	Pole, Wood 10,0m x 160-189 Top Dia.	DDT-055	No	20			R	
.5	Pole, Wood 11,0m x 160-179 Top Dia.	DDT-055	No				R	
.6	Pole, Wood 11,0m x 180-199 Top Dia.	DDT-055	No	140			R	
.8	Pole, Wood 12,0m x 180-199 Top Dia.	DDT-0053	No	4			R	
.11	X-arm, Wood 2.5m x 140-159 Top Dia	DDT-061	No	174			R	
.12	X-arm, Wood 3.5m x 140-159 Top Dia	DDT-061	No				R	
.13	X-arm, Wood 4.5m x 140-159 Top Dia	DDT-061	No				R	
.14	6m, 160-179mm Diameter		No	8			R	
	Stays, Flying Stays and Anti-Climbing Devices							
lote	The unit price for a standard stay and an aerial stay shall exclude the wooden poles, but include the stay wire, stay rods, insulators, stay plate, stay guards, bitumastic paint, guy grip dead end, earthing of stay, line splice, precast concrete slabs, pole clamp, nuts bolts and washers etc.							
	The following stays shall be in accordance with the specification and shall include a stay plate							
.15	LV Stay	DDT-0341	No	381			R	
.16	MV Stay	DDT-0341	No	221			R	
	The following struts shall be in accordance with the specification							
.17	7m Strut	DDT-1167	No	1			R	
.18	11m Strut	DDT-0342	No	1			R	
								_
	Amount carried over to next page	1	1				R	

Item	Description	Detail Reference	Unit	Tender Quantity	Supply Rate	Install Rate	Total Price (R)	
	Amount brought forward from previous page						R	-
	The following flying stays shall be in accordance with the specifications and shall exclude poles							
4.19	LV Flying Stay	DDT-1168	No		-	-	R	-
4.20	MV Flying Stay	DDT-0343	No		-	-	R	-
	The following anti-climbing devices shall include barbed wire as specified							
4.21	Equipment anti climbing device	DDT	No	28			R	-
	Excavations and Compaction							
Note	The excavations for service connections are measured elsewhere							
	Determination of pole positions, excavate, and supply a mechanical boring device if required. The rate shall include backfilling, compaction to 93% MOD AASHTO density, and where necessary the supply and transportation of suitable ground as may be required to receive the desired compaction, except where cement is specified. Any damage to existing services shall be made good by the Contractor at his own expense and to the approval or the PM(C).							
4.22	Hole for 7m pole - 1.4m deep		No	350			R	-
4.23	Hole for 9m pole - 1.6m deep		No	98			R	-
4.24	Hole for 10m pole - 1.6m deep		No	20			R	-
4.25	Hole for 11m pole - 1.8m deep		No	140			R	-
4.26	Hole for 12m pole - 2.0m deep		No				R	-
4.27	Hole for 13m pole - 2.2m deep		No				R	-
4.28	Hole for LV stay - 1.4m deep		No	381			R	-
4.29	Hole for MV stay - 1.5m deep		No	221			R	-
4.30	Hole for LV strut		No	1			R	-
4.31	Hole for MV strut		No	1			R	-
<b>4</b> .32	Blasting - per hole (Provisional Amount, Blasting as per Eskom standrard, approved Eskom blasting contractor)		No	364			R	-
4.33	Mechanical excavation - (Provisional) - Up to 2.2m deep		No	364			R	-
	Amount carried over to next page						R	-

Item	Description	Detail Reference	Unit	Tender Quantity	Supply Rate	Install Rate	Total Price (R)
	Amount brought forward from previous page			Quartity			R -
	Pole Labels						
	Supply and install labels on all poles (Transformers, links, LV fuses, pole boxes etc.) in accordance with the specifications including the provision of all fixing materials						
4.34	Equipment labels		No	51			R -
	Vibration Dampers Supply and vibration dampers on conductor in accordance with the specifications						
4.35	Vibration Dampers		No		-	-	R -
	Pistol Grips Supply and pistol grips on line hardware in accordance with the specifications						
4.36	Pistol Grips		No		-	-	R -
4.37	Spark Gap Device		No				
4.38	Bird Flight Divertors		No				R -
	Concrete						
	Ready mix concrete slabs for pole bases as required						
4.39	Concrete bases		No	10			R -
	Supply and mix cement on site into material excavated from pole hole, including the provision of water to ensure the correct moisture content of the backfill material.						
4.40	Cement mixture per hole		No	10			R -
	Line Route Clearing						
4.41	Clearing of trees from a servitude (As per Eskom standard), including the stacking or disposal of cuttings and debris, as directed by eskom, and the poisioning of stumps with an approved poison. Three quotations to be provided by Eskom approved bush clearing contractors. (Provisional).		Prov				R 500,000.00
4.42	Bush Clearing Permits (All permits required for Bush Clearing) Obtaining of permits is the responsibility of the contractor		No	Sum	5,000.00		R 5,000.00
	Survey						
4.43	Set out pole and stay positions as indicated on rough detail sketches by tape measure and sighting rods where survey was not done by Eskom; per peg		Rate		-	-	R -
	TOTAL : Carried forward to summary						

	Jozini Ward 4	ENQUIR` DD/F					
		Detail		Tender			
Item	Description	Reference	Unit	Quantity	Install Rate	Total	Price (R)
	Conductor						
	Dismantle the follwing conductor						
	The following dimensions will all be "Route Length"						
Note							
111	Fox Conductor	D2426		1000		Ь	
4.1.1	Fox Conductor	D3136	m	1000		R	-
4.1.2	ABC	D3136	SUM				
		D3136	m	1000		R	-
4.1.3	Dismantle Existing LV cable	D3136	m			R	-
	Bio divers Valta na Cturatura						
	Medium Voltage Structures  Allow for the dismantling of the following structures and insulator						
	assemblies						
414	LV structures (Existing) - To be dismantled						
	Single phase LV structures (Intermediate)	DDT1153	No				
	Single phase LV structures (intermediate) Single phase LV structures -Strain 0-60 deg	DDT1155	No			-	
	Single phase LV structures -Strain 60-90 deg	DDT1156	No			-	
	Single Phase LV structure - Terminal	DDT1154	No				
	Airdac stubby poles		No				
	Dismantling- Existing house connections -Complete		No				
	SWER Structures General arrangements						
	SWER - Intermediate - 0 deg Deviation	DDT1340B	No			R	-
	SWER - Medium(1°-60°) Deviation	DDT1343	No			R	-
						ļ	
	Three Phase Structures General arrangements						
	Sectional Links (Cut-Outs) - 1804	D-DT-1804	No				
	Sectional Links (Cut-Outs) - 1848 3 Phase - Delta / 2.5m Wood X-arm- Strain - Terminal	DDT1848 DDT1746	No No				
	S Friase - Deita / 2.3111 WOOd A-attil- Strain - Terminal	טטווועט	INO				
4.1.5	Transformer/Recloser						
0	11 4110] 01 11101 / NOC10301						
	Dismantle existing Eskom transformer on (NETWORK NAME)		No				
	Dismantle existing Eskom Section Breaker on (NETWORK NAME)		No				
	3						
4.1.6							
	Dismantling, loading, safe storage, transport, offloading to Eskom or as						
	required of transformers, poles, conductor etc. Sign JMC69 document						
	and submit to Eskom/Consultant.		No		Provisional Sum	R	3,500.00
						<u> </u>	
	TOTAL : Carried forward to summary						

	BILL NO 5 - LV OVE	RHEAD	DIST	RIBUTION	LINES		
	Jozini Ward 4	ENQUIRY	NO:				
	Description	Detail Reference	Unit	Tender Quantity	Supply Rate	Install Rate	Total Price (R)
	LV ABC						
	The LV insulated aerial bundle conductor system shall be in accordance with SABS 1418 and insulated in accordance with SABS 0198 and the Distribution Standard Part 3.						
	The unit rate per meter shall include the tensioning and stringing of the bundle in accordance with the sag and stress tables provided by the manufacturer with all plant, equipment and accessories required to erect an LV overhead bundled distribution line i.e. Drum trailer, winch, wind-off pulleys, pulling rope/cable with connection, dynamometer, slide-lock, sheathed synthetic-fibre belt, woven snatch belt, snatch block, tackle, shackle, etc.						
	Measured lengths for stringing shall be net line route lengths and unit rates shall include for sag, off-cuts, etc.						
	Contractor to, safely store and transport to site and string. The conductor will be delivered on sealed drums and adequate allowance shall be made for the correct handling thereof.						
5.1	Single phase ABC (35mm <sup>2</sup> insulated)		m	10,000			R -
5.2	Dual phase ABC (35mm <sup>2</sup> insulated)		m	13,253			R -
5.3	Three phase ABC (35mm <sup>2</sup> insulated)		m	3,439			R -
5.5	Three phase ABC (70mm <sup>2</sup> insulated)		m	440			R -
	LV STRUCTURES						
	Allow for the assembly of the following LV strain and suspension assemblies in accordance with the specifications shown in the drawings. Including all earthing, drilling of holes and treating of drilled holes. All LV ABC hardware, line connectors, PVC cable ties, nuts, bolts, washers, lock washers shall be allowed for in the appropriate item below. Excluding the supply and planting of poles, stays and struts, which are measured elsewhere.						
	Amount carried over to next page						R -
	<u>l</u>	l		l			I

Item	Description	Detail Reference	Unit	Tender Quantity	Supply Rate	Install Rate	Total Price (R)
	Amount brought forward from previous page						R -
	Supply and install all the materials as specified for the following  LV STRUCTURES SINGLE PHASE						
5.6	ABC Suspension Assembly 0-30	DDT-1153	No	75			R -
5.7	ABC Terminal Assembly	DDT-1154	No	105			R -
5.8	ABC Strain Assembly (0-60°)	DDT-1155	No	52			R -
5.9	ABC Strain Assembly (60-90°)	DDT-1156	No	3			R -
5.10	ABC T-off from Intermediate	DDT-1157	No	14			R -
5.11	ABC T-off from Strain	DDT-1159	No	26			R -
	LV STRUCTURES DUAL PHASE						
5.12	ABC Suspension Assembly 0-30	DDT-1145	No	92			R -
5.13	ABC Terminal Assembly	DDT-1146	No	50			R -
5.14	ABC Strain Assembly (0-60°)	DDT-1147	No	93			R -
5.15	ABC Strain Assembly (60-90°)	DDT-1148	No	11			R -
5.16	ABC T-off from Intermediate	DDT-1149	No	6			R -
5.17	ABC T-off from Strain	DDT-1151	No	7			R -
	Amount carried over to next page						R -

Item	Description	Detail Reference	Unit	Tender Quantity	Supply Rate	Install Rate	Total Price (R)
	Amount brought forward from previous page			,			R -
	LV STRUCTURES THREE PHASE						
5.18	ABC Suspension Assembly 0-30	DDT-1100	No	23			R -
5.19	ABC Terminal Assembly	DDT-1120	No	16			R -
5.20	ABC Strain Assembly (0-60°)	DDT-1121	No	21			R -
5.21	ABC Strain Assembly (60-90°)	DDT-1122	No	2			R -
5.22	ABC T-off from Intermediate	DDT-1140	No	2			R -
5.23	ABC T-off from Strain	DDT-1142	No	2			R -
	LV Fuse Switch Units						
	Supply, deliver to site, off load on site and safely store. The fused switch shall be supplied complete with the pole mounting bracket, nuts, bolts, washers, etc. for securing the unit to the wooden pole. The fuses shall be supplied with the fuse switch unit. Fuse ratings shall be as shown on the drawings. Install the on load fused disconnecting switch on the transformer structure including the drilling of holes as required, including the termination of the LV ABC to the unit.						
5.24	63A Load disconnecting switch similar to MORSDORPHER 63A		No	68			R -
5.25	80A Load disconnecting switch similar to MORSDORPHER 160A		No	18			R -
	Amount carried over to next page						R -

Item	Description	Detail Reference	Unit	Tender Quantity	Supply Rate	Install Rate	Total Price (R)
	Amount brought forward from previous page			Quantity			R -
	LV Pole Mounted Service Boxes						
	Supply and install on a wooden and/or concrete pole a pole mounted distribution box as specified complete with pole mounting brackets, cable ties, PG clamps, miniture circuit breaker(s), neutral, phase and earth bars, insulated copper tails for connecting to LV ABC, insulation piercing connectors and factory installed cable openings. Included shall be the stainless steel strapping and buckles and terminations of the tails onto the LV ABC.						
5.27	2 - 4 York type box, complete with insulated copper tails, insulation piercing connectors and nylon compression glands.	DDT-3055	No	213			R -
5.28	4 - 8 York type box, complete with insulated copper tails, insulation piercing connectors and nylon compression glands.	DDT-3055	No				R -
	Earthing of LV Network						
Note	All MV transformer earthing is measured elsewhere and all LV earths per structure are meaured with the structure. This section is intended for LV earths at transformers						
	Allowance shall be made for the testing of the earth resistance for the entire reticulation system in accordance with the TN-C-S earthing system as defined in the Distribution Standard Part 2 and any earth tests which may be required in terms of the standard and detailed specifications.						
5.29	LV Earth	DDT-0637	No	23			R -
	Testing						
	Allowance shall be made for the testing of each LV ABC distributor on accordance with the project specification. Included shall be the provision of test certificates and all documentation as required.						
5.30	LV Test		No	23			R -
	TOTAL : Carried forward to summary						R -

	BILL NO 6 - HOUSE CONNECTIONS											
	Jozini Ward 4	ENQUIRY N	NO:									
Item	Description	Detail Reference	Unit	Tender Quantity	Supply Rate	Install Rate	Total Price (R)					
	House Connections  House Connections (Type A), test and commissioning complete including IC's, supply and install house labelling, completion of PCS file, sealing of meters and as built drawings on completion. Poles and excavation are measured											
6.1	elsewhere.  Type A  House Connections (Type B), test and commissioning complete including IC's, supply and install house labelling, completion of PCS file, sealing of meters and as built drawings on completion. Poles and excavation are measured elsewhere.	DDT 0360	No				R -					
6.2	Туре В	DDT 0361	No	213			R -					
	Conductor											
Note	Measured lengths for stringing shall be net line route lengths and unit rates shall include for sag, cut-offs etc.											
	Contractor to <u>supply</u> , safely store, transport to site and string. Installation includes all glands, lugs, shrouds, termination and connections as required.											
6.3	CABLE 1KV 2C 6mm SQ CONCENTRIC CU		m	10650			R -					
	Sundry Items											
	Supply and install pole in excavated hole, including cutting and scafing, kicking bolts, bonding, treating, etc. Excavations and compaction are measured elsewhere.											
6.5	5m Pole, 80-99mm top diameter	DDT 0058	No	213			R -					
6.6	7m Pole, 120-139mm top diameter	DDT 0050	No	21	-		R -					
	Amount carried over to next page						R -					

		Detail		Tender	Supply	Install	
Item	Description	Reference	Unit	Quantity	Rate	Rate	Total Price (R)
	Amount brought forward from previous page						R -
	Determination of pole positions, excavate, and supply a mechanical boring device if required. The rate shall include backfilling, compaction to 93% MOD AASHTO density, and where necessary the supply and transportation of suitable ground as may be required to receive the desired compaction, except where cement is specified. Any damage to existing services shall be made good by the Contractor at his own expense and to the approval or the PM(C).						
6.7	Hole for 5m service pole - 1m deep		No	213			R -
6.8	Hole for 7m service pole - 1.4m deep		No	21			R -
	Meters and readyboards						
6.9	METER,SPLIT PLC 20A + CIU		No	213			R -
6.10	PASSIVE BASE UNIT, ECU WITH RAIL + READY BOARD		No	213			R -
	TOTAL : Carried forward to summary						R -



# ELECTRIFICATION OF 213 CONNECTIONS IN JOZINI WARD 4, EKUVELENI VILLAGE

# XXXXXXXX 2021

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#### 1. DESCRIPTION OF WORKS

The project includes the following aspects:

- ♦ the erection of the installation, as per the approved design
- the testing and commissioning of the entire installation
- the provision of acceptable marked up signed, stamped and dated "as-built" drawings, sag and tension charts, compliance and hand over procedure.
- Making good of house walls where ready board has been installed.
- the handing over of the installation in a working order with all the necessary administration
- The contractor will fix marketing labels as per the labelling standard, TQCSS005.
- ♦ Completing of PCS file for uploading of connections to be done immediately after energization and registering of all connected customers on the Eskom customer management system within 7 days after energization.
- Sealing of all installed customer meters
- ◆ The completion of all the necessary administration work in providing the works. (SACS, Planning, Survey, Project Engineering)
- Installation certificate to be completed by a competent resource and to be submitted within 7 days after energization.

# The scope of works includes the following:

The provision of electrical infrastructure complete including compilation of all information to successfully upload the PCS files as required for reporting of energized connections for the Area of the Jozini Local Municipality of the Eskom Eastern Region.

#### 2. WORK TO BE PERFORMED BY THE CONTRACTOR FOR THE WORKS

# SCOPE

Connections are to be made with 6mm2 concentric cable from the nearest pole top box, low voltage bundle is to be constructed as shown on the drawing. The new transformer zones are to be constructed as per

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the scope of works for the Jozini Ward 4 Electrification project. The following LV infrastructure is required to cater for the 213 new connections.

- Build 11880 m of 35mm2 Single phase LV ABC
- Build 8910 m of 35mm2 Dual phase LV ABC
- Build 2420 m of 35mm2 Three phase LV ABC
- Build 330 m of 35mm2 Three phase LV ABC
- 9585 m of 6mm2 Airdac
- Installation of 9x16kVA, 11x32kVA & 3x50kVA transformers on Makhathini NB24
- Install 213 meters and bases
- Installation of new Voltage regulator

# KWAZULU – NATAL PROVINCE DEPARTMENT OF COOPERATIVE GOVERNANCE AND TRADITIONAL AFFAIRS

# PART 2

# ELECTRIFICATION OF 63 CONNECTIONS IN ABAQULUSI WARD 1, EMADAMINI (63HH) VILLAGE

Pricing Data	
C2.1: PRICING INSTRUCTIONS C2.2: BILL OF QUANTITIES C2.3: DAYWORK SCHEDULE	
Signed:	
Vuyo Sogoni (Project Manager)	Xolani Banda (Electrical Engineer)

aqulusi Ward 1 - Emadamini Electrification			PRICE (EXCL V	AT)
Establish Site(Fixed Items)				
Provision for compliance with all the General Conditions of Contract, Special Conditions of Contract, All necessary insurances required to adequately cover the works, Workmans Compensation, Travelling, Outof-Town Allowance, Maintenance and Guarantee	Sum	1		
Establish facilities on site. The Contractor shall provide a fenced space with fence at least 1.8m high with a lockable gate for a temporary Site Office and Stores where all drawings and Specifications will be kept, as well as the provision of safe and secure staorage	Sum	1		
3 Facilities for Contractor :	0			
a) Offices & storage sheds     b) Establishment of staff accommodation, office accommodation on site for site     meetings and a Clerk of Works including office furniture and telephone / telefax	Sum	1		
as specified and facilities.	Sum	1		
c) Ablution & latrine facilities	Sum Sum	1		
e) Water supplies, electric power & communications  Removal of all items indicated above upon completion of construction and making good and restoring of the Site to the satisfaction of the Project Manager.	Sum	1		
.5 Provision of "As Built" drawings.	Sum	1		
The Contractor shall make an order for one project signboard bearing the name of the project, the name and logo of the Client, and the	Sum	1		
.7 Provision for Legal and Contractual Compliance.	Sum	1		
8 Provision of personal protective equipment and clothing for all the contractor's staff, including sub-contractors.	Sum	11		
Provision of safety measures, e.g Fall arrest systems, shoring for safety purposes etc.	Sum	1		
10 Compliance with OH&S Act & Construction Regulations.	Sum	1		
Compliance with the Requirements for the Expanded Public Works Programme (incl. monthly reports).	Sum	1		
The Contractor shall make allowance to receive, transport to site, offload and stack the materials supplied to the contract. The rate shall also include the implementation and maintenance of a Materials Management System for the duration of the contract.	Sum	1		
On Completion of the project, all dismantled materials (transformers, mini-subs etc.) shall be reconciled and quantified. Once authorised by the Consultant/Project Manager, this materials shall be transported to Eskom New Germany stores using the correct material return forms.	Sum	1		
14 Operate and Maintain Facilities on Site(Time Related Items)				
Facilities for Contractor:	NA: C			
a) Offices & storage sheds	Month	3		
b) Ablution & latrine facilities     d) Water supplies, electric power & communications	Month Month	3		
Provision of office accommodation on site for site meetings and a Clerk of Works including office furniture and telephone / telefax as specified.	Month	3		
16 Contract management and full time supervision of the works	Month	3		
17 Community Liaison Officer conversant in Zulu and local cultural norms	Month	3		
Municipality Technician In Training for Skills Transfer  Contractor to make a provision for a project Sample line to Eskom	Month	3		
<ul> <li>standard as per latest revision. This is available at Eskom T &amp; Q department in New Germany.</li> <li>Contractor shall provide security guard/s to ensure the substation site</li> </ul>	Sum	3		
including offices, storage sheds and all material are protected from theft or any damage. The Contractor needs to ensure that the above mentioned is guarded 24hrs a day.	Month	3		
		<u> </u>	R	

Abaqulusi Ward 1 - Emadamini Electrification   Description   Ref.   Unit   Quantity   Supply Rate   Install   Rate   Total Pri	BILL	NO 2 - MEDIUM VOLTAGE SWITCHGEAR, SECTIONALISE	RS, TRA	ANSFO	RMERS, ET	С		
Transformers (Coastal Spec.) - pole mounted installation of existing or now Eskom-supplied transformers on an appropriate structure and secure as required including the termination of cables and conductors, the provision of suitable lugs for 35, 50 or 70mm conductor as required & all accessories. Excluding cable, conductors, and the transformer structure, include transport, offioadingloading, sales storage from appropriate Eskom store.  2.1 NEW Transformer 16k/A 22k/V320V  2.2 NEW Transformer 16k/A 22k/V320V  2.3 NEW Transformer 16k/A 22k/V320V  2.4 NEW Transformer 50k/A 22k/V320V  2.5 NEW Transformer 50k/A 22k/V320V  2.6 Existing transformers staying in same position only connecting LV  2.7 NEW Transformer 16k/A 22k/V320V  2.8 Section Enasker Medium Voltage Surge Arrestors  Supply, deliver, off load on site and safely store on site the following surge arrestors, complete with galvanised steel mounting brackets for securing the surge arrestor, nuts, bolts, washers and lock washers as specified. Socre the surge arrestors for securing the surge arrestor, but should be conductors. Supply, design of restore the following surge arrestors and the termination of conductors. Excluding the conductors and transform. Discharge current 10kA.  2.2W/2ZKv. MCOV 19.2W Surge arrestor and the termination of conductors and including the drilling off holes in wooden poles as required. 15K fused links.  3.10 No 16  3.10 No 6  3.10 No 9  3.10 No 16  3.10 No 16  3.11 No 9  3.11 No 16  3.12 No 9  3.12 No 16  3.13 No 9  3.14 No 9  3.15 No 16   Abaqı	ulusi Ward 1 - Emadamini Electrification				Р	RICE (EXCL VA	т)	
In stallation of existing or new Eskom-supplied transformers on an appropriate structure and secure as required including the termination of cabbs and conductors, the provision of autiable lugs for 35, 50 or 70mm conductor as required & all accessories, Excluding cable, conductors, and the transformer structure. Include transport, offloading/loading, safe storage from appropriate Eskom store.  2.1 NEW Transformer 16k/VA, 22k/V415V 3021 No 1 2.2 NEW Transformer 64k/VA, 22k/V415V 3021 No 1 2.4 NEW Transformer 64k/VA, 22k/V415V 3021 No 1 2.5 NEW Transformer 60k/VA, 22k/V415V 3021 No 1 2.6 Concecting LV 3021 No 1 2.7 NEW Transformer 16k/VA Auxi, 22k/V30V 3021 No 1 2.8 Section Breaker Medium Voltage Surge Arrestors Supply, deliver, off load on site and safely store on site the following surge arrestors, complete with galvanised steel mounting brackets for securing the surge arrestor, nuts, bolts, washers and lock washers as specified. Secure the surge arrestors and brackets to the transformer specified including the termination of conductors. Excluding the conductors and transformer. Discharge current 10kA.  22k/V2k/X, MCOV 19,2k/ Surge arrestor. 31mm/kV, coastal.  22k/V2k/X, MCOV 19,2k/ Surge arrestor. 31mm/kV, coastal.  3100 No 16  Re Supply and install link isolators as detailed including the installation of crossarm brackets and the termination of conductors. Excluding the conductors and including the drilling of holes in wooden poles as required. 15k fused links.  3100 No 9  Re Re Supply and install at V surge arrestor including luga and galvanised botts.  3101 No 9  Re Re Supply and install at LV surge arrestor including luga and galvanised botts.  3102 No 9  Re Re Supply and install at LV surge arrestor including luga and galvanised botts.  3103 No 6  Re Re Supply and install at LV surge arrestor including luga and galvanised botts.  3104 No 104 No 10	Item	Description		Unit	Quantity	Supply Rate	Install Rate	Total Price (R)
2.2 NEW Transformer 54kVA, 22kV/415V 2.3 NEW Transformer 54kVA, 22kV/415V 3021 No 3021	_	Installation of existing or new Eskom-supplied transformers on an appropriate structure and secure as required including the termination of cables and conductors, the provision of suitable lugs for 35, 50 or 70mm conductor as required & all accessories. Excluding cable, conductors, and the transformer structure. Include transport, offloading/loading, safe						
2.3 NEW Transformer 64kVA, 22kV/415V 2.4 NEW Transformer 50 kVA, 22kV/415V 3021 No 10 NeW Transformer 10kVA, 22kV/230V 2.5 NEW Transformer 10kVA Ausly 22kV/230V 2.6 Existing transformer staying in same position only connecting LV No 2.7 NEW Transformer 16kVA Ausl, 22kV/230V 3021 No 404 No 405 No 405 No 406 No	2.1	NEW Transformer 16kVA, 22kV/230V	3021	No	3			R -
2.4 NEW Transformer 50 kVA, 22kV/230V 2.5 NEW Transformer 100kVA, 22kV/230V 3021 No 2.6 connecting LV 2.7 NEW Transformer 16kVA Auxi, 22kV/230V 3021 No 3021 N	2.2	NEW Transformer 32kVA, 22kV/415V	3021	No	1			R -
2.5 NEW Transformer 100kVA, 22kV/230V 2.6 Existing transformers staying in same position only connecting LV 2.7 NEW Transformer 16kVA Auxi, 22kV/230V 3021 No No Section Breaker Medium Voltage Surge Arrestors Supply, deliver, off load on site and safely store on site the following surge arrestors, complete with galvanised steel mounting brackets for securing the surge arrestor, nuts, bolts, washers and lock washers as specified. Secure the surge arrestors and brackets to the transformer as specified including the termination of conductors. Excluding the conductors and transformer. Discharge current 10kA. 22kV/22kV, MCOV 19.2kV Surge arrestor, 31mm/kV, coastal.  Medium Voltage Sectionalisers and Links Supply and install link isolators as detailed including the installation of crossarm brackets and the termination of conductors and including the defilling of holes in wooden poles as required. 15k fused links.  2.10 Solid Links, Single Pole (2.5m X-arm) 1848 No 9 R Neutral Surge Arrestor Supply and install a LV surge arrestor including lugs and galvanised bolts.  2.12 6kV, 10kA Surge Arrestor 3088 No 6 R Supply and install all materials for the complete earthing of transformer structures for ABC networks as specified, Included in the rate shall be all required spikes, insulated copper conductor, galvanised conduits, staples, bare copper, excavations, backfilling, etc. The rate shall allow for all required MV earth electrodes, consisting of four earth spikes in accordance with the Distribution specifications, Part 2. Additional earth spikes/conductor shall be measured elsewhere if required.	2.3	NEW Transformer 64kVA, 22kV/415V	3021	No				
2.6 Existing transformers staying in same position only connecting LV  2.7 NEW Transformer 16kVA Auxi, 22kV/230V  3021 No  Section Breaker Medium Voltage Surge Arrestors Supply, deliver, off load on site and safely store on site the following surge arrestors, complete with galvanised steel mounting brackets for securing the surge arrestor, nuts, bolts, washers and lock washers as specified. Secure the surge arrestors and brackets to the transformer as specified including the termination of conductors. Excluding the conductors and transformer. Discharge current 10kA.  2.2 Exting 2 Exting 2 Exting 3 Supply and install link isolators as detailed including the installation of crossarm brackets and the termination of conductors and including the drilling of holes in wooden poles as required. 15K fused links.  2.10 Solid Links, Single Pole (2.5m X-arm)  No 1848 No 9  R  R  Reutral Surge Arrestor Supply and install at LV surge arrestor including lugs and galvanised bolts  6 RV, 10kA Surge Arrestor Supply and install all materials for the complete earthing of transformer structures for ABC networks as specified. Included in the rate shall be all required spikes, insulated copper conductor, galvanised conduits, staples, bare copper, excavations, backfilling, etc. The rate shall allow for all required MV earth electrodes, consisting of four earth spikes in accordance with the Distribution specifications, Part 2. Additional earth spikes/conductor shall be measured elewwhere if required.	2.4	NEW Transformer 50 kVA, 22kV/415V	3021	No	1			R -
2.7 NEW Transformer 16kVA Ausi, 22kV/230V  2.8 Section Breaker  Medium Voltage Surge Arrestors Supply, deliver, off load on site and safety store on site the following surge arrestors, complete with galvanised steel mounting brackets for securing the surge arrestor, nuts, bolts, washers and lock washers as specified. Secure the surge arrestors and brackets to the transformer as specified including the termination of conductors. Excluding the conductors and transformer. Discharge current 10kA.  22kV/22KV, MCOV 19.2kV Surge arrestor, 31mm/kV. coastal.  Medium Voltage Sectionalisers and Links Supply and install link isolators as detailed including the installation of crossarm brackets and the termination of conductors and including the diffling of holes in wooden poles as required. 15k fused links.  2.10 Solid Links, Single Pole (2.5m X-arm)  Neutral Surge Arrestor Supply and install a LV surge arrestor including lugs and galvanised bolts  2.12 (6kV, 10kA Surge Arrestor Transformer & Equipment Earthing Supply and install all materials for the complete earthing of transformer structures for ABC networks as specified, included in the rate shall be all required spikes, insulated copper conductor, galvanised conduits, staples, bare copper, excavations, backfilling, etc. The rate shall allow for all required MV earth electrodes, consisting of four earth spikes in accordance with the Distribution specifications, Part 2. Additional earth spikes/conductor shall be measured elsewhere if required.	2.5	NEW Transformer 100kVA, 22kV/230V	3021	No				
2.8 Section Breaker Medium Voltage Surge Arrestors Supphy, deliver, off load on site and safely store on site the following surge arrestors, complete with galvanised steel mounting brackets for securing the surge arrestor, nuts, boths, washers and lock washers as specified. Secure the surge arrestors and brackets to the transformer as specified including the termination of conductors. Excluding the conductors and transformer. Discharge current 10kA.  22kV/22KV, MCOV 19.2kV Surge arrestor, 31mm/kV, coastal.  Medium Voltage Sectionalisers and Links  Supply and install link isolators as detailed including the installation of crossarm brackets and the termination of conductors and including the drilling of holes in wooden poles as required. 15K fused links.  2.10 Solid Links, Single Pole (2.5m X-arm)  Neutral Surge Arrestor Supply and install a LV surge arrestor including lugs and galvanised bolts  2.12 6kV, 10kA Augiliary Surge Arrestor  Supply and install all materials for the complete earthing of transformer & Equipment Earthing  Supply and install all materials for the complete earthing of transformer structures for ABC networks as specified. Included in the rate shall be all required spikes, insulated copper conductor, galvanised conduits, staples, bare copper, excavations, backfilling, etc. The rate shall allow for all required MV earth electrodes, consisting of four earth spikes in accordance with the Distribution specifications, Part 2. Additional earth spikes/conductor shall be measured elsewhere if required.  2.14 MV Earth (1860 /1866B)  // 1866B  No 6  R	2.6	, , , , ,	3021	No				
Medium Voltage Surge Arrestors Supply, deliver, off load on site and safely store on site the following surge arrestors, complete with galvanised steel mounting brackets for securing the surge arrestor, nuts, bolts, washers and lock washers as specified. Secure the surge arrestors and brackets to the transformer as specified including the conductors and transformer. Discharge current 10kA.  22kV/22kV, MCOV 19.2kV Surge arrestor, 31mm/kV, coastal.  3100 No 16  R  Medium Voltage Sectionalisers and Links  Supply and install link isolators as detailed including the installation of crossarm brackets and the termination of conductors and including the drilling of holes in wooden poles as required. 15k fused links.  2.10 Solid Links, Single Pole (2.5m X-arm)  Neutral Surge Arrestor  Supply and install a LV surge arrestor including lugs and galvanised bolts  2.12 6kV, 10kA Surge Arrestor  Supply and install all materials for the complete earthing of transformer & Equipment Earthing  Supply and install all materials for the complete earthing of transformer structures for ABC networks as specified. Included in the rate shall be all required spikes, insulated copper conductor, galvanised conduits, staples, bare copper, excavations, backfilling, etc. The rate shall allow for all required MV earth electrodes, consisting of four earth spikes in accordance with the Distribution specifications, Part 2. Additional earth spikes/conductor shall be measured elsewhere if required.	2.7	NEW Transformer 16kVA Auxi, 22kV/230V	3021	No				
2.9 coastal.  Medium Voltage Sectionalisers and Links  Supply and install link isolators as detailed including the installation of crossarm brackets and the termination of conductors and including the drilling of holes in wooden poles as required. 15K fused links.  2.10 Solid Links, Single Pole (2.5m X-arm)  1848 No 9  R  No 1848 No 9  R  No 1848 No 9  R  No 1848 No 9  R  No 1848 No 9  R  No 6  R  No 6  R  R  Supply and install a LV surge arrestor including lugs and galvanised bolts  Supply and install all materials for the complete earthing of transformer & Equipment Earthing  Supply and install all materials for the complete earthing of transformer structures for ABC networks as specified. Included in the rate shall be all required spikes, insulated copper conductor, galvanised conduits, staples, bare copper, excavations, backfilling, etc. The rate shall allow for all required MV earth electrodes, consisting of four earth spikes in accordance with the Distribution specifications, Part 2. Additional earth spikes/conductor shall be measured elsewhere if required.  No 6  R  No 6  R  R  R  R  R  R  R  R  R  R  R  R  R	2.8	Medium Voltage Surge Arrestors Supply, deliver, off load on site and safely store on site the following surge arrestors, complete with galvanised steel mounting brackets for securing the surge arrestor, nuts, bolts, washers and lock washers as specified. Secure the surge arrestors and brackets to the transformer as specified including the termination of conductors. Excluding the conductors and		No				
installation of crossarm brackets and the termination of conductors and including the drilling of holes in wooden poles as required. 15K fused links.  2.10 Solid Links, Single Pole (2.5m X-arm)  2.11 Fused Links, Single Pole (2.5m X-arm)  Neutral Surge Arrestor  Supply and install a LV surge arrestor including lugs and galvanised bolts  2.12 6kV, 10kA Surge Arrestor  3088 No 6  R  6kV, 10kA Auxiliary Surge Arrestor  Transformer & Equipment Earthing  Supply and install all materials for the complete earthing of transformer structures for ABC networks as specified. Included in the rate shall be all required spikes, insulated copper conductor, galvanised conduits, staples, bare copper, excavations, backfilling, etc. The rate shall allow for all required MV earth electrodes, consisting of four earth spikes in accordance with the Distribution specifications, Part 2. Additional earth spikes/conductor shall be measured elsewhere if required.  MV Earth (1860 /1866B)  R  R  R  R  R  R  R  R  R  R  R  R  R	2.9	coastal.	3100	No	16			R -
Pused Links, Single Pole (2.5m X-arm)  Neutral Surge Arrestor Supply and install a LV surge arrestor including lugs and galvanised bolts  2.12 6kV, 10kA Surge Arrestor 3088 No 6 R  2.13 6kV, 10kA Auxiliary Surge Arrestor Transformer & Equipment Earthing  Supply and install all materials for the complete earthing of transformer structures for ABC networks as specified. Included in the rate shall be all required spikes, insulated copper conductor, galvanised conduits, staples, bare copper, excavations, backfilling, etc. The rate shall allow for all required MV earth electrodes, consisting of four earth spikes in accordance with the Distribution specifications, Part 2. Additional earth spikes/conductor shall be measured elsewhere if required.  MV Earth (1860 /1866B)  R	•	installation of crossarm brackets and the termination of conductors and including the drilling of holes in						
Neutral Surge Arrestor Supply and install a LV surge arrestor including lugs and galvanised bolts  2.12 6kV, 10kA Surge Arrestor 3088 No 6  R  Supply and install all materials for the complete earthing of transformer & Equipment Earthing  Supply and install all materials for the complete earthing of transformer structures for ABC networks as specified. Included in the rate shall be all required spikes, insulated copper conductor, galvanised conduits, staples, bare copper, excavations, backfilling, etc. The rate shall allow for all required MV earth electrodes, consisting of four earth spikes in accordance with the Distribution specifications, Part 2. Additional earth spikes/conductor shall be measured elsewhere if required.  1860  AND  R  R  R  R  R  R  R  R  R  R  R  R  R	_	, ,						
Supply and install a LV surge arrestor including lugs and galvanised bolts  2.12 6kV, 10kA Surge Arrestor  6kV, 10kA Auxiliary Surge Arrestor  Transformer & Equipment Earthing  Supply and install all materials for the complete earthing of transformer structures for ABC networks as specified. Included in the rate shall be all required spikes, insulated copper conductor, galvanised conduits, staples, bare copper, excavations, backfilling, etc. The rate shall allow for all required MV earth electrodes, consisting of four earth spikes in accordance with the Distribution specifications, Part 2. Additional earth spikes/conductor shall be measured elsewhere if required.  2.14 MV Earth (1860 /1866B)  R R  R R  R R  R R  R R  R R  R R  R	2.11	Fused Links, Single Pole (2.5m X-arm)	1848	No	9			R -
Supply and install all materials for the complete earthing of transformer structures for ABC networks as specified. Included in the rate shall be all required spikes, insulated copper conductor, galvanised conduits, staples, bare copper, excavations, backfilling, etc. The rate shall allow for all required MV earth electrodes, consisting of four earth spikes in accordance with the Distribution specifications, Part 2. Additional earth spikes/conductor shall be measured elsewhere if required.  2.14 MV Earth (1860 /1866B)  //866B No 6	_	Supply and install a LV surge arrestor including lugs and galvanised bolts 6kV, 10kA Surge Arrestor 6kV, 10kA Auxiliary Surge Arrestor	3088					
2.14 MV Earth (1860 /1866B) /1866B No 6 R		Supply and install all materials for the complete earthing of transformer structures for ABC networks as specified. Included in the rate shall be all required spikes, insulated copper conductor, galvanised conduits, staples, bare copper, excavations, backfilling, etc. The rate shall allow for all required MV earth electrodes, consisting of four earth spikes in accordance with the Distribution specifications, Part 2. Additional earth spikes/conductor shall be measured						
	0.44			,	_			
					ь			-
TOTAL : Carried forward to summary Page 18 p of 336		TOTAL : Carried forward to summary Dage 19	9 of 336					Р

BILL I	NO 3 - MEDIUM VOLTAGE OVERHEAD DISTRIBUTION SYSTEM						
Abaqı	ulusi Ward 1 - Emadamini Electrification					PRICE (EXCL \	/AT)
Item	Description	DDT Ref	Unit	Quantity	Supply Rate	Install Rate	Total Price (R)
	Conductor						
	Take delivery off, safely store on sealed drums with ends adequately secured and transport to site conductor as specified. String conductor as specified including splices, jumper conductor ties, strain clamps, suspension clamps, tensioning, sagging, etc.						
Note	The following dimensions will all be "Conductor Length" with 10% is allowed for slack & wastage. Additional wastage/slack is for Contractor's account.						
3.1.1	ACSR Hare - 3 Phase - Conductor length ACSR Fox - 3 Phase - Conductor length	3136 3136	m m	9 384			R -
3.1.2	ACSR Fox - 2 Phase - Conductor length	3136	m	1 150			R -
Note	MV STRUCTURES  Allow for the following structures and insulator assemblies in accordance with the specifications as shown in the drawings. Include the specified crossarms, drilling of holes and treating of such holes, the provision of the U-nails and earthwire in accordance with Eskom specifications. All jumpers to links and transformers to be installed with PVC black pipe. Supply and installation of 15m of 3/3.35x1100MPa steel wire for a BIL for each pole structure as per Eskom specification. Exclude the supply and planting of poles, stays and struts which are measured elsewhere. Insulators as per E1090SS. Include BIL insulation co-ordination for shared MV & LV structures as per 03TB-34 or later approved Eskom standard.						
	Supply and install all material as specified for the construction of the following MV structures. Including bonding of hardware and earthing. All excavations, poles, crossarms and stays are measured elsewhere.  Note: RX refers to statutory road crossings with the relevant DDT0257-10kN-31mm/kV post insulator, full wrap tie or DDT0251-40kN-31mm/kV						
	longrod with pistolgrips.  MV STRUCTURES General Arrangement						
3.2	Delta / 2,5m Wood X-arm - Intermediate - 0° Deviation	1340B	No				
3.3	Delta / 2,5m Wood X-arm - Intermediate - 0° Deviation(RX)	1340B	No	30			R -
3.4	Delta / 2,5m Wood X-arm - Strain - 0° Deviation	1343	No				
3.5	Delta / 2,5m Wood X-arm - Strain - 0° Deviation(P.G/V.D)	1343	No	10			R -
3.6	Delta / 2,5m Wood X-arm - Strain - Medium(1°-60°) Deviation	1344	No				
3.7	Delta / 2,5m Wood X-arm - Strain - Medium(1°-60°) Deviation(PG)	1344	No	20			R -
3.8	Delta / 2,5m Wood X-arm - Strain - Terminal	1346	No	6			R -
3.9	Delta / 2,5m Wood X-arm - Strain - Terminal(P.G/V.D)	1346	No	6			R -
3.13	Delta / 2,5m Wood X-arm - Intermediate - 0° Deviation	1740B	No	12			R -
3.14	Delta / 2,5m Wood X-arm - Intermediate - 0° Deviation(RX)	1740B	No	7			R -
3.15	Delta / 2,5m Wood X-arm - Strain - 0° Deviation	1743	No	4			R -
3.16	Delta / 2,5m Wood X-arm - Strain - 0° Deviation(RX)	1743	No	2			R -
3.17	Delta / 2,5m Wood X-arm - Strain - Medium(1°-60°) Deviation	1744	No	7			R -
3.18	Delta / 2,5m Wood X-arm - Strain - Medium(1°-60°) Deviation(PG)	1744	No	1			R -
3.19	Delta / 2,5 Wood X-arm - Strain - Terminal	1746	No	4			R -
	Amount carried over to next page						R -

Item	Description		Unit	Quantity	Supply Rate	Install Rate	Total Price (R)
	Amount brought forward from previous page						
	Auxiliary Structures						
3.25	3Ph, Take off (2.5m X-arm)	1804	No	5			R -
	3Ph, Take off (2.5m X-arm)(RX)	1804	No				
3.26.	3 Phase Take-off - H-Pole (3,5m Wooden X-arm)	1806	No				
3.27	2Ph, Take off (2.5m X-arm)	1814	No				
3.28	2Ph, Take off (2.5m X-arm)(RX)	1814	No	5			R -
3.29	Section Links-cut-out-3,5 / 4.5m Wood X-arm / H pole	1847	No				
3.3	Section Links - Cut-outs - 2,5m Wood X-arm / Single Pole (dual phase)	1848	No	5			R -
3.31	Section Links - Cut-outs - 2,5m Wood X-arm / Single Pole (three phase)	1848	No	3			R -
3.32	Transformer - Single Pole mount (16-100kVA).	1860	No				
3.33	Transformer - Pole mounting out-of-line (16-100kVA) includes 1860 module, etc as per EI067-MVL) and excludes transformer.	1866B	No	6			R -
3.34	Auto Recloser Structure - General Arrangement	1829B	No				
3.35	MV Test (per transformer installation) Ref. SCSASABZ1		No	6			R -
3.36	MV Phasing of line, ensure correct phasing.	311	Sum	6			R -
	Supply and install MV Full tension Joints as per the DDT Standards						
3.37.	Fox - Line splice	3228	Ea	10			R -
3.38	Allow for MV joints between different conductor types	3073	Ea	15			R -
3.39	Insulation Co-ordination and Bonding. The unit rate shall allow for the complete installation of a BIL lightning downwire on existing structures, including the excavation around the pole, the installation of a 3x3.5mm galvanised BIL downwire, installed down the pole in accordance with the Eskom standard, 03TB-34.	310	Ea	9			R -
	Amount carried over to next page						R -

BILL	NO 4 - SUPPORT FOR OVERHEAD RETICULATION						
Abaqı	ulusi Ward 1 - Emadamini Electrification				PRICE (EXCL V	AT)	
Item	Description	DDT Ref	Unit	Quantity	Supply Rate	Install Rate	Total Price (R)
	Poles and Crossarms Recieve and safely store the following poles. Transport to site of works and install pole in excavated hole, including cutting and scafing, kicking blocks, bonding, treating, etc. Excavations and compaction are measured elsewhere.						
4.1	7m Pole, 120-139mm top diameter	0050	No	120			R -
4.2	9m Pole, 140-159mm top diameter	0055	No	18			R -
4.3	9m Pole, 160-179mm top diameter	0055	No				
	10m Pole, 160-179mm top diameter	0052	No				
4.4	10m Pole, 180-199mm top diameter	0052	No				
4.5	11m Pole, 160-179mm top diameter	0051	No				
4.6	11m Pole, 180-199mm top diameter	0051	No	35			R -
4.7	11m Pole, 200-219mm top diameter	0051	No	10			R -
4.8	12m Pole, 180-199mm top diameter	0052	No				
4.9	12m Pole, 200-219mm top diameter	0052	No				
4.10	13m Pole, 180-199mm top diameter	0052	No				
	14m Pole, 200-219mm top diameter	0053	No				
	Recieve, off load and install the following wooden cross arms.						
4.11	2.5m, 140-159mm Diameter	0061	No	133			R -
4.12	3.5m, 140-159mm Diameter	0061	No	6			R -
7	4.5m, 140-159mm Diameter	0061	No	60			D
	6m,160-179mm Diameter  Stays, Flying Stays and Anti-Climbing Devices The unit price for a standard stay and an aerial stay shall exclude the wooden poles, but include the stay wire, stay rods, insulators, stay plate, stay guards, bitumastic paint, guy grip dead end, earthing of stay, line splice, precast concrete slabs, pole clamp, nuts bolts and washers etc.  The following stays shall be in accordance with the specification and shall include a stay plate		No	63			R -
4.15	MV Stay (DDT0341 rev 9, BIL 40kV & 150kV)	0341	No	96			R -
4.16	LV Stay  The following flying stays shall be in accordance with the specifications and shall include poles & excavation.	0341	No	162			R -
7	MV Flying Stay	0343	No	3			R -
4.18	LV Flying Stay	1168	No	9			R -
	The following struts shall be in accordance with the specifications and shall include poles & excavation.						
4.19	MV Strut	0342	No	7			R -
4.20.	LV Strut	1167	No	15			R -
	Amount carried over to next page						R -

		ı					
Item	Description	DDT Ref	Unit	Tender Quantity	Supply Rate	Install Rate	Total Price (R)
	Amount brought forward from previous page						
	Excavations and Compaction						
Note	The excavations for service connections are measured						
	elsewhere  Determination of pole positions, excavate, and						
	supply a mechanical boring device if required. The						
	rate shall include backfilling, compaction to 93%						
	MOD AASHTO density, and where necessary the supply and transportation of suitable ground as						
	may be required to receive the desired compaction,						
	except where cement is specified. Any damage to existing services shall be made good by the						
	Contractor at his own expense and to the approval or the PM(C).						
	Before excavation work begins the Contractor shall						
	evaluate the stability of the ground before excavation						
	begins. Contractor shall use warning signs, positioned next to an excavation within which persons are working						
	or carrying out inspections. Ref CR (11)						
4.21	Hole for 7m pole - 1.3m deep	0332	No	120			R -
4.22	Hole for 9m pole - 1.5m deep	0332	No	18			R -
-	Hole for 10m pole - 1.5m deep	0333	No				
_	Hole for 11m pole - 1.8m deep	0332	No	35			R -
4.24	Hole for 12m pole - 2.0m deep	0332	No				
	Hole for 13m pole - 2.2m deep Hole for 14m pole - 2.4m deep	0332	No No				
4.25	Hole for MV stay - 1.5m deep	0350	No	96			R -
	Hole for LV stay - 1.4m deep	0350	No	162			R -
4.27	Hole for MV strut - 1.8m deep	0342	No	7			R -
4.28	Hole for LV strut - 1.3m deep	0342	No	15			R -
	Rock excavation (the contractor is to provide adequate						
	measures to ensure a rock hole be exacavated to the correct depth to faciliate the correct infrastructure, this						
	may include the excavation per rock hole by		No	294			R -
	mechanical means viz. Compressors dependent on diesel fuel to accommodate Jackhammer drilling or						
	blasting). These Rock Holes to be verified by the						
4 29	relevant Clerk of Works. Ref CR (11) Provissional Drilling		No	324			R -
4.20	_		140	0 <b>2</b> 4			
	Bush Clearing						
4.30	Provision for bush clearing by the acredited sub-		m^2	27000			В
	contractor.		m^2	27000			R -
	Pole Labels Supply and install labels on all poles in accordance						
	with the specifications including the provision of all						
	fixing materials. Allow for pick-up, loading/offloading, transport from appropriate						
	Eskom store. Labels to the Eskom Standard						
	SCSSCAAP5, TQGHSP05 and TQCSS005. Dynatape, masking tape or Hand written with						
	permanent marker type labels are not to be						
	considered for operational labelling under any circumstances.						
4.31	Equipment labels		No	12			R -
7	Mosdorfer fuse rating labels (transformers)		No	6			R -
	Fuse - "Warning. Open all fuses before working on line"		No	6			R -
	Transformer Max fuse notification label		No	6			R -
	Feeder Max Fuse notification label		No	12			R -
		3202		12			R -
	RACFreeder Labels	<b>3202</b> ge <b>193</b> o	336 No	20			R -
_	Scope of works Pole Top Box Phase Labels		No	70	C3.4 Constructio	n	R -
	TOTAL : Carried forward to summary			TOTALS		-	R -

Item	Description		Unit	Quantity	Supply Rate	Install Rate	Total Price (R)
	Amount brought forward from previous page						
	General Items						
4.40	Supply and install labels Spiral Vibration Dampers Spiral Vibration Dampers (Fox) Spiral Vibration Dampers (Hare) Supply and Install Anti-Climbing Devices as per the latest DDT Standards. Anti-Climbing Device as per 05T109. Including the removal of existing spikes. Galvanised wire per DDT3170. Galvanises staples per DDT3129. Install on	3175 3175	Each Each	30			R -
4.42	trfr strs, struts, parallel MV stay wires, recloser str, OOL trfr strs, etc, structures where meter boxes or equipment is installed <2m above ground, any str having cable secured by means of strapping <0.5m apart, any climbable pole str, apparatus etc as per DDT standard.	0399	per str	24			R -
4.43	Supply and Install, where MV & LV Earths are on the same structure, UV protected black PVC pipe of length 1.2m on each earth downwire, cutting the top and bottom of the pipe at 45deg, split the pipe so as to insert the MV/LV earth and installing clout nails at the bottom and top.		per str	12			R -
	TOTAL : Carried forward to summary			TOTALS			R -

Abaqı	ulusi Ward 1 - Emadamini Electrification				F	PRICE (EXCL VAT	Γ)	
			Unit				<u>,                                      </u>	
Item	Description	DDT Ref		Quantity	Supply Rate	Install Rate	Total Price (	R)
	LV ABC (insulated neutral)							
	The LV insulated aerial bundle conductor system shall be in accordance with SABS 1418 and insulated in							
	accordance with SABS 0198 and the Distribution							
	Standard Part 3. Ref. EI-092-LVL  The unit rate per meter shall include the tensioning and stringing of the bundle in accordance with the sag and stress tables provided by the manufacturer with all plant, equipment and accessories required to erect an LV overhead bundled distribution line i.e. Drum trailer, winch, wind-off pulleys, pulling rope/cable with connection, dynamometer, slide-lock, sheathed synthetic-fibre belt, woven snatch belt, snatch block, tackle, shackle, etc.							
Note	Measured lengths for stringing shall be net line route lengths and unit rates shall include for sag, off-cuts, etc.							
	Supply, safely store and transport to site and string. The conductor will be delivered on sealed drums and adequate allowance shall be made for the correct handling thereof.							
	Ensure correct tooling - D 51 Hydraulic Crimping Tool and dies, a 13mm tube spanner with T – bar, Phase separators, Slings, Wide Grooved Pulleys, Steel Pulling Socks, Pulling Swivels, Rickie, Come-along and Dynamometers.							
5.1	Single phase ABC (35mm <sup>2,</sup> 2 core) - insulated neutral	3141	m	2375			R	-
5.2	Dual phase ABC (35mm <sup>2</sup> , 3 core) - insulated neutral	3141	m	1200			R	-
5.3	Three phase ABC (35mm <sup>2,</sup> 4 core) - insulated neutral	3141	m	1500			R	-
5.4	Single phase ABC (70mm <sup>2,</sup> 2 core) - insulated neutral	3141	m					
5.5	Dual phase ABC (70mm <sup>2</sup> ·3 core) - insulated neutral	3141	m	3300			R	-
5.6	Three phase ABC (70mm <sup>2,</sup> 4 core) - insulated neutral	3141	m	1500			R	-
	LV STRUCTURES							
	Allow for the assembly of the following LV strain and suspension assemblies in accordance with the specifications shown in the drawings. Including all earthing, drilling of holes and treating of drilled holes. All LV ABC hardware, line connectors, PVC cable ties, nuts, bolts, washers, lock washers shall be allowed for in the appropriate item below. Excluding the supply and planting of poles, stays and struts, which are measured elsewhere. Use strain assembly when crossing roads.							
	Supply and install all the materials as specified for the following:							
5.6	Single Phase ABC Intermediate Assembly	1153	No	50			R	-
5.7	Single Phase ABC Terminal Assembly	1154	No	25			R	-
5.8	Single Phase ABC Strain Assembly (0-60 deg)	1155	No	15			R	-
5.9	Single Phase ABC Intermediate Supporting Assembly	1156	No	10			R	-
5.10. 5 11	Single Phase ABC Intermediate Suspension Assembly	1158	No No	1			R	-
	Single Phase ABC Tee from Intermediate Single Phase ABC Tee from Strain	1157 1159	No No	3 4			R R	_
		1159 19 <b>5</b> 16 <b>3</b> 36		4 5			R	-
	Anount carried over to next page		. 10	<u> </u>		1	R	_

				Tender			
Item	Description	DDT Ref	Unit	Quantity		Total Price	e (R)
	Amount brought forward from previous page						
5.13	Dual Phase ABC Intermediate Assembly	1145	No	25		R	-
5.14	Dual Phase ABC Terminal Assembly	1146	No	10		R	-
5.15	Dual Phase ABC Strain Assembly (0-60 deg)	1147	No	5		R	-
5.16	Dual Phase ABC Strain Assembly (60-90 deg)	1148	No	5		R	-
5.17	Dual Phase ABC Tee from Intermediate	1149	No	1		R	-
5.18	Dual Phase ABC intermediate Suspension	1150	No	2		R	-
5.19	Dual Phase ABC Tee from Strain	1151	No	4		R	-
5.20.	Dual Phase ABC intermediate Strain Assembly	1152	No	5		R	-
5.21	Three Phase ABC Intermediate Assembly	1100	No	25		R	-
5.22	Three Phase ABC Terminal Assembly	1120	No	20		R	-
5.23	Three Phase ABC Strain Assembly (0-60 deg)	1121	No	20		R	-
5.24	Three Phase ABC Strain Assembly (60-90 deg)	1122	No	5		R	-
5.25	Three Phase ABC Tee from Intermediate	1140	No	2		R	-
5.26	Three Phase ABC intermediate Suspension	1141	No	3		R	-
5.27	Three Phase ABC Tee from Strain	1142	No	4		R	-
5.28	Three Phase ABC X intermediate Strain	1143	No	3		R	-
	LV Fuse Switch Units						
	Supply, deliver to site, off load on site and safely store. The fused switch shall be supplied complete with the pole mounting bracket, nuts, bolts, washers, etc. for securing the unit to the wooden pole. The fuses shall be supplied with the fuse switch unit. Fuse ratings shall be as shown on the drawings. Install the on load fused disconnecting switch on the transformer structure including the drilling of holes as required, including the termination of the LV ABC to the unit. Fuse ratings below allow for 120% overload.						
	One fuse unit is for the transformer and one unit per LV feeder for isolation/protection.  63A Single Phase Load disconnecting switch						
5.29	MORSDORPHER	309	No	12		R	-
5.30.	80A Dual Phase Load disconnecting switch MORSDORPHER	309	No	9		R	-
	Amount carried over to next page					R	-

				Tender			
Item	Description	DDT Ref	Unit	Quantity			Total Price (R)
	Amount brought forward from previous page						
Note	Earthing of LV Network  All MV transformer earthing is measured elsewhere and all LV earths per structure are measured with the structure. This section is intended for LV earths at transformers.						
	Allowance shall be made for the testing (including earth loop impedance) of the earth resistance for the entire reticulation system in accordance with the TN-C-S earthing system as defined in the Distribution Standard Part 2 and any earth tests which may be required in terms of the standard and detailed specifications. Use 2 x H-Crimps - neutral connection point.						
5.31	LV Earth (Crowsfoot)	627	No	12			R -
5.32	LV Earth (single point)	642	No				
	LV Pole Mounted Service Boxes (Outdoor)						
	Supply and install on a wooden and/or concrete pole						
	a pole mounted distribution box as specified complete with pole mounting brackets, cable ties,						
	PG clamps, miniture circuit breaker(s), neutral,						
	phase and earth bars, insulated copper tails for						
	connecting to LV ABC, insulation piercing						
	connectors and factory installed cable openings. Included shall be the stainless steel strapping and						
	buckles and terminations of the tails onto the LV						
	ABC.						
5.33	1-4. York type box, complete with insulated copper tails, insulation piercing connectors and nylon compression glands, per DDT0180.	3055	No	63			R -
5.34	5-8. York type box, complete with insulated copper tails, insulation piercing connectors and nylon compression glands, per DDT0180.		No	66			R -
	Testing						
	Allowance shall be made for the testing of each LV ABC distributor on accordance with the project specification. Included shall be the provision of test certificates and all documentation as required.						
5.35	LV Test, per zone. Ref. SCSASABZ1		No	30			R -
	General						
5.36	Supply and install ABC Full tension Joints as per the DT						
	Standards - Single phase ABC (35mm²) Supply and install ABC Full tension Joints as per the DT		Ea	8			R -
5.38	Standards - Dual phase ABC (35mm²) Supply and install ABC Full tension Joints as per the DT		Ea	8			R -
	Standards - Three phase ABC (35mm²)		Ea	8			R -
5.39	<b>Phasing:</b> Allow for verification of the customer phasing as per the Construction drawings.		zone	63			R -
	TOTAL : Carried forward to summary			TOTALS			R -
		l	I	l	1	1	1

BILL NO 6 - HOUSE CONNECTIONS: R250 per connection will be held back by Eskom until the timeous delivery and population of the PCS file as required for the CDX download.

Abco	Abaqulusi Ward 1 - Emadamini Electrification				-	PRICE (EXCL VA	r\
Abaqı	ulusi ward 1 - Emadamini Electrification	DDT			r	RICE (EXCL VA	
Item	Description	DDT Ref	Unit	Quantity	Supply Rate	Install Rate	Total Price (R)
	House Connections Installation, testing, commissioning complete including CoC, IC's, sealing and as built drawing on completion. Includes installation of EMU in PTB, Ready Board, CIU LCD Keypad, Meter Seal and associated accessories. Make good house walls. Poles and excavations are measured elsewhere. Includes installation of meter.						
6.1	Type B - (service pole 100%)	0361	No	63			R -
	Conductor						
Note	Measured lengths for stringing shall be net line route lengths and unit rates shall include for sag, cut-offs etc.						
	Installation including all glands, lugs, shrouds, termination and connections as required. Include safe storage, transport to site and stringing. Connect power (L-N) from EMU to Ready Board (E/L & MCB) and Comms pair from EMU to CIU.						
6.2	Cable 1kV 1C 6mmSQ Concentric Cable		m	3500			R -
6.3	Cable 1kV 1C 10mmSQ Concentric Cable		m				
	Sundry Items  Recieve and safely store the following poles. Transport to site of works and install pole in excavated hole, including cutting and scafing, kicking bolts, bonding, treating, etc. Excavation and compaction are measured elsewhere.						
6.4	5m pole, 80-100mm top diameter	0058A	No	63			R -
6.5	7m Pole, 100-120mm top diameter	0050B	No				
6.6	9m Pole, 140-159mm top diameter	0055B	No				
6.7	LV Stay (Service Connection)	0341	No				
6.8	Intermediate Suspension / Strain assembly	0366/ 0384	No	63			R -
6.9	Install <b>'Unique Seals'</b> supplied by Eskom and record on Control Sheet and PCS file. Two seals per unit.		No	63			R -
6.10	20A Split Meter		No	63			R -
6.11	Ready Boardy		No	63			R -
6.12	Supply and install <b>Marketing Labels</b> complete. Labels to the Eskom Standard SCSSCAAP5 and TQGHSP05.		No	63			R -
	Submit populated <b>Control Sheet</b> and <b>PCS CorDaptix</b> information to the Project Engineer upon the successful energising of a customer. Payment will only be made upon the successful loading of the Data onto Eskom's CorDaptix software system. Resolve queries raised by Eskom and the Engineer.			63			R -
6.14 6.15	Excavations and Compaction						
	Determination of pole positions, excavate, and supply a mechanical boring device if required. The rate shall include backfilling, compaction to 93% MOD AASHTO density, and where necessary the supply and transportation of suitable ground as may be required to receive the desired compaction, except where cement is specified. Any damage to existing services shall be made good by the Contractor at his own expense and to the approval or the PM(C).						
6.17	Hole for 5m service pole - 1.0m deep		No	63			R -
6.18	Hole for 7m service pole - 1.3m deep		No	6			R -
<b>P</b>	Hole for 9m service pole - 1.5m deep	100 af 22	No				
6.20 CONT	RACT	<b>198</b> of <b>33</b>	No No				
Part C3	TOTAL OF WORKS forward to summary			TOTALS C	3.4 Construction		R -

# ELECTRIFICATION OF 101 CONNECTIONS IN ABAQULUSI WARD 4, ESIGANGENI (26HH), MPEMBENI (28HH), NGEDLANE (21HH) AND SOZWANE (26) VILLAGE(S)

**Bill of Quantities Abaqulusi Ward 4** 

KZN CoGTA - Abaqulusi Ward 4 Electrification			PRICE (EXCL V
Establish Site(Fixed Items)			
Provision for compliance with all the General Conditions of Contract,			
Special Conditions of Contract All necessary insurances required to			
adequately cover the works, Workmans Compensation, Travelling, Out-			
of-Town Allowance, Maintenance and Guarantee	Sum	1	
Establish facilities on site. The Contractor shall provide a fenced space			
with fence at least 1.8m high with a lockable gate for a temporary Site			
Office and Stores where all drawings and Specifications will be kept, as			
well as the provision of safe and secure staorage	Sum	1	
Facilities for Contractor :			
a) Offices & storage sheds	Sum	1	
b) Establishment of staff accommodation, office accommodation on			
site for site			
meetings and a Clerk of Works including office furniture and			
telephone / telefax			
as specified and facilities.	Sum	11	
c) Ablution & latrine facilities	Sum	11	
e) Water supplies, electric power & communications	Sum	1	
Removal of all items indicated above upon completion of construction and making good and restoring of the Site to the satisfaction of the			
and making good and restoring of the Site to the satisfaction of the Project Manager.	Sum	1	
Provision of "As Built" drawings.	Sum	1	
	Juiii		
The Contractor shall make an order for one project signboard bearing			
the name of the project, the name and logo of the Client, and the Contractor.	Sum	1	
Provision for Legal and Contractual Compliance.	Sum	1	
Provision of personal protective equipment and clothing for all the			
contractor's staff, including sub-contractors and 15 EPWP Personels.	Sum	1	
Provision of eafaty measures a g. Fall arrest systems, shoring for			
safety purposes etc.	Sum	1	
Compliance with OH&S Act & Construction Regulations.	Sum	1	
Compliance with the Requirements for the Expanded Public Works			
Programme (Inci. monthly reports).	Sum	11	
The Contractor shall make allowance to receive, transport to site, offload			
and stack the materials supplied to the contract. The rate shall also			
include the implementation and maintenance of a Materials Management	_		
System for the duration of the contract.	Sum	1	
On Completion of the project, all dismantled materials (transformers,			
mini-subs etc.) shall be reconciled and quantified. Once authorised by			
the Consultant/Project Manager, this materials shall be transported to	_	4	
Eskom New Germany stores using the correct material return forms.	Sum	1	
Operate and Maintain Facilities on Site(Time Related Items)     Facilities for Contractor:			
a) Offices & storage sheds	Month	5	
b) Ablution & latrine facilities	Month	5	
d) Water supplies, electric power & communications	Month	5 5	
Provision of office accommodation on site for site meetings and a Clerk			
of Works including office furniture and telephone / telefax as specified.	Month	5	
6 Contract management and full time supervision of the works	Month	5	
Community Liaison Officer conversant in Zulu and local cultural norms.			
7 Main contractor to make a minimum of R180 daily allowance to 15	Month	5	
EPWP/ Casual workers.			
8 Municipality Technician In Training for Skills Transfer x 2	Month	5	
Contractor to make a provision for a project Sample line to Eskom			
9 standard as per latest revision. This is available at Eskom T & Q			
department in New Germany.	Sum	5	
Contractor shall provide security guard/s to ensure the substation site			
including offices, storage sheds and all material are protected from theft	Month	5	
or any damage. The Contractor needs to ensure that the above	IVIOLIUI	3	
mentioned is guarded 24hrs a day.			

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	KZN CoGTA - Abaqulusi Ward 4 Electrification				P	RICE (EXCL VA	Т)
tem	Description	DDT Ref.	Unit	Quantity	Supply Rate	Install Rate	Total Price (R
2.2 2.3	Transformers (Coastal Spec.) - pole mounted Installation of existing or new Eskom-supplied transformers on an appropriate structure and secure as required including the termination of cables and conductors, the provision of suitable lugs for 35, 50 or 70mm conductor as required & all accessories. Excluding cable, conductors, and the transformer structure. Include transport, offloading/loading, safe storage from appropriate Eskom store. NEW Transformer 16kVA, 22kV/230V NEW Transformer 32kVA, 22kV/415V NEW Transformer 64kVA, 22kV/415V NEW Transformer 50 Kva, 22kV/415V NEW Transformer 100kVA, 22kV/230V Existing transformers staying in same position only connecting LV		5 5 5 5 5	21 1			R R
2.7 2.8	NEW Transformer 16kVA Auxi, 22kV/230V Section Breaker  Medium Voltage Surge Arrestors Supply, deliver, off load on site and safely store on site the following surge arrestors, complete with galvanised steel mounting brackets for securing the surge arrestor, nuts, bolts, washers and lock washers as specified. Secure the surge arrestors and brackets to the transformer as specified including the termination of conductors. Excluding the conductors and transformer. Discharge current 10kA.		No No				
2.9	Coastal.  Medium Voltage Sectionalisers and Links Supply and install link isolators as detailed including the installation of crossarm brackets and the termination of conductors and including the drilling of holes in wooden poles as required. 15K fused links.	3100	No	25			R
	Fuse Links, Single Pole (3.5m X-arm) Fused Links, Single Pole (2.5m X-arm)	1847 1848	No No	2 38			R R
	Neutral Surge Arrestor Supply and install a LV surge arrestor including lugs and galvanised bolts						
	6kV, 10kA Surge Arrestor 6kV, 10kA Auxiliary Surge Arrestor  Transformer & Equipment Earthing Supply and install all materials for the complete earthing of transformer structures for ABC networks as specified. Included in the rate shall be all required spikes, insulated copper conductor, galvanised conduits, staples, bare copper, excavations, backfilling, etc. The rate shall allow for all required MV earth electrodes, consisting of four earth spikes in accordance with the Distribution specifications, Part 2. Additional earth spikes/conductor shall be measured elsewhere if required.		No No	25			R
	MV Earth (1860 /1866B) Auto Recloser Earthing Kit	/1866B 1829B	No No	25			R

	KZN CoGTA - Abaqulusi Ward 4 Electrification					PRICE (EXCL \	/AT)
em	Description	DDT Ref	Unit	Quantity	Supply Rate	Install Rate	Total Price (R
	Conductor  Take delivery off, safely store on sealed drums with ends adequately secured and transport to site conductor as specified. String conductor as specified including splices, jumper conductor ties, strain clamps, suspension clamps, tensioning, sagging, etc.						
ote	The following dimensions will all be "Conductor Length" with 10% is allowed for slack & wastage. Additional wastage/slack is for Contractor's account.						
1.1	ACSR Hare - 3 Phase - Conductor length ACSR Fox - 3 Phase - Conductor length ACSR Fox - 2 Phase - Conductor length	3136 3136 3136	m m m	50 612 9 936			R R
ote	MV STRUCTURES  Allow for the following structures and insulator assemblies in accordance with the specifications as shown in the drawings. Include the specified crossarms, drilling of holes and treating of such holes, the provision of the U-nails and earthwire in accordance with Eskom specifications. All jumpers to links and transformers to be installed with PVC black pipe. Supply and installation of 15m of 3/3.35x1100MPa steel wire for a BIL for each pole structure as per Eskom specification. Exclude the supply and planting of poles, stays and struts which are measured elsewhere. Insulators as per E1090SS. Include BIL insulation coordination for shared MV & LV structures as per 03TB-34 or later						
	Supply and install all material as specified for the construction of the following MV structures. Including bonding of hardware and earthing. All excavations, poles, crossarms and stays are measured elsewhere.  Note: RX refers to statutory road crossings with the relevant DDT0257-10kN-31mm/kV post insulator, full wrap tie or DDT0251-40kN-31mm/kV longrod with pistolgrips.						
	MV STRUCTURES General Arrangement						
.2	Delta / 2,5m Wood X-arm - Intermediate - 0° Deviation	1340B	No	8			R
.3	Delta / 2,5m Wood X-arm - Intermediate - 0° Deviation(RX)	1340B	No	1			R
.4 .5	Delta / 2,5m Wood X-arm - Strain - 0° Deviation Delta / 2,5m Wood X-arm - Strain - 0° Deviation(P.G/V.D)	1343 1343	No No	7			R
6	Delta / 2,5m Wood X-arm - Strain - Medium(1°-60°) Deviation	1344	No	4			R
7	Delta / 2,5m Wood X-arm - Strain - Medium(1°-60°) Deviation(PG)	1344	No				
8 9	Delta / 2,5m Wood X-arm - Strain - Terminal Delta / 2,5m Wood X-arm - Strain - Terminal(P.G/V.D)	1346 1346	No No	18 1			R R
	Phase / phase - H-Pole / 4,5m Wood X-arm – Strain – 0° Deviation	1373	NI-				
0.	-RX Phase / phase - H-Pole / 4,5m Wood X-arm – Strain - Medium(1*- 60°) Deviation -RX	1376	No				
	Delta / 2,5m Wood X-arm - Intermediate - 0° Deviation	1740B	No No	53			R
	Delta / 2,5m Wood X-arm - Intermediate - 0° Deviation(RX)	1740B	No	2			R
		1743	No	32			R
	Delta / 2,5m Wood X-arm - Strain - 0° Deviation(RX)	1743	No	1			R
17	Delta / 2,5m Wood X-arm - Strain - Medium(1°-60°) Deviation	1744	No	11			R
18	Delta / 2,5m Wood X-arm - Strain - Medium(1°-60°) Deviation(PG) 3 Phase - Delta / 2,5m Wood X-arm - Strain - Medium(60°-90°)	1744	No	2			R
2	Deviation	1745	No	11			R
19	Delta / 2,5 Wood X-arm - Strain - Terminal	1746	No	1			R
2	Delta / 2,5 Wood X-arm - Strain - Terminal (PG)	1746	No				
21	3 Phase - Delta / 4,5m Wood X-arm - Strain - 0° Deviation	1753	No	1			R
22	3 Phase - H-Pole / 4,5m Wood X-arm - Intermediate - 0° Deviation	1770	No	3			R
23	3 Phase - H-Pole / 4,5m Wood X-arm - Strain - 0° Deviation 3 Phase - H-Pole / 4,5m Wood X-arm - Strain - Medium(1°-60°)	1773	No	7			R
24		1774	No	2			R
.2	3 Phase - H-Pole / 4,5m Wood X-arm - Strain - Terminal	1776	No				
	Page 202	Ī				l e	İ

Item	Description		Unit	Quantity	Supply Rate	Install Rate	Total Price (R)
	Amount brought forward from previous page						
	Auxiliary Structures						
3.25	3Ph, Take off (2.5m X-arm)	1804	No	9			R -
	3Ph, Take off (2.5m X-arm)(RX)	1804	No				
3.27	2Ph, Take off (2.5m X-arm)	1814	No	11			R -
3.28	2Ph, Take off (2.5m X-arm)(RX)	1814	No				
<ul><li>3.26.</li><li>3.29</li><li>3.3</li><li>3.31</li></ul>	Phase / phase Take-off - H-Pole (3,5m Wooden X-arm) Section Links-cut-out-3,5 / 4.5m Wood X-arm / H pole Section Links - Cut-outs - 2,5m Wood X-arm / Single Pole (dual phase) Section Links - Cut-outs - 2,5m Wood X-arm / Single Pole (three	1816 1847 1848 1848	No No No	1 2 17			R - R - R - R
3.3	phase)  2ph or 3 ph 200A link assembly-(without crossarm)	3086	No	11			17
	Transformer - Single Pole mount (16-100kVA).	1860	No	19			R -
3.33	Transformer - Pole mounting out-of-line (16-100kVA) includes 1860 module, etc as per EI067-MVL) and excludes transformer.	1866B	No	4			R -
3.34	Auto Recloser Structure - General Arrangement	1829B	No				
3.35	MV Test (per transformer installation) Ref. SCSASABZ1		No	25			R -
3.36	MV Phasing of line, ensure correct phasing.	311	Sum	25			R -
3.38	Supply and install MV Full tension Joints as per the DDT Standards Fox - Line splice Allow for MV joints between different conductor types Insulation Co-ordination and Bonding. The unit rate shall allow for the complete installation of a BIL lightning downwire on existing structures, including the excavation around the pole, the installation of a 3x3.5mm galvanised BIL downwire, installed down the pole in accordance with the Eskom standard, 03TB-34.	3228 3073 310	Ea Ea	154			R -
	Amount carried over to Summary						R -

	KZN CoGTA - Abaqulusi Ward 4 Electrification				PRICE (EXCL VA	AT)	
Item	Description	DDT Ref	Unit	Quantity	Supply Rate	Install Rate	Total Price (R)
	Poles and Crossarms Recieve and safely store the following poles. Transport to site of works and install pole in excavated hole, including cutting and scafing, kicking blocks, bonding, treating, etc. Excavations and compaction are measured elsewhere.			,	,		
4.1	7m Pole, 120-139mm top diameter	0050	No	258			R -
4.2	9m Pole, 140-159mm top diameter	0055	No	38			R -
4.3	9m Pole, 160-179mm top diameter	0055	No	28			R -
	10m Pole, 160-179mm top diameter	0052	No				
4.4	10m Pole, 180-199mm top diameter	0052	No	10			R -
4.5	11m Pole, 160-179mm top diameter	0051	No	4			R -
4.6	11m Pole, 180-199mm top diameter	0051	No	137			R -
4.7	11m Pole, 200-219mm top diameter	0051	No	22			R -
4.8	12m Pole, 180-199mm top diameter	0052	No	14			R -
4.9	12m Pole, 200-219mm top diameter	0052	No				
4.10	13m Pole, 180-199mm top diameter	0052	No	1			R -
	14m Pole, 200-219mm top diameter	0053	No				
	Recieve, off load and install the following wooden cross arms.						
4.11	2.5m, 140-159mm Diameter	0061	No	263			R -
4.12	3.5m, 140-159mm Diameter	0061	No	1			R -
7	4.5m, 140-159mm Diameter	0061	No	16			R -
	6m,160-179mm Diameter  Stays, Flying Stays and Anti-Climbing Devices The unit price for a standard stay and an aerial stay shall exclude the wooden poles, but include the stay wire, stay rods, insulators, stay plate, stay guards, bitumastic paint, guy grip dead end, earthing of stay, line splice, precast concrete slabs, pole clamp, nuts bolts and washers etc.  The following stays shall be in accordance with the specification and shall include a stay plate		No	4			R -
4.15	MV Stay (DDT0341 rev 9, BIL 40kV & 150kV)	0341	No	217			R -
4.16	LV Stay The following flying stays shall be in accordance with the specifications and shall include poles & excavation.	0341	No	169			R -
7	MV Flying Stay	0343	No	12			R -
4.18	LV Flying Stay  The following struts shall be in accordance with the specifications and shall include poles & excavation.	1168	No	8			R -
	MV Strut	0342	No	12			R -
4.20.	LV Strut	1167	No	8			R -
	Amount carried over to next page						R -

			DDT	ı	T			Т	
Arount brought forward from previous page  Recovations and Compaction  Note The excreations for service connections are measured elsewhere  Determination of pole positions, excavate, and supply a mechanical barring device if required. The compaction of pole positions, excavate, and supply an echanical barring device if required. The compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the compacting of the c	Item	Description	DDT Ref	Unit	Tender Quantity	Supply Rate	Install Rate	Total Price (R	3)
Note the exceptions for service connections are measured elevatives.  Determination of pole positions, exceavate, and supply amechanical boring device if required. The rate shall include backfilling, compaction to 93% MOD ASHTO density, and where necessary the supply and transportation of suitable ground as nearly be referred to the supply and transportation of suitable ground as nearly be referred to the supply and transportation of suitable ground as nearly be referred to the substitute of the substitute of the contractor at his own expense and to the paproval or the PMC).  Before exceasion work begins the Contractor shall evaluate the stability of the ground before excession begins. Contractor shall we want to an excession within which persons are working or clarifying out inspections. Ref CR (11)  4.21 Hole for 17m pole - 1.5m deep 0332 No 38 R R  2.21 Hole for 17m pole - 1.5m deep 0333 No 163  Ref Hole for 17m pole - 1.5m deep 0333 No 163  Ref Hole for 17m pole - 2.4m deep 0332 No 164  4.26 Hole for 17m pole - 2.4m deep 0332 No 164  Also for 14m pole - 2.4m deep 0332 No 164  Also Hole for 17 shap pole - 2.2m deep 0332 No 165  Ref Hole for 17 shap pole - 2.2m deep 0332 No 168  Ref Hole for 17 shap pole - 2.5m deep 0332 No 168  Ref Hole for 17 shap pole - 2.5m deep 0332 No 168  Ref Hole for 17 shap pole - 2.5m deep 0332 No 168  Ref Hole for 17 shap pole - 2.5m deep 0332 No 168  Ref Hole for 17 shap pole - 2.5m deep 1032 No 169  Ref Hole for 17 shap pole - 2.5m deep 1032 No 169  Ref Hole for 17 shap pole - 2.5m deep 1032 No 169  Ref Hole for 17 shap pole - 2.5m deep 1032 No 169  Ref Hole for 17 shap pole - 2.5m deep 1032 No 169  Ref Hole for 17 shap pole - 2.5m deep 1032 No 169  Ref Hole for 17 shap pole - 2.5m deep 1032 No 169  Ref Hole for 17 shap pole - 2.5m deep 1032 No 169  Ref Hole for 17 shap pole - 2.5m deep 1032 No 169  Ref Hole for 17 shap pole - 2.5m deep 1032 No 169  Ref Hole for 17 shap pole - 2.5m deep 1032 No 169  Ref Hole for 17 shap pole - 2.5m deep 1032 No 169  Ref Hole for 17 shap pole - 2.		·		0	Quartity	Сирріу і шіс	motal rate	,	- -
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except where cement is specified. Any damage to existing services shall be made good by the Contractor at his own expense and to the approval or the PMC(D).  Before excavation work begins the Contractor shall evaluate the stability of the ground before excavation begins. Contractor shall use warning signs, positioned next to an excavation within which persons are working or carrying out inspections. Ref CR(11)  4.21 Hole for 7m pole - 1.5m deep  4.22 Hole for 10m pole - 1.5m deep  4.23 Hole for 11m pole - 2.0m deep  4.24 Hole for 12m pole - 2.0m deep  4.25 Hole for 11m pole - 2.1m deep  4.26 Hole for 11m pole - 1.5m deep  4.27 Hole for My strut - 1.5m deep  4.28 Hole for IV stay - 1.5m deep  4.29 Hole for IV stay - 1.5m deep  4.20 Hole for IV stay - 1.5m deep  4.21 Hole for My strut - 1.5m deep  4.22 Hole for My strut - 1.5m deep  4.23 Hole for IV stay - 1.5m deep  4.26 Hole for IV stay - 1.5m deep  4.27 Hole for My strut - 1.5m deep  4.28 Rock excavation (the contractor is to provide adequate measures to ensure a rock hole be varied to measure to ensure a rock hole be ward rolling or bissing). These Rock Holes to be verified by the relevant Claubet a occommodal packformmer drilling or bissing). These Rock Holes to be verified by the relevant Claubet and Exchange of the state of the s		• • • • • • • • • • • • • • • • • • • •							
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4.28 Hole for LV strut - 1.3m deep  Rock excavation (the contractor is to provide adequate measures to ensure a rock hole be exacavated to the correct depth to facilitate the correct infrastructure, this may include the excavation per rock hole by mechanical means viz. Compressors dependent on diesel fuel to accommodate Jackhammer drilling or blasting). These Rock Holes to be verified by the relevant Clerk of Works. Ref CR (11)  4.29 Provissional Drilling  Bush Clearing  Provision for bush clearing by the acredited subcontractor.  Pole Labels  Supply and install labels on all poles in accordance with the specifications including the provision of all fixing materials. Allow for pick-up, loading/offloading, transport from appropriate Eskom store. Labels to the Eskom Standard SCSCAPS, TQGHSP05 and TQCSS005. Dynatape, masking tape or Hand written with permanent marker type labels are not to be considered for operational labelling under any circumstances.  4.31 Equipment labels  4.32 Moscorfer fuse rating labels (transformers)  4.33 Fuse - "Warning. Open all fuses before working on line"  4.35 Feeder Max Fuse notification label  4.36 Danger Labels (transformers, links, anti-climbings)  A.37 LV Feeder Labels	4.26	Hole for LV stay - 1.4m deep	0350	No	169			R	-
Rock excavation (the contractor is to provide adequate measures to ensure a rock hole be exacavated to the correct depth to facilitate the correct infrastructure, this may include the excavation per rock hole by mechanical means viz. Compressors dependent on diesel fuel to accommodate Jackhammer drilling or blasting). These Rock Holes to be verified by the relevant Clerk of Works. Ref CR (11)  4.29 Provissional Drilling  Bush Clearing  Provision for bush clearing by the acredited subcontractor.  Pole Labets Supply and install labels on all poles in accordance with the specifications including the provision of all fixing materials. Allow for pick-up, loading/offloading, transport from appropriate Eskom store. Labels to the Eskom Standard SCSSCAAP5, TQGHSP05 and TQCSS005. Dynatape, masking tape or Hand written with permanent marker type labels are not to be considered for operational labelling under any circumstances.  4.31 Equipment labels  4.32 Mosdorfer fuse rating labels (transformers)  4.33 Fuse - "Warning. Open all fuses before working on line"  4.34 Transformer Max fuse notification label  4.35 Feeder Max Fuse notification label  4.36 Danger Labels (transformers, links, anti-climbings)  AD Telephanical means viz. Compressors dependent on diesel and the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the con	4.27	Hole for MV strut - 1.8m deep	0342	No	24			R	-
measures to ensure a rock hole be exacavated to the correct depth to facilitate the correct infrastructure, this may include the excavation per rock hole by mechanical means viz. Compressors dependent on diesel fuel to accommodate Jackhammer drilling or blasting). These Rock Holes to be verified by the relevant Clerk of Works. Ref CR (11)  4.29 Provissional Drilling  Bush Clearing  Provision for bush clearing by the acredited subcontractor.  Pole Labels Supply and install labels on all poles in accordance with the specifications including the provision of all fixing materials. Allow for pick-up, loading/offloading, transport from appropriate Eskom store. Labels to the Eskom Standard SCSSCAAP5, TQGHSP05 and TQCSS005. Dynatape, masking tape or Hand written with permanent marker type labels are not to be considered for operational labelling under any circumstances.  4.31 Equipment labels  4.32 Mosdorfer fuse rating labels (transformers)  4.33 Fuse - "Warning. Open all fuses before working on line"  4.34 No 22 R  R  Prowless of ensured and provided the correct of the considered for operational label (transformer Max fuse notification label  No 22 R  R  Provision for touch clearing by the acredited subcontractor.  No 22 R  R  R  Lach 300  R  Adovor for bush clearing by the acredited subcontractor.  Provision for bush clearing by the acredited subcontractor.  Provisional Drilling  R  Adovor for bush clearing by the acredited subcontractor.  R  As a fush Clearing  R  Adovor for bush clearing by the acredited subcontractor.  R  As a fush Clearing  R  R  As a fush Clearing  R  R  As a fush Clearing  R  R  R  As a fush Clearing  R  R  R  R  R  R  R  R  R  R  R  R  R	4.28	Hole for LV strut - 1.3m deep	0342	No	16			R	-
correct depth to facilitate the correct infrastructure, this may include the excavation per rock hole by mechanical means viz. Compressors dependent on diesel fuel to accommodate Jackhammer drilling or blasting). These Rock Holes to be verified by the relevant Clerk of Works. Ref CR (11)  4.30 Provision for bush clearing by the acredited subcontractor.  Pole Labels Supply and install labels on all poles in accordance with the specifications including the provision of all fixing materials. Allow for pick-up, loading/offloading, transport from appropriate Eskom store. Labels to the Eskom Standard SCSSCAAP5, TQGHSP05 and TQCSS005. Dynatape, masking tape or Hand written with permanent marker type labels are not to be considered for operational labelling under any circumstances.  4.31 Equipment labels  Mosdorfer fuse rating labels (transformers)  No 50  R  Fuse - "Warning. Open all fuses before working on line"  No 22  R  Transformer Max fuse notification label  No 22  R  Pole Labels  No 50  R  R  R  A.34 Puse - "Warning. Open all fuses before working on line"  No 22  R  Pose - "Warning. Open all fuses before working on line"  No 22  R  Danger Labels (transformers, links, anti-climbings)  A.35 Peeder Max Fuse notification label  R  No 42  R									
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permanent marker type labels are not to be considered for operational labelling under any circumstances.  4.31 Equipment labels  4.32 Mosdorfer fuse rating labels (transformers)  4.33 Fuse - "Warning. Open all fuses before working on line"  4.34 Transformer Max fuse notification label  4.35 Feeder Max Fuse notification label  4.36 Danger Labels (transformers, links, anti-climbings)  4.37 LV Feeder Labels  No 42  R  R  R									
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circumstances.  4.31 Equipment labels  4.32 Mosdorfer fuse rating labels (transformers)  No 22  R  4.33 Fuse - "Warning. Open all fuses before working on line"  No 22  R  4.34 Transformer Max fuse notification label  No 22  R  4.35 Feeder Max Fuse notification label  No 22  R  A.36 Danger Labels (transformers, links, anti-climbings)  A.37 LV Feeder Labels  No 42  R		· · · · · · · · · · · · · · · · · · ·							
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4.37 LV Feeder Labels No 42	4.35	Feeder Max Fuse notification label		No	22			R	-
	4.36	Danger Labels (transformers, links, anti-climbings)	3202	No	50			R	-
	4.37	LV Feeder Labels		No	42			R	-
	7				119				-
TOTAL : Carried forward to summary		·						R	_

Item	Description		Unit	Quantity	Supply Rate	Install Rate	Total Price (R)
	Amount brought forward from previous page						R -
	General Items						
4.40	Supply and install labels Spiral Vibration Dampers Spiral Vibration Dampers (Fox) Spiral Vibration Dampers (Hare) Supply and Install Anti-Climbing Devices as per the latest DDT Standards.	3175 3175	Each Each	960			R -
4.42	Anti-Climbing Device as per 05Tl09. Including the removal of existing spikes. Galvanised wire per DDT3170. Galvanises staples per DDT3129. Install on trfr strs, struts, parallel MV stay wires, recloser str, OOL trfr strs, etc, structures where meter boxes or equipment is installed <2m above ground, any str having cable secured by means of strapping <0.5m apart, any climbable pole str, apparatus etc as per DDT standard.		per str	50			R -
4.43	Supply and Install, where MV & LV Earths are on the same structure, UV protected black PVC pipe of length 1.2m on each earth downwire, cutting the top and bottom of the pipe at 45deg, split the pipe so as to insert the MV/LV earth and installing clout nails at the bottom and top.		per str	22			R -
	TOTAL : Carried forward to summary			TOTALS			R -

Item		KZN CoGTA - Abaqulusi Ward 4 Electrification				F	PRICE (EXCL VAT)			
LV ABC (insulated neutral)   The LV insulated aerial bundle conductor system shall be in accordance with SABS 1418 and insulated in accordance with SABS 1418 and insulated in accordance with SABS 1418 and insulated in accordance with SABS 1418 and insulated in accordance with SABS 1418 and insulated in accordance with SABS 1418 and insulated in accordance with SABS 1418 and insulated in accordance with SABS 1418 and insulated in accordance with the sag and stress tables provided by the manufacturer with all plant, equipment and accessories required to erect an LV overhead bundled distribution line i.e. Drum trailer, which, wind-off pulleys, pulling repercable with connection, dynamometrs, side-lock, sheathed, etc.   Note   Measured lengths for stringing shall be net line route lengths and unit rates shall include for sag, off-cuts, etc.   Supply, safely store and transport to site and string. The conductor will be delivered on sealed drums and adequate allowance shall be made for the correct handling thereof.   Ensure correct tooling. D 51 Hydraulic Crimping Tool and dies, a 13mm tube spanner with T – bar, Phase separators, Slings, Wide Crooved Pulleys, Sicel Pulling Socies, Pulling Swices, Rokie, Corre-along and Dynamometers.				Unit		<u> </u>				
The LV insulated aerial bundle conductor system shall be in accordance with SABS 1418 and insulated in accordance with SABS 1418 and insulated in accordance with SABS 1418 and insulated in accordance with SABS 1518 and the Distribution Standard Part 3. Ref. EI-092-LVL line untrate per meter shall include the tensioning and strings tables provided by the manufacturer with all plant, equipment and accessories required to erect an LV overhead bundled distribution line i.e. Drum trailer, winch, wind-off pulleys, pulling rope/cable with connection, dynamometer, side-lock, shackle, shackle, etc.  Note  Measured lengths for stringing shall be net line route lengths and unit rates shall include for sag, off-cuts, etc.  Supply, safely store and transport to site and string. The conductor will be delivered on sealed drums and adequate allowance shall be made for the correct handling thereof.  Ensure correct tooling - D 51 Hydraulic Crimping Tool and dies, a 13mm table spanner with T – bar. Phases separators, Sings, Wide Grooded Pulleys, Steel Pulling Socks, Pulling Sulvels, Rickie, Corre-along and Dynamometers.  Single phase ABC (35mm² 3 core) - insulated neutral  3141 m 3607.792  351. Single phase ABC (35mm² 3 core) - insulated neutral  3141 m 3607.792  362. Three phase ABC (35mm² 4 core) - insulated neutral  3141 m 3607.792  363. Dual phase ABC (35mm² 4 core) - insulated neutral  3141 m 3607.792  364. Three phase ABC (70mm² 4 core) - insulated neutral  365. Three phase ABC (70mm² 4 core) - insulated neutral  366. Single phase ABC (70mm² 4 core) - insulated neutral  376. Single phase ABC (70mm² 4 core) - insulated neutral  3778. Allow for the assembly of the following LV strain and suspension assemblies in accordance with the specifications shown in the drawings - including all aerthing, drilling of holes and treating of drilled holes. All LV ABC hardware, line connectors, PVC cable ties, nuts, boths, weshers, lock weshers shall be allowed for in the appropriate litem below. Excluding the supply and planting of poles, a	Item	Description	DDT Ref		Quantity	Supply Rate	Install Rate	Total Price (R)		
in accordance with SABS 1418 and insulated in accordance with SABS 1418 and insulated in accordance with SABS 0198 and the Distribution Standard Part 3. Ref. Et-092-LVL  Note Standard Part 3. Ref. Et-092-LVL  The unit rate per meter shall include the tensioning and stress tables provided by the manufacture with all plant, equipment and accessories required to erect an LV overhead bundled distribution line 1e. Drum trailer, which, which off polleys, putifing repeticable with connection, dynamometer, slide-lock, sheathed synthetic fibre belt, woven snatch bits, snatch block, tackle, shackle, etc.  Note Massured lengths for stringing shall be net line route lengths and unit rates shall include for sag, off-cuts, etc.  Supply, safely store and transport to site and string. The conductor will be delivered on sealed drums and adequate allowance shall be made for the correct handling thereof.  Ensure correct tooling - D.51 Hydraulic Crimping Tool and dies, a 13mm tube spanner with T - bar, Phase separators, Sings, Wide Grooved Pulleys, Steel Pulling Socks, Pulling Sweels, Rickie, Come-along and Dynamometers.  Single phase ABC (35mm² 2 core) - insulated neutral 3141 m 3607.792  Dual phase ABC (35mm² 3 core) - insulated neutral 3141 m 3607.792  Three phase ABC (35mm² 4 core) - insulated neutral 3141 m 3607.792  Three phase ABC (35mm² 4 core) - insulated neutral 3141 m 3607.792  LV STRUCTURES  Allow for the assembly of the following LV strain and suspension assemblies in accordance with the specifications shown in the drawings. Including all earthing, drilling of holes and treating of drilled holes. All LV ABC hardware, line connectors, PVC cable ties, nuts, botis, washers, shot be allowed for in the appropriate item below. Excluding the supply and planting of poles, stays and struts, which are measured elsewhere. Use strain assembly when crossing roads.  Supply and install all the materials as specified for the following:  Single Phase ABC Strain Assembly (60-90 deg) 1155 No 36  Single Phase ABC Strain Assembly (60-90 d		LV ABC (insulated neutral)								
stringing of the bundle in accordance with the sag and stress tables provided by the manufacture with all plant, equipment and accessories required to erect an LV overhead bundled distribution line Le. Drum trailer, winch, wind-off pulleys, pulling rope/cable with connection, dynamometer, slide-bock, sheathed synthetic fibre belt, woven snatch belt, snatch block, tackle, shackle, etc.  Note  N	Note	in accordance with SABS 1418 and insulated in accordance with SABS 0198 and the Distribution Standard Part 3. Ref. EI-092-LVL								
Measured lengths for stringing shall be net line route lengths and unit rates shall include for sag, off-cuts, etc.  Supply, safely store and transport to site and string. The conductor will be delivered on sealed drums and adequate allowance shall be made for the correct handling thereof.  Ensure correct tooling - D 51 Hydraulic Crimping Tool and dies, a 13mm tube spanner with T – bar, Phase separators, Sings, Wide Grooved Pulleys, Steel Pulling Socks, Pulling Swivels, Rickie, Come-along and Dynamometers.  Single phase ABC (35mm² 2 core) - insulated neutral 31411 m 3607.792  Dual phase ABC (35mm² 3 core) - insulated neutral 31411 m 3607.792  Dual phase ABC (35mm² 4 core) - insulated neutral 31411 m 2457.792  Three phase ABC (35mm² 4 core) - insulated neutral 31411 m 3607.792  Live Time phase ABC (70mm² 4 core) - insulated neutral 31411 m 3607.792  Live Time phase ABC (70mm² 4 core) - insulated neutral 31411 m 3607.792  Live Time phase ABC (70mm² 4 core) - insulated neutral 31411 m 3607.792  Live Time phase ABC (70mm² 4 core) - insulated neutral 31411 m 3607.792  Live Time phase ABC (70mm² 4 core) - insulated neutral 31411 m 3607.792  Live Time phase ABC (70mm² 4 core) - insulated neutral 31411 m 3607.792  Live Time phase ABC (70mm² 4 core) - insulated neutral 31411 m 3607.792  Live Time phase ABC (70mm² 4 core) - insulated neutral 31411 m 3607.792  Live Time phase ABC (70mm² 4 core) - insulated neutral 31411 m 3607.792  Live Time phase ABC (70mm² 4 core) - insulated neutral 31411 m 3607.792  Live Time phase ABC (70mm² 4 core) - insulated neutral 31411 m 3607.792  Live Time phase ABC (70mm² 4 core) - insulated neutral 31411 m 3607.792  Live Time phase ABC (70mm² 4 core) - insulated neutral 31411 m 3607.792  Live Time phase ABC (70mm² 4 core) - insulated neutral 31411 m 3607.792  Live Time phase ABC (70mm² 4 core) - insulated neutral 31411 m 3607.792  Live Time phase ABC (70mm² 4 core) - insulated neutral 31411 m 3607.792  Live Time phase ABC (70mm² 4 core) - insulated neutral 31411 m 3607.792  Live Time phase A	Note	stringing of the bundle in accordance with the sag and stress tables provided by the manufacturer with all plant, equipment and accessories required to erect an LV overhead bundled distribution line i.e. Drum trailer, winch, wind-off pulleys, pulling rope/cable with connection, dynamometer, slide-lock, sheathed synthetic fibre belt, woven snatch belt, snatch block, tackle,								
The conductor will be delivered on sealed drums and adequate allowance shall be made for the correct handling thereof.  Ensure correct tooling - D 51 Hydraulic Crimping Tool and dies, a 13mm tube spanner with T – bar, Phase separators, Slings, Wide Grooved Pulleys, Steel Pulling Socks, Pulling Swivels, Rickie, Come-along and Dynamometers.  5.1 Single phase ABC (35mm²- 2 core) - insulated neutral Dynamometers.  5.2 Dual phase ABC (35mm²- 3 core) - insulated neutral Dynamometers.  5.3 Dual phase ABC (70mm²- 3 core) - insulated neutral Dynamometers.  5.4 Three phase ABC (70mm²- 4 core) - insulated neutral Dynamometers.  5.5 Three phase ABC (70mm²- 4 core) - insulated neutral Dynamometers.  5.6 Allow for the assembly of the following LV strain and suspension assemblies in accordance with the specifications shown in the drawings. Including all earthing, drilling of holes and treating of drilled holes. All LV ABC hardware, line connectors, PVC cable ties, nuts, botts, washers, lock washers shall be allowed for in the appropriate item below. Excluding the supply and planting of poles, stays and struts, which are measured elsewhere. Use strain assembly when crossing roads.  Supply and install all the materials as specified for the following:  5.6 Single Phase ABC Intermediate Assembly 1154 No 88  Single Phase ABC Strain Assembly 1155 No 36  Single Phase ABC Strain Assembly (0-60 deg) 1156 No 4  Single Phase ABC Strain Assembly (60-90 deg) 1156 No 4  Single Phase ABC Terminal Assembly (60-90 deg) 1156 No 16  Single Phase ABC Terminalere 1157 No 16	Note									
and dies, a 13mm tube spanner with T – bar, Phase separators, Slings, Wide Grooved Pulleys, Steel Pulling Socks, Pulling Swivels, Rickie, Come-along and Dynamometers.  5.1 Single phase ABC (35mm²- 2 core) - insulated neutral 3141 m 3607.792  5.2 Dual phase ABC (35mm²- 3 core) - insulated neutral 3141 m 3607.792  5.3 Dual phase ABC (35mm²- 4 core) - insulated neutral 3141 m 2457.792  5.4 Three phase ABC (35mm²- 4 core) - insulated neutral 3141 m 2457.792  5.5 Three phase ABC (70mm²- 4 core) - insulated neutral 3141 m 5.5 Three phase ABC (70mm²- 4 core) - insulated neutral 3141 m 5.5 Three phase ABC (70mm²- 4 core) - insulated neutral 3141 m 5.5 Three phase ABC (70mm²- 4 core) - insulated neutral 3141 m 5.5 Three phase ABC (70mm²- 4 core) - insulated neutral 3141 m 5.5 Three phase ABC (70mm²- 4 core) - insulated neutral 3141 m 5.5 Three phase ABC (70mm²- 4 core) - insulated neutral 3141 m 5.5 Three phase ABC (70mm²- 4 core) - insulated neutral 3141 m 5.5 Three phase ABC (70mm²- 4 core) - insulated neutral 3141 m 5.5 Three phase ABC (70mm²- 4 core) - insulated neutral 3141 m 5.5 Three phase ABC (70mm²- 4 core) - insulated neutral 3141 m 5.5 Three phase ABC (70mm²- 4 core) - insulated neutral 3141 m 5.5 Three phase ABC (70mm²- 4 core) - insulated neutral 3141 m 5.5 Three phase ABC (70mm²- 4 core) - insulated neutral 3141 m 5.5 Three phase ABC (70mm²- 4 core) - insulated neutral 3141 m 5.5 No 36 No 4 No 4 No 4 No 5 No 5 No 5 No 5 No 5		The conductor will be delivered on sealed drums and adequate allowance shall be made for the correct								
5.2 Dual phase ABC (35mm²-3 core) - insulated neutral  5.3 Dual phase ABC (70mm²-3 core) - insulated neutral  5.4 Three phase ABC (35mm²-4 core) - insulated neutral  5.5 Three phase ABC (70mm²-4 core) - insulated neutral  5.6 Three phase ABC (70mm²-4 core) - insulated neutral  6.7 Three phase ABC (70mm²-4 core) - insulated neutral  6.8 Single Phase ABC Intermediate  6.9 Single Phase ABC Istrain Assembly (60-90 deg)  6.10 ABC T from Intermediate  7.1 Three phase ABC Tee from Intermediate  7.2 Acore) - insulated neutral  7.3 3141 m  7. 3 314		and dies, a 13mm tube spanner with T – bar, Phase separators, Slings, Wide Grooved Pulleys, Steel Pulling Socks, Pulling Swivels, Rickie, Come-along and								
5.3 Dual phase ABC (70mm² 3 core) - insulated neutral 3141 m 5.5 Three phase ABC (35mm² 4 core) - insulated neutral 3141 m  LV STRUCTURES  Allow for the assembly of the following LV strain and suspension assemblies in accordance with the specifications shown in the drawings. Including all earthing, drilling of holes and treating of drilled holes. All LV ABC hardware, line connectors, PVC cable ties, nuts, bolts, washers, lock washers shall be allowed for in the appropriate item below. Excluding the supply and planting of poles, stays and struts, which are measured elsewhere. Use strain assembly when crossing roads.  Supply and install all the materials as specified for the following:  5.6 Single Phase ABC Intermediate Assembly  5.7 Single Phase ABC Strain Assembly (0-60 deg)  5.8 Single Phase ABC Strain Assembly (0-60 deg)  5.9 Single Phase ABC Strain Assembly (60-90 deg)  5.10. ABC T from Intermediate  1157 No 19	5.1	Single phase ABC (35mm <sup>2,</sup> 2 core) - insulated neutral	3141	m	18609.82			R -		
5.4 Three phase ABC (35mm² 4 core) - insulated neutral 5.5 Three phase ABC (70mm² 4 core) - insulated neutral 3141 m  LV STRUCTURES  Allow for the assembly of the following LV strain and suspension assemblies in accordance with the specifications shown in the drawings. Including all earthing, drilling of holes and treating of drilled holes. All LV ABC hardware, line connectors, PVC cable ties, nuts, bolts, washers, lock washers shall be allowed for in the appropriate item below. Excluding the supply and planting of poles, stays and struts, which are measured elsewhere. Use strain assembly when crossing roads.  Supply and install all the materials as specified for the following:  5.6 Single Phase ABC Intermediate Assembly  5.7 Single Phase ABC Strain Assembly (0-60 deg)  5.8 Single Phase ABC Strain Assembly (0-60 deg)  5.9 Single Phase ABC Strain Assembly (60-90 deg)  5.10. ABC T from Intermediate  1157 No 19	5.2	Dual phase ABC (35mm <sup>2,</sup> 3 core) - insulated neutral	3141	m	3607.792			R -		
Three phase ABC (70mm² 4 core) - insulated neutral  LV STRUCTURES  Allow for the assembly of the following LV strain and suspension assemblies in accordance with the specifications shown in the drawings. Including all earthing, drilling of holes and treating of drilled holes. All LV ABC hardware, line connectors, PVC cable ties, nuts, bolts, washers, lock washers shall be allowed for in the appropriate item below. Excluding the supply and planting of poles, stays and struts, which are measured elsewhere. Use strain assembly when crossing roads.  Supply and install all the materials as specified for the following:  5.6 Single Phase ABC Intermediate Assembly  5.7 Single Phase ABC Strain Assembly  5.8 Single Phase ABC Strain Assembly (0-60 deg)  5.9 Single Phase ABC Strain Assembly (60-90 deg)  5.10. ABC T from Intermediate  1157 No  19	5.3	Dual phase ABC (70mm <sup>2,</sup> 3 core) - insulated neutral	3141	m	2457.792			R -		
Allow for the assembly of the following LV strain and suspension assemblies in accordance with the specifications shown in the drawings. Including all earthing, drilling of holes and treating of drilled holes. All LV ABC hardware, line connectors, PVC cable ties, nuts, bolts, washers, lock washers shall be allowed for in the appropriate item below. Excluding the supply and planting of poles, stays and struts, which are measured elsewhere. Use strain assembly when crossing roads.  Supply and install all the materials as specified for the following:  5.6 Single Phase ABC Intermediate Assembly  5.7 Single Phase ABC Terminal Assembly  5.8 Single Phase ABC Strain Assembly (0-60 deg)  5.9 Single Phase ABC Strain Assembly (60-90 deg)  5.10. ABC T from Intermediate  5.11 Single Phase ABC Tee from Intermediate  1157 No  19	5.4	Three phase ABC (35mm <sup>2,</sup> 4 core) - insulated neutral	3141	m						
Allow for the assembly of the following LV strain and suspension assemblies in accordance with the specifications shown in the drawings. Including all earthing, drilling of holes and treating of drilled holes. All LV ABC hardware, line connectors, PVC cable ties, nuts, bolts, washers, lock washers shall be allowed for in the appropriate item below. Excluding the supply and planting of poles, stays and struts, which are measured elsewhere. Use strain assembly when crossing roads.  Supply and install all the materials as specified for the following:  5.6 Single Phase ABC Intermediate Assembly  5.7 Single Phase ABC Terminal Assembly  5.8 Single Phase ABC Strain Assembly (0-60 deg)  5.9 Single Phase ABC Strain Assembly (60-90 deg)  5.10. ABC T from Intermediate  1157 No  19	5.5	Three phase ABC (70mm <sup>2,</sup> 4 core) - insulated neutral	3141	m						
suspension assemblies in accordance with the specifications shown in the drawings. Including all earthing, drilling of holes and treating of drilled holes. All LV ABC hardware, line connectors, PVC cable ties, nuts, bolts, washers, lock washers shall be allowed for in the appropriate item below. Excluding the supply and planting of poles, stays and struts, which are measured elsewhere. Use strain assembly when crossing roads.  Supply and install all the materials as specified for the following:  5.6 Single Phase ABC Intermediate Assembly  1153 No  190  5.7 Single Phase ABC Terminal Assembly  1154 No  88  5.8 Single Phase ABC Strain Assembly (0-60 deg)  1155 No  36  5.9 Single Phase ABC Strain Assembly (60-90 deg)  1156 No  4  5.10. ABC T from Intermediate  1157 No  16  5.11 Single Phase ABC Tee from Intermediate  1157 No  19		LV STRUCTURES								
the following:         5.6       Single Phase ABC Intermediate Assembly       1153       No       190         5.7       Single Phase ABC Terminal Assembly       1154       No       88         5.8       Single Phase ABC Strain Assembly (0-60 deg)       1155       No       36         5.9       Single Phase ABC Strain Assembly (60-90 deg)       1156       No       4         5.10       ABC T from Intermediate       1157       No       16         5.11       Single Phase ABC Tee from Intermediate       1157       No       19		suspension assemblies in accordance with the specifications shown in the drawings. Including all earthing, drilling of holes and treating of drilled holes. All LV ABC hardware, line connectors, PVC cable ties, nuts, bolts, washers, lock washers shall be allowed for in the appropriate item below. Excluding the supply and planting of poles, stays and struts, which are measured								
5.7       Single Phase ABC Terminal Assembly       1154       No       88         5.8       Single Phase ABC Strain Assembly (0-60 deg)       1155       No       36         5.9       Single Phase ABC Strain Assembly (60-90 deg)       1156       No       4         5.10.       ABC T from Intermediate       1157       No       16         5.11       Single Phase ABC Tee from Intermediate       1157       No       19										
5.8       Single Phase ABC Strain Assembly (0-60 deg)       1155       No       36         5.9       Single Phase ABC Strain Assembly (60-90 deg)       1156       No       4         5.10.       ABC T from Intermediate       1157       No       16         5.11       Single Phase ABC Tee from Intermediate       1157       No       19	5.6	Single Phase ABC Intermediate Assembly	1153	No	190			R -		
5.9 Single Phase ABC Strain Assembly (60-90 deg) 1156 No 4 5.10. ABC T from Intermediate 1157 No 16 5.11 Single Phase ABC Tee from Intermediate 1157 No 19	5.7	Single Phase ABC Terminal Assembly	1154	No	88			R -		
5.10. ABC T from Intermediate  1157 No 16  5.11 Single Phase ABC Tee from Intermediate  1157 No 19	5.8	Single Phase ABC Strain Assembly (0-60 deg)	1155	No	36			R -		
5.11 Single Phase ABC Tee from Intermediate 1157 No 19	5.9	Single Phase ABC Strain Assembly (60-90 deg)	1156	No	4			R -		
	5.10.	ABC T from Intermediate	1157	No	16			R -		
5.12 Single Phase ABC Tee from Strain 1159 No 5	5.11	Single Phase ABC Tee from Intermediate	1157	No	19			R -		
	5.12	Single Phase ABC Tee from Strain	1159	No	5			R -		
5.13 ABC X Intermediate - Strain Assembly 1160 No	5.13	ABC X Intermediate - Strain Assembly	1160	No						

				Tender			
Item	Description	DDT Ref	Unit	Quantity		Tota	l Price (R)
	Amount brought forward from previous page					R	-
5.13	Dual Phase ABC Intermediate Assembly	1145	No	10		R	-
5.14	Dual Phase ABC Terminal Assembly	1146	No	7		R	-
5.15	Dual Phase ABC Strain Assembly (0-60 deg)	1147	No	6		R	-
5.16	Dual Phase ABC Strain Assembly (60-90 deg)	1148	No				
5.17	Dual Phase ABC Tee from Intermediate	1149	No	2		R	-
5.18	Dual Phase ABC intermediate Suspension	1150	No				
5.19	Dual Phase ABC Tee from Strain	1151	No	2		R	-
5.20.	Dual Phase ABC intermediate Strain Assembly	1152	No				
5.21	Three Phase ABC Intermediate Assembly	1100	No				
5.22	Three Phase ABC Terminal Assembly	1120	No				
5.23	Three Phase ABC Strain Assembly (0-60 deg)	1121	No				
5.24	Three Phase ABC Strain Assembly (60-90 deg)	1122	No				
5.25	Three Phase ABC Tee from Intermediate	1140	No				
5.26	Three Phase ABC intermediate Suspension	1141	No				
5.27	Three Phase ABC Tee from Strain	1142	No				
5.28	Three Phase ABC X intermediate Strain	1143	No				
	LV Fuse Switch Units						
	Supply, deliver to site, off load on site and safely store. The fused switch shall be supplied complete with the pole mounting bracket, nuts, bolts, washers, etc. for securing the unit to the wooden pole. The fuses shall be supplied with the fuse switch unit. Fuse ratings shall be as shown on the drawings. Install the on load fused disconnecting switch on the transformer structure including the drilling of holes as required, including the termination of the LV ABC to the unit. Fuse ratings below allow for 120% overload.						
	One fuse unit is for the transformer and one unit per LV feeder for isolation/protection.  63A Single Phase Load disconnecting switch						
5.29	63A Single Phase Load disconnecting switch MORSDORPHER	309	No	40		R	-
5.30.	80A Dual Phase Load disconnecting switch MORSDORPHER	309	No	1		R	-
	Amount carried over to next page					R	-

				Tender				
Item	Description	DDT Ref	Unit	Quantity			Total Price (	R)
	Amount brought forward from previous page						R	<u> </u>
Note	Earthing of LV Network  All MV transformer earthing is measured elsewhere and all LV earths per structure are measured with the structure. This section is intended for LV earths at transformers.							
	Allowance shall be made for the testing (including earth loop impedance) of the earth resistance for the entire reticulation system in accordance with the TN-C-S earthing system as defined in the Distribution Standard Part 2 and any earth tests which may be required in terms of the standard and detailed specifications. Use 2 x H-Crimps - neutral connection point.	637						
5.31	LV Earth (Crowsfoot)	627	No	22			R	_
	LV Earth (single point)	642	No					
	LV Pole Mounted Service Boxes (Outdoor)							
	Supply and install on a wooden and/or concrete pole							
	a pole mounted distribution box as specified complete with pole mounting brackets, cable ties,							
	PG clamps, miniture circuit breaker(s), neutral,							
	phase and earth bars, insulated copper tails for							
	connecting to LV ABC, insulation piercing connectors and factory installed cable openings.							
	Included shall be the stainless steel strapping and							
	buckles and terminations of the tails onto the LV ABC.							
	1-4. York type box, complete with insulated copper tails,							
5.33	insulation piercing connectors and nylon compression glands, per DDT0180. 5-8. York type box, complete with insulated copper tails,	3055	No	119			R	-
5.34	insulation piercing connectors and nylon compression glands, per DDT0180.		No					
	Testing							
	Allowance shall be made for the testing of each LV ABC distributor on accordance with the project specification. Included shall be the provision of test certificates and all documentation as required.							
5.35	LV Test, per zone. Ref. SCSASABZ1		No	42			R	-
	General							
5.36	Supply and install ABC Full tension Joints as per the DT							
	Standards - Single phase ABC (35mm²) Supply and install ABC Full tension Joints as per the DT		Ea	20			R	-
5.38	Standards - Dual phase ABC (35mm²) Supply and install ABC Full tension Joints as per the DT		Ea	20			R	-
3.50	Standards - Three phase ABC (35mm²)		Ea	20			R	-
5.39	<b>Phasing:</b> Allow for verification of the customer phasing as per the Construction drawings.		zone	100			R	-
	TOTAL : Carried forward to summary						R	-
		l			1	l .	l	

BILL NO 6 - HOUSE CONNECTIONS: R250 per connection will be held back by Eskom until the timeous delivery and population of the PCS file as required for the CDX download.

	KZN CoGTA - Abaqulusi Ward 4 Electrification				F	PRICE (EXCL VAT	7)
Item	Description	DDT Ref	Unit	Quantity	Supply Rate	Install Rate	Total Price (R)
	House Connections						
	Installation, testing, commissioning complete including CoC, IC's, sealing and as built drawing on completion. Includes installation of EMU in PTB, Ready Board, CIU LCD Keypad, Meter Seal and associated accessories. Make good house walls. Poles and excavations are measured elsewhere. Includes installation of meter.	•					
6.1	Type B - (service pole 100%)	0361	No	119			R -
Note	Conductor  Measured lengths for stringing shall be net line route lengths and unit rates shall include for sag, cut-offs etc.						
	Installation including all glands, lugs, shrouds, termination and connections as required. Include safe storage, transport to site and stringing. Connect power (L-N) from EMU to Ready Board (E/L & MCB) and Comms pair from EMU to CIU.						
6.2	Cable 1kV 1C 6mmSQ Concentric Cable		m	5000			R -
6.3	Cable 1kV 1C 10mmSQ Concentric Cable		m				
	Sundry Items						
	Recieve and safely store the following poles. Transport to site of works and install pole in excavated hole, including cutting and scafing, kicking bolts, bonding, treating, etc. Excavation and compaction are						
	measured elsewhere.	00504	No	100			D
6.4	5m pole, 80-100mm top diameter 7m Pole, 100-120mm top diameter	0058A 0050B	No No	100 10			R -
•	9m Pole, 140-159mm top diameter	0055B	No	10			TX.
6.7	LV Stay (Service Connection)	0341 0366/	No				
6.8	Intermediate Suspension / Strain assembly	0384	No	10			R -
6.9	Install <b>'Unique Seals'</b> supplied by Eskom and record on Control Sheet and PCS file. Two seals per unit.		No	100			R -
6.10	20A Split Meter		No	100			R -
6.11	Ready Boardy		No	100			R -
6.12	Supply and install <b>Marketing Labels</b> complete. Labels to the Eskom Standard SCSSCAAP5 and TQGHSP05.		No	100			R -
6.12	Submit populated <b>Control Sheet</b> and <b>PCS CorDaptix</b> information to the Project Engineer upon the successful energising of a customer. Payment will only be made upon the successful loading of the Data onto Eskom's CorDaptix software system. Resolve queries raised by Eskom and the			100			R -
6.14	Engineer.			100			-
•	Excavations and Compaction  Determination of pole positions, excavate, and supply a mechanical boring device if required. The rate shall include backfilling, compaction to 93% MOD AASHTO density, and where necessary the supply and transportation of suitable ground as may be required to receive the desired compaction, except where cement is specified. Any damage to existing services shall be made good by the Contractor at his own expense and						
•	to the approval or the PM(C).						
•	Hole for 5m service pole - 1.0m deep Hole for 7m service pole - 1.3m deep		No No	100 10			R -
•	Hole for 9m service pole - 1.5m deep		No				· · ·
•	Hole for service connection stay - 1.3m deep		No				
	TOTAL : Carried forward to summary Page 2	210 of 33					R -



# ELECTRIFICATION OF 63 CONNECTIONS IN ABAQULUSI WARD 1, EMADAMINI (63HH) VILLAGE

# ELECTRIFICATION OF 101 CONNECTIONS IN ABAQULUSI WARD 4, ESIGANGENI (26HH), MPEMBENI (28HH), NGEDLANE (21HH) AND SOZWANE (26) VILLAGE(S)

# ZNT2011/2020LG

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#### 1. DESCRIPTION OF WORKS

The project includes the following aspects:

- the erection of the installation, as per the approved design
- the testing and commissioning of the entire installation
- the provision of acceptable marked up signed, stamped and dated "as-built" drawings, sag and tension charts, compliance and hand over procedure.
- Making good of house walls where ready board has been installed.
- the handing over of the installation in a working order with all the necessary administration
- The contractor will fix marketing labels as per the labelling standard, TQCSS005.
- ♦ Completing of PCS file for uploading of connections to be done immediately after energization and registering of all connected customers on the Eskom customer management system within 7 days after energization.
- Sealing of all installed customer meters
- ◆ The completion of all the necessary administration work in providing the works. (SACS, Planning, Survey, Project Engineering)
- ◆ Installation certificate to be completed by a competent resource and to be submitted within 7 days after energization.

#### The scope of works includes the following:

The provision of electrical infrastructure complete including compilation of all information to successfully upload the PCS files as required for reporting of energized connections for the Area of the Abaqulusi Local Municipality of the Eskom Eastern Region.

## 2. WORK TO BE PERFORMED BY THE CONTRACTOR FOR THE WORKS

#### SCOPE

Connections are to be made with 6mm2 concentric cable from the nearest pole top box, low voltage bundle is to be constructed as shown on the drawing. The new transformer zones are to be constructed as per the scope of works for the Abaqulusi Ward 1 Electrification project. The following LV infrastructure is required to cater for the 63 new connections.

- 1. Build 2.72km of three-phase and 0.5km of dual phase ACSR Fox line (route length).
- 2. Install new 3x16kVA 22kV/240V, 1x32kVA 22kV/+240V/-240V and 1x50kVA 22kV/+420V/-420V
- 3. Label all unlabelled transformers.
- 4. Build 2.375km of 35mm² x 2C ABC, 1.2km of 35mm² x 3C ABC, 1.5km of 35mm² x 4C ABC, 3.3km of 70mm² x 3C ABC and 1.5km of 70mm² x 4C ABC all with insulated neutral conductor.
- 5. String 3.5km of 6mm2 service cable (Airdac) and
- 6. Install 63 PLC Split Meters and ready boards.

Connections are to be made with 6mm2 concentric cable from the nearest pole top box, low voltage bundle is to be constructed as shown on the drawing. The new transformer zones are to be constructed as per the scope of works for the Abaqulusi Ward 4 Electrification project. The following LV infrastructure is required to cater for the 101 new connections.

- 1. Build 14.67km of three-phase and 2.88km of dual phase ACSR Fox line (route length).
- 2. Install new 21x16kVA 22kV/240V and 1x32kVA 22kV/+240V/-240V
- 3. Re-use 1x16kVA 22kV/240V Transformers
- 4. Label all unlabelled transformers.
- 5. Build 18.6km of 35mm² x 2C ABC, 3.60km of 35mm² x 3C ABC & 2.46km of 70mm² x 3C ABC all with insulated neutral conductor.
- 6. String 6.0km of 6mm2 service cable (Airdac) and
- 7. Install 101 PLC Split Meters and ready boards.

# 2.1 General Principles

In an effort to meet future demands that will be placed on this region in terms of electrification, new techniques and technology will have to be applied in order to electrify increasing numbers of customers at lower costs.

#### 2.2 Outline of Work required

- a) Community liaison
- b) Installation
- c) Commissioning
- d) Hand over

## 2.3 Statutory Requirements & Standards

All activities shall comply with the statutory requirements and where possible within the ambit of the relevant guidelines, inter alia:

- a) The Occupational Health and Safety (OHS) Act 85 of 1993 and Construction Regulation of 2003
- b) The principles of the Distribution Standards (Eskom)
- c) The requirements of the relevant Eskom standards in force at the time of Bid i.e. Distribution Standards
- d) The Construction Regulations under Government Gazette No. 25207 of 18 July 2003.

The Contractor is to note that should shortcomings appear in the Eskom standards, these are to be highlighted, and proposals offered, and allowances for changes based on these proposals are to be included in the Bid.

All Bidders' must make generic Health & Safety Plan and Health & Safety Competency information available to Eskom Risk for evaluation on acceptance of Bid or provide relevant documentation indicating accreditation.

#### **Health & Safety Plan:**

It is mandatory for the Principal Contractor to submit a Health & Safety Plan to the Employer (client). The Employer will discuss and negotiate with the Principal Contractor the contents of the Health & Safety Plan contemplated in 5(1) of the Construction Regulations and thereafter finally approve the Health & Safety Plan for implementation.

The Principal Contractor must forward their Health & Safety Plan to the Employer's Representative (Programme / Project Manager) within two weeks of contract award or as soon as practically possible after contract award. No construction work to commence without the prior approval of the Health & Safety Plan.

Any changes to the Contractor's submitted Health & Safety Plan will not result in a compensation event or changes to the contract value.

#### 2.4 Material

All materials sourced are to conform to the **Eskom Buyer's Guide Part 9** and they are to be procured from **Eskom Preferred Suppliers** (Refer to document **TQSNC008** listed under section 3, Specifications), and shall be new and of the best quality. Any deviation or variance from the above to be approved by the Technology & Quality Department prior to implementation.

Material options will be determined in accordance with the Distribution Standard packages. Where specific site circumstances require non-standard material application and / or due to shortcomings of the standard package, the designer / contractor shall develop "ad hoc" packages to submit these to Eskom <u>Technology & Quality Department</u> for approval before implementation.

Where materials other than those in the standard design packages are offered, the "Bided material and Technique" schedule shall be completed as part of the Bid.

In addition to the Buyer's Guide, all bare conductor shall comply with the Eskom Distribution Technology Standard SCSSCAAY5 Rev 1"Specification for Phase Conductor for Distribution Lines" February 2001.

#### **Marked Conductor**

- Only marked conductor may be used on Eskom projects.
- Marked conductor may only be obtained from the approved manufacturers.
- Bidders' must base their Bids on conductor prices as obtained from the approved manufacturers.
- The Bidders' provide for waste and off-cuts in their Bids.
- The successful Bidders (Contractor) must procure marked conductor from an approved manufacturer.
- Conductor manufacturers may sell marked conductor only to those contractors who can prove that it will be used on Eskom projects. Arrangements will be made to provide such contractors with the necessary proof, indicating the name of the project and the quantities required.
- The contractor provides for the necessary transport arrangement to deliver conductor to site.
- The contractor arranges for returning unused marked conductor to the supplier, should there be any.
- The contractor returns all waste and off-cuts to Eskom.
- An accredited Distributor may only be included in the supply chain if Eskom have received confirmation from the Eskom-approved Manufacturer of the following:
  - The Distributor is an approved/ accredited Distributor of the Manufacturer.
  - No marked conductor will be sold to anyone without a letter being presented to the manufacturer.
  - Marked conductor will be delivered directly to the contractor/ site.
  - No marked conductor may be at the premises of the Distributor.
  - The Distributor merely arranges the deal, and the process as currently being applied, remains unchanged.

#### **Refurbished Material**

Only new material will be Bided on in the main offer. Refurbished/ second hand material may only be Bided as an alternative.

## **Upfront Payment**

Bidders may submit an alternative Bid indicating the savings in cost if the contractor was to be paid for the upfront purchase and delivery of material.

#### 2.5 Earthing

The *Contractor* will be responsible for ensuring that soil resistivity tests are carried out, and that the earthing design is completed and submitted with the Bid. (as per Earthing Standards part 2)

#### 2.6 Clearances and shared structures

As per the Distribution Standard.

## 2.7 Equipment and Structures

The Contractor is to ensure that structures are uncluttered and that working clearances are maintained with regard to the amount of equipment installed and shall ensure that provision is made for safe and easy operational practice. This is especially pertinent to strain poles, switching points and transformer structures. Equipment must not be positioned on angle or strained structures. In addition, there shall be no three-phase tees, or equipment placed on vertical structures. Medium Voltage routes are to be as straight and simple as possible. Correct sag and tension techniques are to be used.

#### 2.8 Site Visits

A site diary will be signed by all personnel visiting the site. Deviations will be reported to the *Project Manager*.

# 2.9 Connections

The following principles apply to connections

a) Where only a meter change occurs,

The requirements of the standard, "Connecting existing customers in townships which Eskom is electrifying Ref.: CD/s019" applies

b) New Connections

Combined Neutral and Earth (CNE) service to be provided in line with the new earthing policy

All meters to be sealed by the Contractor (see bill no. 6)

Note :

The contractor is responsible to make good walls where ready-boards have been installed which may include the wall to be plastered and an application of one coat of paint (see bill no. six (6) in the Bill of Quantity.)

Section 6 of the Bill of quantities "House Connections" will only be paid once all correct information necessary for the loading of connections into CC & B has been submitted to the Consultant and successfully loaded onto the Eskom system i.e. control sheets, meter cards, Uploaded PCS files etc.

#### 2.10 Sample infrastructure Installation

- The successful Contractor will be required to build a sample reticulation sub system for the *Project Manager*'s approval, to serve as a quality benchmark for the project before construction commences. This sample system shall include the Bided commodities (sample board) and the construction techniques (stubby line) applicable to the project and shall be built at a central point (to be agreed with the *Project Manager*). The cost of the sample system in its entirety will be for the Bidders' account.
- The sample installation proposal shall be submitted at the detailed design stage and the construction work shall not commence until such time as the sample installation has been completed and approved by the Project Engineer. Furthermore, all materials used shall comply with the requirements of the Buyers Guide, Distribution Std part 9, and shall be new and of the best quality.
- The stubby line and sample board shall remain available and intact for the full duration of the project.

# 2.11 Approvals

The *Contractor* shall obtain the statutory approvals for the construction of this project on behalf of Eskom from the *Authorities* concerned and such approvals must be forwarded to the Eskom Area Survey Office. All approvals to be done via Eskom Survey Office to cater for annual consideration/ records etc. Statutory approvals for any given transformer area have to be submitted prior to the construction of that particular transformer area, to the Eskom *Project Manager*.

## 2.12 Specification for "AS-BUILT" PLANS (Rev. 4 1999-10-25)

# i. Main Objective

The main objective behind the requirement for the provision by the *Contractor* of "as-built" information is to provide the computerised mapping service for the Marketing, Planning, Survey Records, Construction and Maintenance of Urban/Rural reticulation projects. The Contractor is to mark-up the construction drawings with all changes on site showing the as-built configuration and these are to be submitted to Eskom survey for the creation of the as-built drawings.

## 2.13 Community Involvement

# i. Generally

Contractor must involve the community, be it for prioritising, identifying projects, advice or information

Contractor must organise all community meetings in respect of the Project.

This community involvement system must be understood and accepted by the Contractor

In any activity whatsoever the community by way of its structures (Village representatives, local and district electrification committees) should be notified and involved.

#### ii. Implementation of policy

- Promotion of community participation
- Retention directly and indirectly of a significant portion of capital expenditure within the community
- Development of local entrepreneurs ( Contractors )
- Transfer of administrative, managerial and commercial skills

#### iii. Expanded Public Works Program

#### **Description of the works**

#### **Employer's Objectives**

The employer's objectives are to deliver public infrastructure using labour intensive methods

#### Labour-intensive works

Labour-intensive works comprise the activities described in the Labour-Intensive Specification. Such works shall be constructed using local workers who are temporarily employed in terms of this scope of work.

The degree to which *Contractors* are able to embrace these principles must be indicated in the Bids submitted (see Bid Forms). This aspect of the *Works* is material and will be evaluated in consideration of the Bids.

Those parts of the contract to be constructed using labour-intensive methods have been marked in the bill of quantities with the letters LI in a separate column filled in against every item so designated. The works, or parts of the works so designated are to be constructed using labour-intensive methods only.

The use of plant to provide such works, other than plant specifically provided for in the scope of work, is a variation to the contract.

The items marked with the letters LI are not necessarily an exhaustive list of all the activities which must be done by hand, and this clause does not over-ride any of the requirements in the generic labour intensive specification in the Scope of Works.

Payment for items which are designated to be constructed labour-intensively (either in this schedule or in the Scope of Works) will not be made unless they are constructed using labour-intensive methods.

Any unauthorized use of plant to carry out work which was to be done labour-intensively will not be condoned and any works so constructed will not be certified for payment.

## Payment for the labour-intensive component of the works

Payment for works identified in the Scope of Work as being labour-intensive shall only be made in accordance with the provisions of the Contract if the works are constructed strictly in accordance with the provisions of the scope of work.

Any non-payment for such works shall not relieve the Contractor in any way from his obligations either in contract or in delict.

Table 1: Base indicators to be collected on all EPWP projects

BI Number	Project level Indicator to be	Comments
	used in monitoring systems	

1	Number of people ("Different warm bodies") employed on relevant project	Will be assumed to be equivalent to number of job opportunities created. Will measure the number of people to benefit directly form the EPWP.		
2	Person-days of employment created	Total number of person days created will be divided by 230 to convert to person years of employment created.		
3	Minimum wage rate	Since local public bodies may set the wage rate as part of the EPWP to wage rate on a particular project will need to be reported		
4	Number of training days provided	Since all workers are entitled to training it is important to ensure that actual training is delivered		
5	Overall spending on the project	Will give an indication of how much is actually spent on EPWP projects		
6	Demographics of workers on EPWP projects	The percentages of women, youth and disabled to be reported on.		

Table 2: KPI's to be used for the EPWP

KPI Number		Method for calculation	Comment
	KPI		
1	Number of Job opportunities created	Assumed to be equal to number of warm bodies employed per project	Will give an indication as to how many unemployed people benefit directly form the EPWP
2	Person years of employment created	Divide the total number of person days of all projects by 230 (Agreed upon number of person days of employment per year)	Indicator that shows the equivalent number of full-time jobs created
3	Number of training days provided	Total sum from all projects	Measure total amount of training provided
4	Overall spending on EPWP projects	Total sum from all projects	Measure total government spending on the EPWP
5	Demographics of workers on EPWP projects	Total sums of the project totals of women, youth and disabled employed	Measures the demographics of the people benefiting from the EPWP
6	Average length of employment created	Divide person years of employment created (KPI 2) by number of job opportunities (KPI 1)	Also allows comparison between sectors and types of projects
6	Total income paid out to previously unemployed workers	Multiply number of person-days (BI 2) by the minimum wage (BI 3)	
7	Average income of EPWP worker	Divide Total income (KPI 6) by Number of job opportunities (KPI 1)	
8	Average duration of training provided	Divide total number of training days (KPI 3) by number of job opportunities (KPI 1)	Provides an indication of the level of skills build in the programmer
9	Percentage of spending paid out to EPWP workers	Divide total income paid out (KPI 6) by Overall spending on EPWP (KPI 4)	Measure the labor intensity of the EPWP

To be collected by the Contractor:

• Base indicators to be collected on all EPWP projects ( See above)

# 2.13 Reporting to the Client

The *Contractor* is referred to the required Progress Report Format, as per the above. The form compares the "Planned" progress at the start of the project with the actual progress achieved

The form is to be completed weekly with all the information as required on the form.

#### 2.14 Excavation

Due to excavations being entirely the Contractors risk, Contractors must make themselves fully aware of the soil conditions during the Bidding phase.

Contractors are warned that the terrain is uneven and the access to pole positions may prove to be difficult in certain areas.

Contractors are advised to obtain as much information as possible regarding the soil structure in this area as no claims will be entertained should excavations prove to be more difficult than what Contractors allowed for in their Bid Submission.

All holes to be blasted will have to be verified by the Consultant Clerk of works prior to blasting.

### 3. ITEMS FOR THE WORKS SUPPLIED BY THE EMPLOYER

#### Free Issue Material:

NONE - All materials supplied by the contractor

#### 4. PROGRAMME, PLANNING & REPORTING

The *Contractor* shall submit a programme in the form of an activity schedule, which itemises the *Works* and indicates both the Rand value and the duration/completion of each activity.

# **Reporting Requirements:**

A weekly progress report containing:

- Executive summary (typical one to two paragraphs)
- Performance to date
- Problems experienced
- Priorities for the next two weeks
- Corrective actions necessary and needed
- Overall performance of Contractor (s) has to be sent to the Employer's Agent

The following feedback is also required by the above-mentioned responsible person:

Physical progress on all aspects of the project every Thursday before 12H00

The format and definitions will be discussed with the Contractor and by the Employer's Agent.

# 5. CONSTRAINTS ON HOW THE CONTRACTOR PROVIDES THE WORKS

# 5.1 COMPLIANCE WITH EMPLOYMENT EQUITY ACT No. 55 of 1998

CONTRACTORS EMPLOYING MORE THAN FIFTY (50) EMPLOYEES ARE REQUIRED TO SUBMIT A CERTIFICATE OF COMPLIANCE WITH THE EMPLOYMENT EQUITY ACT NO.55 OF 1998.

THIS CERTIFICATE OF COMPLIANCE IS A MANDATORY BID RETURNABLE AND FAILURE TO DO SO WOULD LEAD TO DISQUALIFICATION OF THE OFFER/BID.

# **5.2 BBBEE STATUS EVALUATION**

In terms of Regulation 5 (2) and 6 (2) of the Preferential Procurement Regulations, preference points must be awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the table on page 105 of this document.

#### 5.3 SMME/BWO STATUS

CONTRACTORS ARE REQUESTED TO CONFIRM THAT THEY COMPLY WITH THE OWNERSHIP AND CONTROL REQUIREMENTS AND THAT NOTHING MATERIAL HAS HAPPENED THAT WOULD AFFECT THEIR STATUS.

CONFIRMATION OF THE ABOVE AND CURRENT OWNERSHIP IS A BID RETURNABLE.

#### 6. COMPLETION

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

THE CONTRACTOR MUST SUBMIT MARKED-UP DRAWINGS TO THE CONSULTANT, WHO WILL SUBMIT THE AS-BUILT DRAWINGS TO ESKOM FOR APPROVAL.

THE CONTRACTOR TO LIAISE WITH THE EMPLOYER'S AGENT WITH REGARDS TO APPROVAL OF AS-BUILT.

#### 7. QUALITY MANAGEMENT

Eskom's Quality requirements for the implementation of a Quality System to be in accordance with the Eskom Standard ESKASAAU7. Quality checks to be carried out in accordance with TQRRPO20 Rev1, by the contractor prior to the Consultant/Eskom Clerk of Works or the depot inspections. All documentation must be signed by the contractor and forms part of the hand-over. Should the Contractor not fulfil this requirement, any extra time spend on site by the above-mentioned personnel to re-inspect, shall be for the Contractor's account.

#### 8. SAFETY

The following documents are applicable:

SCSPVABF3 – Occupational Health & Safety Requirements to be met by Contractors and Sub-contractors Employed by Eskom.

SCSPVABM9 - Co-ordination of Safety on Capital Projects

SCSASAAW8 – Standards Applicable to Contractors working in Close Proximity to Live Apparatus.

# Further to the above clauses the following must be strictly adhered to on inception And award of contract:

- CRIMPING TOOL CALIBRATION TEST CERTIFICATE
- DYNAMOMETER TEST CERTIFICATE
- LIST OF TEAM LEADERS AND THEIR TRAINING RECORDS WHICH SHOULD INCLUDE, PROOF THAT THEY HAVE BEEN TRAINED AND ARE IN ACKNOWLEDGMENT OF THE FOLLOWS SKILLS/METHODS OF CONSTRUCTION AND OR OTHER FACTORS INVOLVED IN BUILDING OF POWER LINES:
  - # SAGGING
  - # CRIMPING
  - # BUILDING POWER LINES
  - # FIRST AID
  - # EMERGENCY PREPAREDNESS
- HV REG'S CERTIFICATES FOR THOSE WHO WILL TAKE PERMIT DURING OUTAGES
- MINUTES OF SAFETY MEETINGS THAT WERE CARRIED OUT DURING THE PROJECT
- Access to site documentation
- ACCREDITATION RECORDS OF PERSONNEL ON SITE FROM MERSEY
- SAGGING CHART USED FOR STRINGING
- A FULL LIST OF EMPLOYEES WORKING IN THE PROJECT AS WELL AS THEIR DUTIES (THIS MUST INCLUDE ALL "CASUAL" AND LOCAL LABOR AS WELL)
- A LIST OF PERSONNEL IN CHARGE OF FIRST AID, INCLUDING TRAINING RECORDS, AS WELL AS THEIR APPOINTMENT IN TERMS OF THE STATUTORY AND OSH ACT.
- THE CONTRACTOR IS TO PROVIDE SAFETY CLOTHING TO ALL LABOR EMPLOYED INCLUDING CASUAL AS WELL AS LOCAL LABOUR.

#### 9. ENVIROMENTAL MANAGEMENT

Environmental Management to be in accordance with the following Eskom policy / procedure:

- ESKPBAAD6
- ESKPVAAZ1

Environment Management issues to be referred and co-ordinated through Eskom's Eastern Region Environmental Department (New Germany).

#### 10. SITE SERVICES & PROCEDURES

The Contractor is to provide everything necessary for the proper and timeous completion of the project.

- a. The *Contractor* provides an area for the construction offices, stores, yards, etc. to the approval of the Employer's Agent In addition, the *Contractor* shall make available a desk to be used by Employer's Agent / Employer's Representative.
- b. The Contractor erects a 1,8m fence around his construction site and fits a lockable gate
- c. The Contractor provides a construction supply at their site camp and anywhere else as may be required
- d. The Contractor provides the necessary connecting cables and distribution board(s) from the electricity supply source to the points of demand. The Contractor provides all the necessary connection to the electricity supply and maintains and secures all cable, etc.
- e. The Contractor is to provide an adequate communication network to facilitate the project including telephones. (Telkom telephone)
- f. The Contractor is to provide all necessary water and sewage connections
- g. The Contractor provides facilities and resources for first aid, fire fighting and emergency repair services in accordance with the Occupational Health and Safety Act and the local authority regulations and requirements.
- h. The standard documents listed below form part of the contract:

Ref.	Re	Title
NWS 1058	4	Safety at Construction sites : Requirements to be met by Contractors
NWS 1494	3	Fire Prevention and Protection of Contractor's Premises on New Works Sites
NWS 1007/T		The Management of construction, commissioning and handing over of Transmission Projects
HV REGS	0	HV Regulations for HV Systems
ESKASAA4		Occupational Health and safety requirements to be met
		by Contractor and Sub-Contractors

- i. Other Contractors may be involved in work on other parts of the Site or on associated equipment. Coordination with the other parties will be required for testing of systems involving other plant.
- j. Salvaged equipment from the dismantling process is to be removed from site and returned to the New Germany Store in consultation with the Employer's Representative.
- k. The Contractor must allow free access to authorised personnel when required and co-ordinates all interfaces with the Employer.
- I. The Contractor shall make its own arrangements, to the Employer and the Local Authorities approval for the disposal of all surplus material and construction waste resulting from the Works.

- m. The Contractor arranges for accommodation of his personnel. The Contractor provides temporary and/or mobile toilet facilities on the Site, and removes all evidence of a construction camp on completion of the contract, which should be restored to it's original, or better environmental state.
- n. In addition to his own signage details which shall, prior to erection, be submitted to the Employer's Agent for approval, the Contractor shall provide, erect and maintain one project signboard bearing the name of the project, The Eskom name and logo and the name of the Employer's Agent together with the Contractor's own name, all to the approval of the Employer's Agent. The cost of this sign will be borne by the Contractor.
- o. The switching of all MV feeders shall be performed by Eskom. Written notification shall be given to the appropriate depot supervisor 14 (fourteen) calendar days in advance. The Contractor shall be allowed to perform LV switching with written permission from the Eskom Personnel.
- p. Whenever it may be required to de-energise any approved portion of the electrical network during the course of the contract, the Contractor shall post notices to that effect in terms of the relevant regulations. The minimum requirement shall be as contained in this paragraph of the specification.

Each Section affected by the proposed power outage shall be notified by means of suitable notices fixed to the wooden electrical network poles. The notices shall be constructed from plain white paper glued to a firm "Masonite" backing board. The notice board shall be of minimum dimensions 600mm x 850mm.

The following minimum information shall be required on the notice:

Notices shall be provided in both English and the local language on alternate points:

#### 11. RESTRICTION APPLICABLE TO THE CONTRACTOR

# 11.1 Eskom Procedures, Directives & Policies

The Contractor must ensure compliance with all applicable Eskom Procedures, Directives and Policies.

# 11.2 Contractor Requirements / Registration

The Contractor must ensure compliance with the following requirements / registration:

- a) Wireman's Licence
- b) Electricity Contractors Board Registration
- c) Operation Regulation for High Voltage Systems

# 11.3 Eskom Contractor Training & Accreditation

The contractor must ensure that they have complete MV/LV Lines and Cables (EDCO module 19424) training and accreditation for the set number of employees. This figure is currently 5 and will increase progressively.

Fax : 031 710 5231

### 12. TITLE TO SITE MATERIALS

All energised infrastructure will be handed over to Eskom.

# 13 ACCOUNTS AND RECORDS

Records are to be kept of all invoices on the project.

#### EMPLOYMENT OF LOCAL LABOUR AND TRAINING REQUIREMENTS

#### 16. SCOPE

The specification sets out the requirements relating to the employment of local labour by involving the community through the established structures as well as the training requirements for these labourers.

#### 17. DEFINITIONS

The definitions given in the conditions of contract, the Contract Data and the Works specifications, together with the following additional definitions shall, unless the context dictates otherwise, apply:

**'Key Personnel'** means all contract managers, site agents, materials and survey technicians, trainers, supervisors, foremen, skilled plant operators and the like, and all other personnel in the permanent employ of the Service Provider or sub-contractor who possess special skills and/or who play key roles in the Service Provider's or sub-contractor's operation.

**'Labourer'** means a worker statutorily defined as employees in the Basic Conditions of Employment Act, 1997, who is temporarily or permanently employed by the Service Provider and sub-contractors to perform prescribed work on this Contract. 'Labour' means labourers or workers.

**'Labour Register'** means the list of available Local Labourers compiled by the Community Liaison Officer (CLO) in co-operation with the Project Steering Committee (PSC) in accordance with the results of their negotiations with the Service Provider and the Local Community subsequent to the awarding of the Contract.

**'Local Labourer**' means a worker who is normally permanently residing in the target area(s) as defined by the Employer in the Works Specifications and who is available to be temporarily employed by the Service Provider and sub-contractor to perform prescribed tasks that form part of the Works.

'Targeted Labour' means the Local Labourers, who are defined as the target group for the Contract as normally permanently residing in the target area(s) as defined by the Employer in the Works Specifications. It is incumbent on individuals defined as Target Labour to demonstrate their claims to such residency on the basis of identification and association with and recognition by members of the community residing within the target area. It is incumbent on individuals to provide evidence of qualifying for the target groups.

'Worker' for the purposes of this specification means any person, not being one of the Service Provider's key personnel, nor any key personnel of any sub-contractor, who is engaged by the Service Provider, a sub-contractor or the Employer and paid on an hourly paid basis to participate in the execution of any part of the contract works and shall include unskilled labour, semi-skilled and skilled labour, artisans, clerical workers and the like.

**'Workforce'** means the aggregate body comprising of all workers and shall, unless the context dictates otherwise, include the workforces of the Service Provider and all sub-contractor.

# 18. ENGAGEMENT OF LOCAL LABOUR

The temporary workforce shall, as far as practically possible, and with the exception of key personnel, be recruited /selected from the local communities.

Prior to the award of the Contract, the Employer shall, at his own cost, take all necessary actions to advertise within the local communities of the fact that the Contract will provide temporary employment opportunities and preference will be given to the use of the Local Labour on this Contract. Labourers and workers of the local community required by the Service Provider shall be recruited/ chosen from a Labour Register and appointed for work to enable the Service Provider to comply with the specific minimum target value set for the Contract Participation Goal (CPG) for the Contract. Labourers and workers of the Local community who are engaged by other employers in paid positions of employment shall not be eligible for inclusion on the Labour Register.

# **E1.3.1 Employment of Local Labourers**

Upon the award of the Contract the Service Provider shall without delay consult with the Project Steering Committee (PSC), the Engineer and the Employer, and appoint a Community Liaison Officer (CLO) from a shortlist provided by the PSC, if so instructed, who is mutually acceptable to all parties. The Community Liaison Officer shall negotiate with the Service Provider and the PSC and compile the required list of available Local Labourers called the Labour Register (Labour Desk).

The Service Provider shall select and appoint temporary contract workers required for work included in the Contract from the available Local Labourers listed in the Labour Register with due observance of the skills required for the work in question.

#### E1.3.2 Selection of Local Labourers

The Service Provider shall advise the CLO and the PSC in writing of the various categories of Local Labourers required for construction and the number of Local Labourers required in each category, together with the personal attributes which he considers desirable that each category of Local Labourers shall possess, taking due cognizance of the provisions of the Contract relating to Training.

The Service Provider shall make his selection of Local Labourers from the applicants in the Labour Register, taking due cognizance of his requirements for the workforce and the provisions of the Contract in regard of the provision of Training to the workforce and in accordance with the following principles:

- (a) No potential Local Labourer shall be precluded from being employed by the Service Provider on the execution of the Works by virtue of his lack of skill in any suitable operation forming part of the Works unless:
  - (i) All available vacancies have been or can be filled by labourers who already possess suitable skills; or
  - (ii) The completion period allowed in the Contract, or the remaining portion of the Contract period (as the case may be) is sufficient to facilitate the creation of the necessary skills;
- (c) Preference shall be given to the long-term and single heads of households;
  - (d) The Service Provider shall, in so far as is reasonably practicable, accommodate the applicant's expressed preferences regarding the types of work for which they are selected;
  - (e) The selection process shall make provision for, but shall not be limited to, the inclusion in the Labour Register of disabled Local Labourers who are deemed capable to perform selected tasks, youths who are older than sixteen but not older than thirty five years and women.

After making his selection, the Service Provider shall advise the CLO and the Engineer thereof in writing, and the Engineer, with the assistance of the CLO has the right to call a meeting with PSC and the Local Community for the purpose of ratifying the Service Provider's selection. The Service

Provider shall attend such meeting and where reasonably required, shall motivate his selection. Should the Engineer or the Local Community make reasonable objection to the selection of any particular applicant by the Service Provider, the Service Provider shall not employ such applicant and shall select another suitable applicant acceptable to the Engineer and the Local Community as a replacement of the rejected applicant, in order to finalize the composition of the workforce.

The provisions this clause shall also apply in respect of the selection of additional or replacement members of the workforce as may be necessary from time to time for the execution and completion of the Works.

#### 19. CONTRACTUAL REQUIREMENTS

# E1.4.1 Legislation

The onus shall be on the Service Provider to ensure that all statutory requirements applicable to the employment of Labour are observed.

#### E1.4.2 Labour content

The Labour Content (LC) of the Contract shall be determined as follows:

LC = total value of wages, allowances and costs paid to local labourers, including those employed by sub-Service Providers.

The total Rand value of the Labour Content, expressed as a percentage of the total Award Value (Contract Price exclusive of VAT, Provisional Sums, Prime Cost Sums and allowances for contingencies and escalation), shall be defined as the Labour Content Percentage.

#### E1.4.3 Targeted labour

The targeted labour shall be as specified in Section C3.3 of the Works Specification. The definitions, provisions and specifications of the South African National Standard Specification SANS1914-52002, Targeted Construction Procurement: Part 5: Participation of Targeted Labour will apply to this contract. Should there however be conflict between SANS1914-5: 2002 and the Works n, the latter shall take precedence and prevail.

The Service Provider shall engage targeted labour directly in the execution of the Works to the extent that the monetary value (Labour Content) of such engagement, expressed as a percentage of the Award Value (Contract Price exclusive of VAT, Provisional Sums, Prime Cost Sums and allowances for contingencies and escalation), is not less than the Contract Participation Goal (CPG). The minimum local labour goal for this contract shall be **2%** of the award value.

#### E1.4.4 Records and reporting

The Service Provider shall maintain accurate and comprehensive records of all local labourers engaged on the contract. Forms 1 to 4 (of which pro formas are included in Part C1: Agreements and Contract Data) shall be completed and submitted to the Engineer at the end of each month, from the Commencement date up to the completion of the Contract. Form 3 may be substituted by the use of electronic banking records provided that the system can be audited.

The completed forms shall accompany the Service Provider's monthly claim presented to the Engineer for payment of certified completed work. The Employer reserves the right to delay payments due to the Service Provider should the Service Provider fail to provide any item of required documentation to the approval of the Engineer.

The Service Providers Labour Content performance will be measured at the end of each month in order to monitor the extent to which he is striving to reach the Local Labour Goal specified in Section C3.3 of the Works Specification.

The Service Provider shall, on completion of the contract, and as a pre-requisite event to the release of any retention money in terms of the conditions of contract, provide the Engineer with independently audited documentary evidence of the total actually paid to the workforce and the number of workers days generated during the contract.

#### E1.4.5 SANCTIONS

In the event that the Service Provider fails to substantiate that any failure to achieve the Local Labour Goal was due to quantative under runs, the elimination of items, or any other reason beyond the Service Provider's control which may be acceptable to the Employer, the Service Provider shall be liable to pay to the Employer a financial penalty (P) calculated in accordance with the following formula:

 $P = 0.01 \times (L_M-L_A) \times V_A.$ 

Where:

P = Rand value of penalty payable.

V<sub>A</sub> = Award value (Contract Price exclusive of VAT, Provisional Sums, Prime Cost

Sums and allowances for contingencies and escalation)

L<sub>M</sub> = Local Labour Goal stated in the Project Document

L<sub>A</sub> = The local labour component which the Employer's Representative certifies as

being achieved upon completion of the contract.

#### 20. PROJECT STEERING COMMITTEE

When required a Project Steering Committee (PSC) shall be established to manage the project, consisting of members elected from each of the wards along the project road. The Service Provider will have one senior member of his staff as representative on the PSC without any voting powers.

The Service Provider will report all progress, deviations from the Contract, deviations from the programme, labour related matters, and financial progress to the PSC.

The PSC will act as liaison channel between the Service Provider and the community. The PSC will assist the Service Provider in identifying and recruiting local labour for the project.

The Service Provider shall hold meetings with the PSC on a regular basis (at least once per month but not more than twice per month) to ensure that the PSC is informed and aware of progress and problems that may arise.

Allowance is made for the payment of subsistence/travel allowances to the members of the PSC attending meetings with the Service Provider, by the Service Provider in the Schedule of Quantities.

# 21. COMMUNITY LIAISON OFFICER

# E1.6.1 Appointment

The Service Provider shall appoint a Community Liaison Officer (CLO) after consultation with the WARD COMMITTEE and the Ward Councillor Project Steering Committee (PSC), the Engineer and the Employer, as a link between the Ward Committee, Ward Councillor and Local Community PSC and the Service Provider. The Community Liaison Officer shall be nominated by the Ward Committee and Ward Councillor PSC and shall be appointed as a member of the Service Provider's management personnel and the Service Provider's normal employment conditions shall be applicable to the appointment. The Service Provider shall disclose his normal employment conditions to the Engineer when called upon to do so.

#### E1.6.2 Duties of the Community Liaison Officer

The Community Liaison Officer shall:

- (a) be available on Site daily between the hours agreed on by the Service Provider, the Employer and the Engineer from time to time;
- (b) assist the Service Provider in the identification of suitable trainees and shall attend one of each of the training sessions;
- (c) communicate with the Service Provider and the Engineer to determine the labour requirements with regard to the numbers and skills;
- (d) assist in maintaining good labour relations, and when applicable partake in Labourers' grievances and dispute procedures;
- (e) assist in and facilitate the recruitment of suitable temporary labour and the establishment of the Labour Register (Labour Desk);
- (f) attend all meetings in which the Local Community and/or Labourers are present or are required to be represented;
- (g) assist in the identification, and screening of Labourers from the Local Community in accordance with the Service Provider's requirements;
- (h) inform temporary Labourers of their conditions of temporary employment, and inform temporary Labourers as early as possible when their period of employment will be terminated:
- (i) attend disciplinary proceedings to ensure that hearings are fair and reasonable;
- (j) keep a daily written record of his interviews and community liaison activities;
- (k) carry out specific tasks ordered by the Engineer;
- (I) perform such other duties as required and agreed upon between all parties concerned.

# E1.6.3 Remuneration

The remuneration of the Community Liaison Officer shall be determined jointly by the Service Provider, Engineer and the Employer. A Provisional Sum is to be provided in the Schedule of Quantities to cover the remuneration of the Community Liaison Officer.

The Community liaison Officer shall only be employed and paid for the period in which the duties of a Community Liaison Officer are required as agreed on by the Engineer and the Service Provider.

# 22. TRAINING REQUIREMENTS

Where training is specified in the Contract, the Service Provider shall implement a formal training programme in which the various skills required for the execution and completion of the works are imparted to the workers, and where applicable, sub-contractors engaged therein, in a programmed and progressive manner. Workers shall be trained progressively throughout the duration of the contract in the various stages of a particular type of work.

All Training shall take place during normal working hours and the Service Provider shall make adequate allowance in his programme of work to accommodate the Training to be provided in terms of the Contract and shall ensure that the workers are available at the appropriate times to undergo such Training.

The Service Provider shall submit with his Bid full details of the formal training, which he intends to implement on the Contract. Details of the proposed Training shall be provided on Schedule of Proposed Training in the: Returnable Schedules and shall include the following:

- (i) The name of the training institution and course programme.
- (ii) Each type of training and course content synopsis.
- (iii) The manner in which the training is to be delivered.

The cost of the Training in accordance with the Service Provider's Schedule of Proposed Training programme shall not exceed the sums provided for Training in the relevant pay items in the Bill / Schedule of Quantities.

The Service Provider's Training schedule shall be subject to the approval of the Engineer, and the Service Provider shall, if so instructed by the Engineer, alter or amend the Training schedule and its contents to suit changing conditions on the Site and changes in the Service Provider's programme of work.

#### E1.7.1 Training of Local Labourers

Depending on the requirements of the Contract the Training shall make provision for on-site handson Training, courses presented in-house by the Service Provider, and selected courses presented by institutions accredited by the Construction, Education and Training Authority (CETA) or other institution recognized by the Department of Labour and the Employer.

Each Labourer shall receive basic instructions and on-site hands-on training for the category of work required to be executed by him/her.

An approved number of Local Labourers chosen by the Service Provider in conjunction with the Engineer shall attend in-house courses conducted by trainers in the employ of the Service Provider in accordance with the approved Training programme to satisfy the need for trained Labourers on the Site.

Where formal accredited training is specified in the Contract, Local Labourers with the required aptitude shall be nominated by the Service Provider, and subject to the approval of the Engineer, shall attend approved formal training courses presented by accredited institutions and considered essential for the execution of the Works.

For this purpose the Service Provider shall submit a selection of courses from known training institutions accredited by the Construction, Education and Training Authority (CETA) or other institution recognized by the Department of Labour and the Employer from which the Engineer will choose the courses to be attended by the nominated and approval Local Labourers.

# E1.7.2 Training for Emerging Service Providers (SMME's)

The Service Provider shall closely monitor the performance of the principals of Emerging Service Providers (SMME's), the execution of their subcontracts and shall identify those who, in his opinion, display the potential to benefit from formal Training provided for in the Contract, and when required

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by the Engineer, the Service Provider shall make recommendations in this regard. The final list of candidates will be decided on between the Service Provider and the Engineer.

Where required, Emerging Service Providers engaged by the Service Provider shall receive training and guidance according to an approved formal training programme, which comprises both management skills and business development skills.

The Service Provider shall, when requested provide full details of any additional accredited and inhouse training, viewed to be necessary by the Service Provider, which he intends to implement at his own cost.

If so indicated, the Service Provider shall alter or amend the formal training programme and its contents to suit changing conditions on Site and changes in the Service Provider's programme of work.

#### E1.7.3 Labourers remunerated during training

All Local Labourers employed by the Service Provider shall be remunerated in respect of the time spent undergoing formal training. Payment for Labourers in respect of training periods during which no productive work is executed, shall be reimbursed to the Service Provider as provided for in the Bill / Schedule of Quantities.

### E1.7.4 Non-compliance

If at any stage the Engineer notifies the Employee in writing that the Service Provider is not complying with the requirements of the Contract in respect of the training to be provided to Local and other Labourers and to the Emerging Service Providers, then the Employer is entitled to appoint competent firms or persons to conduct the specified training at the Service Provider's expense and the amounts paid to such firms or persons will be deducted from the Service Provider's payment.

The Service Provider shall be obliged to make Local Labourers and other employees available for Training when so required by the Engineer.

# 23. FORMAL TRAINING

#### E1.8.1 General

The formal skills training programme to be implemented by the Service Provider shall comply with the following minimum standards:

- (a) Be accredited by the Construction, Education and Training Authority (CETA) or other institution recognized by the Department of Labour, as being appropriate for this project.
- (b) Be delivered by suitably qualified and experienced trainers accredited to do so.
- (c) Be delivered in the modules as described by an authorized Training Centre. The modules listed are those considered applicable to most civil engineering projects and shall serve as a guide only for planning purposes. The actual training needs, training agency and programme shall be agreed with the Engineer prior to implementation.

The Service Provider shall be responsible for the provision of everything necessary for the delivery of the skills training programme, including the following:

- (i) Sufficient skilled, competent and accredited trainers to deliver the training programme to all workers in accordance with the training programme;
- (ii) A suitably furnished venue (if required)
- (iii) Transport to and from the works (as necessary)
- (iv) Tools, equipment and teaching aids;
- (v) Stationery and all other necessary materials

All members of the workforce will initially receive training in the module. Road safety for construction workers followed by training in the various work activity modules depending on the activities for which they will be employed. Each worker employed must be given the opportunity of completing at least one of the work activity modules during the initial training period, with further training being given on merit.

The Service Provider shall keep comprehensive records of the training given to each worker as well as the nature and number of work tasks executed by the worker and whenever required shall provide copies of such records to the Engineer.

The Service Provider shall in so far as it is reasonable and practical taking due and cognizance of the nature of the works to be executed at any given time, use training workers on those aspects of the works for which they have been trained.

# E1.8.2 Accredited training and attendance

Only qualified trainers employed by training agencies that are accredited by the Construction, Education and Training Authority (CETA), or other institution recognized by the Department of Labour shall deliver all training. Accredited training referred to both the trainers as well as to the training material. Certificates affirming the successful participation in the various courses shall be presented to each attendant.

The Service Provider shall facilitate in the delivery of training by instructing and motivating the hired local Labour, supervisors and sub-contractors regarding attendance and participation.

All training shall take place within normal working hours or as agreed with the trainees.

# E1.8.3 Supervisors

Attention shall be given to the formal and informal training of supervisors.

Candidates having the potential to become supervisors shall be selected from amongst the workforce and be given additional formal and informal training as outlined above. This selection will take place only once the initial skills training have been completed and workers have been given sufficient opportunity to prove their worth.

# E1.8.4 Training records and certificates

The Service Provider shall keep comprehensive records of the formal training given to each Labourer and principal of the Emerging Service Provider and whenever required shall provide copies of such

records to the Engineer. At the successful completion of each course each participant shall be issued with certificate indicating the course contents as proof of attendance and completion.

#### E1.8.5 Labour / Training Agent

If specified in the Contract, the Service Provider shall appoint a Labour / Training Agent, subject to the written approval of the Engineer. The Labour / Training Agent shall be on the Site at all times when Local and other Labourers are executing work allocated to them. The labour / Training Agent shall report in writing to the Engineer on a daily basis on the work executed by the Local and other Labourers in the employ of the Service Provider, the quality of the work the progress and all other information that the Engineer may require. The Labour / Training Agent shall also be responsible for those aspects of training which are assigned to him the Contract.

# E1.8.6 Training centre

If so specified in the Contract a suitable on-site Training centre shall be provided by the Service Provider to the satisfaction of the Engineer. The Training centre shall comply with the specifications for sire offices as specified in the Specifications Measurement and payment of the Training centre and the required equipment shall be as specified in the Project Specification.

# E2 SPECIFICATION FOR LABOUR-INTENSIVE CONSTRUCTION (EPWP)

#### E2.1 SCOPE

In order to reduce unemployment the Government has initiated the promotion of labour-intensive Expanded Public Works Programme (EPWP) projects.

The Expanded Public Works Programme (EPWP) is a short term, non-permanent, labour-intensive programme initiated by Government and funded wither fully or partially, from public resources to provide a public asset.

This specification sets out the provisions and requirements relating to labour-intensive construction for Expanded Public Works Programme (EPWP) projects.

#### E2.2 DEFINITIONS

For the purpose of this Contract, the definitions given in the Contract Data, the Standard Specifications, and the Works Specifications, together with the following additional definitions shall, unless the context dictates otherwise, apply:

**'Labour-intensive'** means the economically efficient employment of as many unskilled or semi-skilled Local Labourers as is technically feasible for an identified portion or section of the Works.

**'Sub-Contractor'** means any person or group of persons in association, or firm, or body corporate (whether formally constituted or otherwise) not being the Service Provider, to whom specific portions or aspects of the works are sublet or subcontracted by the Service Provider in accordance with the provisions of the contract.

**'Workforce'** means the aggregate body comprising of all workers and shall, unless the context dictates otherwise, include the workforces of the Service Provider and all sub-contractors.

Standard specifications (those normally used by the public bodies) are to be utilised. It is necessary, however, to include certain requirements in the scope of work to implement labour-intensive works in accordance with the provisions of these Guidelines.

# E2.3 LABOUR-INTENSIVE COMPETENCIES OF SERVICE PROVIDER'S STAFF

# E2.3.1 Eligibility requirements

A contract will only be entered into with a Bidder who has in his employ management and supervisory staff satisfying the requirements of the scope of work for labour-intensive competencies for supervisory and management staff.

The Bidder shall, when requested by the Employer to do so, submit with his Bid the names of all management and supervisory staff that will be employed to supervise the labour-intensive portion of the works together with satisfactory evidence that such staff members satisfy the eligibility requirements.

# E2.3.2 Labour-intensive competencies of supervisory and management staff

Established Service Providers shall only engage supervisory and management staff in labour intensive works who have either completed, or for the period 1 April 2004 to 30 June 2005, are registered for training towards, the skills programme outlined in Table 1.

Emerging Service Providers shall have personally completed, or be registered on a skills programme for the NQF level 2 unit standard. All other site supervisory staff in the employ of emerging Service Providers must have completed, or be registered on a skills programme for, the NQF level 2 unit standards or NQF level 4 unit standards.

Table 1: Skills programme for supervisory and management staff

Personnel	NQF	Unit standard titles	Skills programme
	level		description
Team leader /	2	Apply Labour Intensive Construction Systems and	This unit standard must be
supervisor		Techniques to Work Activities	completed, and
		Use Labour Intensive Construction Methods to	1
		Construct and Maintain Roads and Storm water	
		Drainage	Any one of these 3 unit
		Use Labour Intensive Construction Methods to	standards
		Construct and Maintain Water and Sanitation	
		Services	<b>9</b>
		Use Labour Intensive Construction Methods to	
		Construct, Repair and Maintain Structures	
Foreman/	4	Implement labour Intensive Construction Systems	This unit standard must be
supervisor		and Techniques	completed, <b>and</b>

		Use Labour Ir	ntensive	Cor	nstruction M	Methods	s to	1		
		Construct and	Maintai	n Ro	ads and S	torm w	ater			
		Drainage						Any	one of th	nese 3 unit
		Use Labour Ir	ntensive	Cor	nstruction N	Methods	s to	stand	dards	
		Construct and	Mainta	ain V	Water and	Sanita	tion			
		Services								
		Use Labour Ir	ntensive	Cor	nstruction I	Methods	s to			
		Construct, Rep	air and I	Main	tain Structu	ıres				
Site Agent /	5	Manage Labou	r Intensi	ve C	onstruction	Proces	ses	Skills P	rogramm	e against
Manager (i.e. the								this sing	le unit sta	andard
Service Provider's										
most senior										
representative that										
is resident on the										
site)										
Details of these	skills	programmes	may	be	obtained	from	the	CETA	ETQA	manager
(e-mail: gera	rd@ceta	a.co.za, Tel: 01	1-265 59	900)						

# E2.4 STANDARD CONDITIONS OF EMPLOYMENT FOR EXPANDED PUBLIC WORKS PROGRAMME (EPWP) PROJECTS

The Ministerial Determination, Special Public Works Programmes, issued in terms of the Basic Conditions of Employment Act of 1997 by the Minister of Labour in Government Notice N° R63 of 25 January 2002, as reproduced below, shall apply to works described in the scope of work as being labour-intensive and which are undertaken by unskilled or semi-skilled workers.

### E2.4.1 Introduction

- (a) This document contains the standard terms and conditions for workers employed in elementary occupations on an Expanded Public Works Programme (EPWP). These terms and conditions do NOT apply to persons employed in the supervision and management of an EPWP.
- (b) Additional Definitions:

The following additional definitions shall, unless the context dictates otherwise, apply:

- (i) "department" means any department of the State, implementing agent or Service Provider;
- (ii) "employer" means any department, implementing agency or Service Provider that hires workers to work in elementary occupations on a EPWP;
- (iii) "worker" means any person working in an elementary occupation on a EPWP;
- (iv) "elementary occupation" means any occupation involving unskilled or semi-skilled work;
- (v) "management" means any person employed by a department or implementing agency to administer or execute an EPWP;
- (vi) "task" means a fixed quantity of work;
- (vii) "task-based work" means work in which a worker is paid a fixed rate for performing a task;
- (viii) "task-rated worker" means a worker paid on the basis of the number of tasks completed;
- (ix) "time-rated worker" means a worker paid on the basis of the length of time worked.

#### E2.4.2 Terms of Work

- (a) Workers on an EPWP are employed on a temporary basis.
- (b) A worker may NOT be employed for longer than 24 months in any five-year cycle on an EPWP.
- (c) Employment on an EPWP does not qualify as employment as a contributor for the purposes of the Unemployment Insurance Act 30 of 1966.

#### E2.4.3 Normal Hours of Work

- (a) An employer may not set tasks or hours of work that require a worker to work-
  - (i) More than forty hours in any week;
  - (ii) On more than five days in any week; and
  - (iii) For more than eight hours on any day.
- (b) An employer and worker may agree that a worker will work four days per week. The worker may then work up to ten hours per day.
- (c) A task-rated worker may not work more than a total of 55 hours in any week to complete the tasks allocated (based on a 40-hour week) to that worker.

#### E2.4.4 Meal Breaks

- (a) A worker may not work for more than five hours without taking a meal break of at least thirty minutes duration.
- (b) An employer and worker may agree on longer meal breaks.
- (c) A worker may not work during a meal break. However, an employer may require a worker to perform duties during a meal break if those duties cannot be left unattended and cannot be performed by another worker. An employer must take reasonable steps to ensure that a worker is relieved of his or her duties during the meal break.
- (d) A worker is not entitled to payment for the period of a meal break. However, a worker who is paid on the basis of time worked must be paid if the worker is required to work or to be available for work during the meal break.

#### E2.4.5 Special Conditions for Security Guards

- (a) A security guard may work up to 55 hours per week and up to eleven hours per day.
- (b) A security guard who works more than ten hours per day must have a meal break of at least one hour or two breaks of at least 30 minutes each.

#### E2.4.6 Daily Rest Period

Every worker is entitled to a daily rest period of at least eight consecutive hours. The daily rest period is measured from the time the worker ends work on one day until the time the worker starts work on the next day.

#### E2.4.7 Weekly Rest Period

Every worker must have two days off every week. A worker may only work on their day off to perform work, which must be done without delay and cannot be performed by workers during their ordinary hours of work ("emergency work").

#### E2.4.8 Work on Sundays and Public Holidays

- (a) A worker may only work on a Sunday or public holiday to perform emergency or security work.
- (b) Work on Sundays is paid at the ordinary rate of pay.
- (c) A task-rated worker who works on a public holiday must be paid:
  - (i) The worker's daily task rate, if the worker works for less than four hours;
  - (ii) Double the worker's daily task rate, if the worker works for more than four hours.
- (d) A time-rated worker who works on a public holiday must be paid:
  - (i) The worker's daily rate of pay, if the worker works for less than four hours on the public holiday;
  - (ii) Double the worker's daily rate of pay, if the worker works for more than four hours on the public holiday.

#### E2.4.9 Sick Leave

- (a) Only workers who work four or more days per week have the right to claim sick-pay in terms of this clause.
- (b) A worker who is unable to work on account of illness or injury is entitled to claim one day's paid sick leave for every full month that the worker has worked in terms of a contract.
- (c) A worker may accumulate a maximum of twelve days' sick leave in a year.
- (d) Accumulated sick leave may not be transferred from one contract to another contract.
- (e) An employer must pay a task-rated worker the worker's daily task rate for a day's sick leave.
- (f) An employer must pay a time-rated worker the worker's daily rate of pay for a day's sick leave.
- (g) An employer must pay a worker sick pay on the worker's usual payday.
- (h) Before paying sick-pay, an employer may require a worker to produce a certificate stating that the worker was unable to work on account of sickness or injury if the worker is:
  - (i) Absent from work for more than two consecutive days; or
  - (ii) Absent from work on more than two occasions in any eight-week period.

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- A medical certificate must be issued and signed by a medical practitioner, a qualified nurse or a clinic staff member authorized to issue medical certificates indicating the duration and reason for incapacity.
- (j) A worker is not entitled to paid sick-leave for a work-related injury or occupational disease for which the worker can claim compensation under the Compensation for Occupational Injuries and Diseases Act.

#### E2.4.10 Maternity Leave

- (a) A worker may take up to four consecutive months' unpaid maternity leave.
- (b) A worker is not entitled to any payment or employment-related benefits during maternity leave.
- (c) A worker must give her employer reasonable notice of when she will start maternity leave and when she will return to work.
- (d) A worker is not required to take the full period of maternity leave. However, a worker may not work for four weeks before the expected date of birth of her child or for six weeks after the birth of her child, unless a medical practitioner, midwife or qualified nurse certifies that she is fit to do so.
- (e) A worker may begin maternity leave:
  - (i) Four weeks before the expected date of birth; or
  - (ii) On an earlier date:
    - If a medical practitioner, midwife or certified nurse certifies that it is necessary for the health of the worker or that of her unborn child; or
    - If agreed to between employer and worker; or
  - (iii) On a later date, if a medical practitioner, midwife or certified nurse has certified that the worker is able to continue to work without endangering her health.
- (f) A worker who has a miscarriage during the third trimester of pregnancy or bears a stillborn child may take maternity leave for up to six weeks after the miscarriage or stillbirth.
- (g) A worker who returns to work after maternity leave, has the right to start a new cycle of twenty-four months employment, unless the EPWP on which she was employed has ended.

### E2.4.11 Family responsibility leave

Workers, who work for at least four days per week, are entitled to three days paid family responsibility leave each year in the following circumstances:

- (a) When the employee's child is born;
- (b) When the employee's child is sick;
- (c) In the event of a death of:
  - (i) The employee's spouse or life partner;
  - (ii) The employee's parent, adoptive parent, grandparent, child, adopted child, grandchild or sibling.

#### E2.4.12 Statement of Conditions

- (a) An employer must give a worker a statement containing the following details at the start of employment:
  - (i) The employer's name and address and the name of the EPWP;
  - (ii) The tasks or job that the worker is to perform; and
  - (iii) The period for which the worker is hired or, if this is not certain, the expected duration of the contract:
  - (iv) The worker's rate of pay and how this is to be calculated;
  - (v) The training that the worker will receive during the EPWP.

- (b) An employer must ensure that these terms are explained in a suitable language to any employee who is unable to read the statement.
- (c) An employer must supply each worker with a copy of these conditions of employment.

#### E2.4.13 Keeping Records

- (a) Every employer must keep a written record of at least the following:
  - (i) The worker's name and position;
  - (ii) In the case of a task-rated worker, the number of tasks completed by the worker;
  - (iii) In the case of a time-rated worker, the time worked by the worker;
  - (iv) Payments made to each worker.
- (b) The employer must keep this record for a period of at least three years after the completion of the EPWP.

#### E2.4.14 Payment

- (a) An employer must pay all wages at least monthly in cash or by cheque or into a bank account.
- (b) A task-rated worker will only be paid for tasks that have been completed.
- (c) An employer must pay a task-rated worker within five weeks of the work being completed and the work having been approved by the manager or the Service Provider having submitted an invoice to the employer.
- (d) A time-rated worker will be paid at the end of each month.
- (e) Payment must be made in cash, by cheque or by direct deposit into a bank account designated by the worker.
- (f) Payment in cash or by cheque must take place:
  - (i) At the workplace or at a place agreed to by the worker;
  - (ii) During the worker's working hours or within fifteen minutes of the start or finish of work;
  - (iii) In a sealed envelope which becomes the property of the worker.
- (g) An employer must give a worker the following information in writing:
  - (i) The period for which payment is made;
  - (ii) The numbers of tasks completed or hours worked;
  - (iii) The worker's earnings;
  - (iv) Any money deducted from the payment;
  - (v) The actual amount paid to the worker.
- (h) If the worker is paid in cash or by cheque, this information must be recorded on the envelope and the worker must acknowledge receipt of payment by signing for it
- (i) If a worker's employment is terminated, the employer must pay all monies owing to that worker within one month of the termination of employment.

#### E2.4.15 Deductions

- (a) An employer may not deduct money from a worker's payment unless the deduction is required in terms of a law.
- (b) An employer must deduct and pay to the SA Revenue Services any income tax that the worker is required to pay.
- (c) An employer who deducts money from a worker's pay for payment to another person must pay the money to that person within the time period and other requirements specified in the agreement law, court order or arbitration award concerned.
- (d) An employer may not require or allow a worker to:
  - (i) Repay any payment except an overpayment previously made by the employer by mistake;
  - (ii) State that the worker received a greater amount of money than the employer actually paid to the worker; or
  - (iii) Pay the employer or any other person for having been employed.

# E2.4.16 Health and Safety

- (a) Employers must take all reasonable steps to ensure that the working environment is healthy and safe.
- (b) A worker must:
  - (i) Work in a way that does not endanger his/her health and safety or that of any other person;
  - (ii) Obey any health and safety instruction;
  - (iii) Obey all health and safety rules of the SPWP;
  - (iv) Use any personal protective equipment or clothing issued by the employer;
  - (v) Report any accident, near-miss incident or dangerous behaviour by another person to their employer or manager.

# E2.4.17 Compensation for Injuries and Diseases

- (a) It is the responsibility of the employers (other than a Service Provider) to arrange for all persons employed on a SPWP to be covered in terms of the Compensation for Occupational Injuries and Diseases Act, 130 of 1993.
- (b) A worker must report any work-related injury or occupational disease to their employer or manager.
- (c) The employer must report the accident or disease to the Compensation Commissioner.
- (d) An employer must pay a worker who is unable to work because of an injury caused by an accident at work 75% of their earnings for up to three months. The employer will be refunded this amount by the Compensation Commissioner. This does NOT apply to injuries caused by accidents outside the workplace such as road accidents or accidents at home.

# E2.4.18 Termination

- (a) The employer may terminate the employment of a worker for good cause after following a fair procedure.
- (b) A worker will not receive severance pay on termination.
- (c) A worker is not required to give notice to terminate employment. However, a worker who wishes to resign should advise the employer in advance to allow the employer to find a replacement.
- (d) A worker who is absent for more than three consecutive days without informing the employer of an intention to return to work will have terminated the contract. However, the worker may be re-engaged if a position becomes available for the balance of the 24-month period.
- (e) A worker who does not attend required training events, without good reason, will have terminated the contract. However, the worker may be re-engaged if a position becomes available for the balance of the 24-month period.

#### E2.4.19 Certificate of Service

- (a) On termination of employment, a worker is entitled to a certificate stating:
  - (i) The worker's full name;
  - (ii) The name and address of the employer;
  - (iii) The EPWP on which the worker worked;
  - (iv) The work performed by the worker;
  - (v) Any training received by the worker as part of the EPWP;
  - (vi) The period for which the worker worked on the EPWP; and
  - (vii) Any other information agreed on by the employer and worker.

# E2.5 VARIATIONS TO STANDARD CONDITIONS OF EMPLOYMENT FOR EXPANDED PUBLIC WORKS PROGRAMME (EPWP) PROJECTS

Notwithstanding the provisions of the above mentioned Ministerial Determination, Expanded Public Works Programmes, issued in terms of the Basic Conditions of Employment Act of 1997 by the Minister of Labour in Government Notice No R63 of 25 January 2002, the Service Provider shall comply with the following relevant statutory legislation:

- (a) Basic Conditions of Employment Act 75 of 1997
- (b) Labour Relations Act 66 of 1995
- (c) Employment Equity Act 55 of 1998 (Chapters 1 and 2)
- (d) Occupational Health and Safety Act 85 of 1993
- (e) Compensation for Occupational Injuries and Diseases Act 130 of 1993
- (f) Skills Development Act of 1998

The statutory Department of Labour's Government Notice No. R204 of 2 March 2001: Basic Conditions of Employment Act (No. 75 of 1997): Sectoral Determination 2: Civil Engineering Sector, South Africa as amended shall apply in respect of any employer or employee associated with the contract.

For the purposes of this contract, the following variations to the above-mentioned Ministerial Determination, Expanded Public Works Programmes, issued in terms of the Basic Conditions of Employment Act of 1997 by the Minister of Labour in Government Notice No. R63 of 25 January Page 238 of 336

2002 shall apply. The Sub-clause numbers refer to the relevant Sub-clause number under Sub-clause E2.4 above.

Delete Sub Sub-clause E2.4.3 and replace with the following:

"Clauses 8, 9 and 10 of the Department of Labour Government Notice No. R204 of 2 March 2001: Basic Conditions of Employment Act (No. 75 of 1997): Sectoral Determination 2: Civil Engineering Sector, South Africa shall apply. Clause 8 makes provision for 45 hours/week."

Delete Sub Sub-clauses E2.4.6 and E2.4.7 and replace with the following:

"Clause 12 of the Department of Labour Government Notice No. R204 of 2 March 2001: Basic Conditions of Employment Act (no. 75 of 1997): Sectoral Determination 2: Civil Engineering Sector, South Africa shall apply. Clause 12 makes provision for a daily rest period of 12 consecutive hours and a weekly rest period of 36 consecutive hours."

Delete Sub-sub-clause E2.4.14 and replace with the following:

"Sub-clause 5(1) (a) of the Department of Labour Government Notice No. R204 of 2 March 2001: Basic Conditions of Employment Act (No. 75 of 1997): Sectoral Determination 2: Civil Engineering Sector, South Africa shall apply. Sub-clause 5(1) (a) makes provision for employees to be paid weekly, fortnightly or monthly."

#### E2.6 EMPLOYMENT OF UNSKILLED AND SEMI-SKILLED WORKERS IN LABOUR INTENSIVE WORKS

#### E2.6.1 Requirements for the sourcing and engagement of labour.

- (a) Unskilled and semi-skilled labour required for the execution of all labour intensive works shall be engaged strictly in accordance with prevailing legislation, SANS 1914-5, Participation of Targeted Labour and the Works Specification.
- (b) The minimum daily wage rate payable shall be aligned with the current National minimum wage payable at time of Bid as legislated and gazetted by government.
- (c) Tasks established by the Service Provider must be such that:
  - (i) The average worker completes 5 tasks per week in 40 hours or less; and
  - (ii) The weakest worker completes 5 tasks per week in 55 hours or less.
- (d) The Service Provider must revise the time taken to complete a task whenever it is established that the time taken to complete a weekly task is not within the requirements of sub-sub-clause E2.6.1 (c) above.
- (e) The Service Provider shall, through all available community structures, inform the local community of the labour intensive works and the employment opportunities presented thereby. Preference must be given to people with previous practical experience in construction and / or who come from households:
  - (i) Where the head of the household has less than a primary school education;
  - (ii) That have less than one full time person earning an income;
    - (iii) Where subsistence agriculture is the source of income; and
  - (iv) Those that are not in receipt of any social security pension income

- (f) The Service Provider shall endeavour to ensure that the expenditure on the employment of temporary workers is in the following proportions:
  - (i) 40% women;
  - (ii) 20% youth who are between the ages of 18 and 35; and
  - (iii) 2% persons with disabilities.

#### E2.6.2 Specific provisions pertaining to SANS 1914-5

#### (a) Definitions

Targeted labour: Unemployed persons who are employed as local labour on the project.

# (b) Contract participation goals

- (i) The specified contract participation goal for the contract is 20% of the award value. The contract participation goal shall be measured in the performance of the contract to enable the employment provided to targeted labour to be quantified.
- (ii) The wages and allowances used to calculate the contract participation goal shall, with respect to both time-rated and task rated workers, comprise all wages paid and any training allowance paid in respect of agreed training programmes.

# (c) Terms and conditions for the engagement of targeted labour

Further to the provisions of clause 3.3.2 of SANS 1914-5, written contracts shall be entered into with targeted labour.

# (d) Variations to SANS 1914-5

- (i) The definition for net amount shall be amended as follows: Financial value of the contract upon completion, exclusive of any value added tax or sales tax, which the law requires the employer to pay the Service Provider.
- (ii) The schedule referred to in clause 5.2 shall in addition reflect the status of targeted labour as women, youth and persons with disabilities and the number of days of formal training provided to targeted labour.

# E2.6.3 Training of targeted labour

- (a) The Service Provider shall provide all the necessary on-the-job training to targeted labour to enable such labour to master the basic work techniques required to undertake the work in accordance with the requirements of the contract in a manner that does not compromise worker health and safety.
- (b) The cost of the formal training of targeted labour will be funded by the local office of the Department of Labour. This training will take place as close to the project site as practically possible. The Service Provider must access this training by informing the relevant regional office of the Department of Labour in writing, within 14 days of being awarded the contract, of the likely number of persons that will undergo training and when such training is required. The Employer and the Department of Public Works (Fax: 012 3258625/ EPWP Unit, Private Bag X65, Pretoria 0001) must be furnished with a copy of this request.

- (c) The Service Provider shall do nothing to dissuade targeted labour from participating in training programmes and shall take all reasonable steps to ensure that each beneficiary is provided with two days of formal training for every 22 days worked.
- (d) An allowance equal to 100% of the task rate or daily rate shall be paid by the Service Provider to workers who attend formal training, in terms of sub clause E2.6.3(c) above.
- (e) Proof of compliance with the requirements of sub-clause E2.6.3 (b) to (d) must be provided by the Service Provider to the Employer prior to submission of the final payment certificate.

#### E2.7 GENERIC LABOUR-INTENSIVE SPECIFICATION

# **E2.7.1** Applicable Standardized Specification

The Construction and Management Requirements for Works Contracts:

Specification SANS 1921-5: 2004, Part 5: Earthworks Activities, which are to be performed by Hand, shall apply as additional Works Specifications to this contract. The South African National Standard SANS 1921-5: 2005 Specification is not bound in this document and it may be obtained from South African Standards (website <a href="www.stansa.co.za">www.stansa.co.za</a>) or viewed by appointment at the offices of the Employer's Representative during normal working hours.

# E2.7.2 Variations to SANS 1921-5: 2004, Part 5: Earthworks activities, which are to be performed by hand

#### Clause 4.2: Trench excavation

Add the following to sub-clause 4.2.1:

"The trenches which are to be excavated by hand are up to 1,5m deep."

# Clause 4.4: Excavations other than in trenches

Replace sub-sub-clause 4.4.1 with the following:

"All material excavatable by hand related to the items listed in Table 4.13/1 shall be excavated by hand."

# Clause 4.7: Loading

Delete and replace with the following:

"Loading of material in areas difficult for the specialised equipment (restricted areas) shall be done by hand."

# Clause 4.8: Haul

Add the following:

"This clause shall not apply to this contract."

#### Clause 4.10: Spreading

Add the following:

"This clause shall apply to this contract only provided the material can be economically spread by hand."

Add the following new clauses 4.13 and 4.14:

#### "4.13: Labour-intensive Work

The items/activities that shall be done by hand are listed/ provided in Part C4: Site Information. These listed items and others indicated by the prefix LI in the Bill of Quantities are compulsory and may not be executed in any other way.

The Service Provider may identify further activities to increase the labour component of the contract.

#### 4.14: Manufactured Elements

Elements manufactured or designed by the Service Provider, such as manhole rings and cover slabs, precast concrete planks and pipes, masonry units and edge beams shall not individually, have a mass of more than 320kg. In addition the items shall be large enough so that four workers can conveniently and simultaneously acquire a proper hand hold on them.

The Service Provider may also propose to the Engineer additional labour based activities, or alternative activities in place of any of the above-mentioned activities that cannot be executed using labour based methods due to unforeseen and abnormal circumstances.

The Service Provider shall take cognizance of his General Obligations and the contribution of Targeted Labour to the Service Provider Participation Goal (CPG) specified for the contract.

Before commencing with any labour-intensive operations the Service Provider shall discuss his intentions with the Engineer, and shall submit to the Engineer on a weekly basis, daily labour returns indicating the numbers of temporary personnel employed on the works and the activities on which they were engaged."

#### E2.8 MEASUREMENT AND PAYMENT

#### **Prescribed Labour-intensive work**

Those parts of the Works included in the contract, which are to be constructed using labour-intensive methods have been marked in the Schedule / Bill of Quantities. The pay items or sub-items of the works, or parts of the works which are to be constructed using labour-intensive methods only are marked by the letter LI as included in the Payment Refers Column for that item as in the example below. The use of plant to provide such works, other than plant specifically provided for in the Scope of Work, is a variation to the contract. The items marked with LI are not necessarily an exhaustive list of all the activities which may be done by hand, and this clause does not over-ride any of the requirements in the generic labour intensive specification in this Works Specifications.

Payment for items which are designated to be constructed labour-intensively (either in the Schedule / Bill of Quantities or in the Scope of Work) will not be made unless they are constructed using labour-intensive methods. Any unauthorized use of plant to carry out work, which is to be done labour-intensively will not be condoned and any works so constructed will not be certified for payment.

#### **Example**

Item Ref	Payment Refers	Description	Unit
2.1	SANS 1200 C	SITE CLEARANCE	
2.1.1	PSC 5.1 <b>LI</b>	Clear and grub road reserve width 8-13m	ha

2.1.2	SANS 1200 C 8.2.8 LI	Demolish and remove all type of existing shacks on road reserve, irrespective of size on the Engineers instruction	No	
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# **C2.3: SUMMARY PAGE OF BILL OF QUANTITIES**

ELECTRICAL ENGINEERING CONTRACTOR TO IMPLEMENT THE ABAQULUSI WARD 1 ELECTRIFICATION PROJECT (63 CONNECTIONS

SECTION	DESCRIPTION	AMOUNT
А	PRELIMINARY AND GENERAL	R
В	MV TRANSFORMERS	R
С	MV OVERHEAD	R
D	OVERHEAD SUPPORT	R
Е	DISMANTLING	R
F	LV OVERHEAD	R
G	HOUSE CONNECTIONS	R
	SUB TOTAL A: TOTAL OF PRICED ITEMS	R
	ADD 10% CONTINGENCIES TO SUB TOTAL A	R
	SUB TOTAL B: NET CONTRACT PRICE	R
	ADD 15% VAT TO SUB TOTAL B	R
	CONTRACT PRICE CARRIED FORWARD TO FORM OF OFFER	R

Signed	 Date	
Name	 Position	
Tenderer		

# ELECTRICAL ENGINEERING CONTRACTOR TO IMPLEMENT THE ABAQULUSI WARD 2 ELECTRIFICATION PROJECT (200 CONNECTIONS)

SECTION	DESCRIPTION	AMOUNT
А	PRELIMINARY AND GENERAL	R
В	MV TRANSFORMERS	R
С	MV OVERHEAD	R
D	OVERHEAD SUPPORT	R
Е	DISMANTLING	R
F	LV OVERHEAD	R
G	HOUSE CONNECTIONS	R
	SUB TOTAL A: TOTAL OF PRICED ITEMS	R
	ADD 10% CONTINGENCIES TO SUB TOTAL A	R
	SUB TOTAL B: NET CONTRACT PRICE	R
	ADD 15% VAT TO SUB TOTAL B	R
	CONTRACT PRICE CARRIED FORWARD TO FORM OF OFFER	R

Signed	 Date	
Name	 Position	
Tenderer		

# ELECTRICAL ENGINEERING CONTRACTOR TO IMPLEMENT THE ABAQULUSI WARD 3 ELECTRIFICATION PROJECT (69 CONNECTIONS)

SECTION	DESCRIPTION	AMOUNT
А	PRELIMINARY AND GENERAL	R
В	MV TRANSFORMERS	R
С	MV OVERHEAD	R
D	OVERHEAD SUPPORT	R
Е	DISMANTLING	R
F	LV OVERHEAD	R
G	HOUSE CONNECTIONS	R
	SUB TOTAL A: TOTAL OF PRICED ITEMS	R
	ADD 10% CONTINGENCIES TO SUB TOTAL A	R
	SUB TOTAL B: NET CONTRACT PRICE	R
	ADD 15% VAT TO SUB TOTAL B	R
	CONTRACT PRICE CARRIED FORWARD TO FORM OF OFFER	R

Signed	 Date	
Name	 Position	
Tenderer		

# ELECTRICAL ENGINEERING CONTRACTOR TO IMPLEMENT THE ABAQULUSI WARD 4 ELECTRIFICATION PROJECT (101 CONNECTIONS)

SECTION	DESCRIPTION	AMOUNT
А	PRELIMINARY AND GENERAL	R
В	MV TRANSFORMERS	R
С	MV OVERHEAD	R
D	OVERHEAD SUPPORT	R
Е	DISMANTLING	R
F	LV OVERHEAD	R
G	HOUSE CONNECTIONS	R
	SUB TOTAL A: TOTAL OF PRICED ITEMS	R
	ADD 10% CONTINGENCIES TO SUB TOTAL A	R
	SUB TOTAL B: NET CONTRACT PRICE	R
	ADD 15% VAT TO SUB TOTAL B	R
	CONTRACT PRICE CARRIED FORWARD TO FORM OF OFFER	R

Signed	 Date	
Name	 Position	
Tondoror		

# ELECTRICAL ENGINEERING CONTRACTOR TO IMPLEMENT THE JOZINI WARD 4 ELECTRIFICATION PROJECT (213 CONNECTIONS)

SECTION	DESCRIPTION	AMOUNT
А	PRELIMINARY AND GENERAL	R
В	MV TRANSFORMERS	R
С	MV OVERHEAD	R
D	OVERHEAD SUPPORT	R
Е	DISMANTLING	R
F	LV OVERHEAD	R
G	HOUSE CONNECTIONS	R
	SUB TOTAL A: TOTAL OF PRICED ITEMS	R
	ADD 10% CONTINGENCIES TO SUB TOTAL A	R
	SUB TOTAL B: NET CONTRACT PRICE	R
	ADD 15% VAT TO SUB TOTAL B	R
	CONTRACT PRICE CARRIED FORWARD TO FORM OF OFFER	R

Signed	 Date	
Name	 Position	
Tondoror		

# **COGTA KZN**

TENDER NUMBER: ZNT2011/2020LG

ELECTRIFICATION OF THE ABAQULUSI WARD 1 (63 CONNECTIONS), ABAQULUSI WARD 2 (200 CONNECTIONS), ABAQULUSI WARD 3 (69 CONNECTIONS), ABAQULUSI WARD 4 (101 CONNECTIONS) & JOZINI WARD 4 (213 CONNECTIONS)

# **CONTRACT**

PART 3 (OF 5): SCOPE OF WORK

# **CONTENTS**

C3.1	Description of the Works	Blue
C3.2	Engineering	Blue
C3.3	Procurement	Blue
C3.4	Construction	Blue
C3.5	Management	Blue
C3.6	Health and Safety Requirements and Procedures	Blue

#### **C3.1: DESCRIPTION OF THE WORKS**

#### C3.1.1 EMPLOYER'S OBJECTIVES

The employer's objectives are to deliver rural electrification projects using labour-intensive methods in the rural area of **Abaqulusi Ward 1, 2, 3, 4 and Jozini Ward 4**.

The project consists internal MV AAAC 35 / MV ACRS FOX conductor and forms part of electrification for COGTA KZN. The Wards to be connected are **Abaqulusi Ward 1, 2, 3, 4 and Jozini Ward 4**. In accordance with the information provided by the Network Planning, all the take-off points will be shown in the planning report with the normal conditions and the light load conditions specified

The works in this contract are to be executed by using both conventional and labour-intensive construction methods according to the Expanded Public Works Programme (EPWP).

Labour-intensive works comprise the activities described in EPWP framework and related EPWP Ministerial determination, SANS 1921-5, Earthworks activities which are to be performed by hand, and its associated specification data. Such works shall be constructed using local workers who are temporarily employed in terms of this Scope of Work.

- C3.1.2 The Department will be implementing objective criteria in the awarding of the bid. The following conditions apply in the objective criteria:
  - a) The department wishes to outsource the required services to as many service providers as possible who meet the qualifying criteria of the bid.
  - b) Only one award will be made per bidder, with the exception that where no other bidder has met the qualifying criteria for a particular ward, then consideration will be given by the Department in recommending a multiple awards.
  - c) In cases of multiple awards, the Department will reserve the right to make an award of bid subject to the bid price being regarded as fair and reasonable in line with the Departments assessment. Should the price be not regarded as fair and reasonable, then the Department will reserve the right to not make an award of bid for that particular ward and to re-invite offers for that ward only.
  - d) Where no offers have been received for a particular ward, the Department will also reserve the right to tender for that particular ward only.
  - e) Bidders must employ workers from the local community in which the project is undertaken.

# C3.1.2 OVERVIEW OF THE WORKS

The Works to be carried out by the Contractor under this Contract comprise the construction of mainly the following:

MV & LV Construction:

- Construct MV AAAC 11/22kV for internal MV and upgrade of dual phase line to three phase line to Abaqulusi Ward 1, 2, 3, 4 and Jozini Ward 4 as depicted on the drawings.
- Connect 344 households at villages with Split DIN rail 20A Meters
- Out of line transformer structure DDT1866B shall be used for all transformers
- All service connections to houses shall be done using 6mm² and 10mm² concentric cable
- Use of insulators (shackle 100ht x114dia porc D2994) where stay & LV conductors come
  into contact, for example, where MV line terminates and LV line continues and also where
  strut pole comes into contact with LV lines (DDT0980).

- Eskom drawings to be followed strictly. For spacing/attachment heights et cetera, drawings 0348, 1866B, and other applicable drawings to be used and enough spacing between LV conductors and 4.5m cross arms on structure 1866B must be allowed (at least 300mm)
- MV insulation coordination on wooden poles to be done as per DDT0310
- All drawings issued shall form part of Contract drawings including the Single Line Diagrams and shall be consulted throughout the Construction process, and if any discrepancies are noted, the Engineer shall be notified immediately.
- Vibration dampers to be used at spans longer than 180m.
- 35mm<sup>2</sup> Aerial Bundle Conductor to be used on LV network.
- Preliminary and general costs and site establishment
- Site Works/Terrace and Drainage, which includes bush clearing, tree felling and importing of compaction soil.
- Installing of MV Equipment which includes MV switchgear, sectionalizers, transformers, surge Arrestors etc.
- Support for overhead system which includes poles, stays, cross-arm, struts etc.
- MV Overhead distribution system, which includes stringing, damage repair and make off of conductors.
- Labelling of structures, which includes all suspension, strain, angle strain and trips from the sending end to the receiving end substation.
- LV Overhead Distribution lines, which includes all the LV structures, LV fuses, service boxes etc.
- House Connections which includes the test and commissioning, meters and bases, LV services etc.
- Dismantling of conductors, Poles, etc.

#### C3.1.3 LOCATION OF WORKS

The site is situated within Abaqulusi Ward 1, 2, 3, 4 and Jozini Ward 4.

#### C3.1.5 SERVICES

# C3.1.5.1 Other Services (i.e. Telkom, Water, Electricity, etc.)

The Contractor shall ensure that the position of all existing services affected by the Works have been verified before construction works commences and should it be necessary to lower or relocate any service, the Contractor will be required to make the necessary arrangements with the relevant service provider and to advise the Employers Agent accordingly.

#### C3.1.5.2 Survey Beacons and Benchmarks

The Contractor shall be responsible for the preservation of all land survey, erf or other pegs, benchmarks and beacons. If damage or disturbance of any such pegs or beacons is caused by the operations of the Contractor or his subcontractors, the pegs are to be replaced by a Registered Land Surveyor at the cost of the Contractor. Information regarding the position of all such pegs will be made available to the Contractor by the Employers Agent.

The Contractor is to ensure that no spoil is placed over erf pegs or benchmarks and that these are adequately protected for the full duration of the Contract.

Where disturbances of boundary pegs is unavoidable due to excavation or other operations adjacent to the pegs, the Contractor shall advise the Employers Agent or his Representative immediately, and agreement is to be reached that the disturbance of the peg is unavoidable and a strict record of such disturbed pegs is to be kept. Such pegs are to be replaced by a Registered Land Surveyor as described above and the Contractor is to submit proof of the cost of replacement of pegs. The Contractor will be reimbursed on a pro-rata basis to the total cost of peg replacement determined on completion of the Works.

# C3.1.5.3 Protection of Existing Works

The Contractor shall take all necessary steps to ascertain the location of existing services before commencing any section of the works and shall exercise the greatest care when working in the vicinity of such services. No more than three weeks and not less than one week before commencing his operations in any particular area, the Contractor shall request in writing from the Employers Agent the latest available drawings showing the location of services already installed. The Contractor will also be responsible for contacting the various service providers, arranging a meeting and verifying all known as well as possible unknown services on site.

The Contractor shall take all necessary steps to protect any existing works whatsoever against damage which may arise as a result of his operations on Site. The Contractor shall bear the cost of the repair of damage to any service, the possible existence of which could reasonably have been ascertained by him in good time.

Where the Contractor is responsible for damage for which repairs have to be carried out by the Employer or an outside Authority, the costs of these repairs will be recovered by means of a deduction from the Contractor's monthly Payment Certificate. The Employer will attend to the payment of monies due to outside authorities, should the Contractor not make direct payment, to the outside authorities, timeously.

# C3.1.5.4 Tidying up of the Works

The Contractor shall take note that progressive and systematic finishing and tidying will form an essential part of this contract. On no account shall spoil, rubble, materials, equipment or unfinished operations be allowed to accumulate in such a manner as to unnecessarily be a hindrance to or impede the activities of other contractors or service providers. In the event of this occurring, the Employer shall have the right to withhold payment for as long as may be necessary in respect of the relevant works in the area(s) concerned.

Upon completion of the Works or any portion thereof, the ground, fences, gates and any structures that have been interfered with are to be carefully restored to their original condition and all rubbish, tools, tackle, plant and material must be removed so as to leave the Site in a clean and orderly condition. No additional payment shall be made for work set out above.

#### C3.2: ENGINEERING

#### C3.2.1 DESIGN SERVICES AND ACTIVITY MATRIX

The responsibility for the design of the works is set out below:

Concept, feasibility and overall process
Basic engineering and detail layout to tender stage
Final design of Electrical works for construction stage
Construction
Preparation of as-built drawings
(Marked up Employers Agent drawings)

Focus Project Management Focus Project Management Focus Project Management Contractor Contractor

### C3.2.2 DESIGN BRIEF

The Contractor is responsible for the whole construction of the project.

### C3.2.3 DESIGN PROCEDURES

Where drawings of the structures have been prepared by the Employer's Agent, the Contractor shall base their drawings on the Employers Agents drawings and shall check that their equipment fits into and can operate satisfactorily within the structures shown on the Employers Agents drawings. Drawings, dimensions and details of existing infrastructure and equipment are supplied to the Contractor in good faith, however, the Contractor shall base the design of their infrastructure and equipment on actual dimensions and details measured/recorded on Site by them and approved by the Employers Agent. Any inconsistencies, including any conflict between the Employers Agents drawings and the actual dimensions measured on site, shall immediately be drawn to the attention of the Employers Agent, in writing.

Note that all designs are subject to the approval of the Employers Agent, this does not relieve the Contractor of his design responsibility nor accountability. The professional responsibility for such design shall remain with the Contractor and his design Employers Agent.

The Contractor shall take all statutory requirements, as well as the Site Specific Health and Safety Specification and Basic Risk Assessment, included in this document, into consideration when designing the Temporary Works.

The Contractor shall record all construction data to enable the Employers Agent to compile the 'As-built' plans at the end of the contract.

The above summary is not necessarily complete and shall not limit the work to be carried out.

## C3.2.4 DRAWINGS

The drawings relating to this tender shall be provided at the Clarification Meeting.

Any ambiguities shall be clarified by the Tenderer with the Employers Agent prior to the submission of Tenders.

Additional construction drawings will, in terms of Clause 5.9 of the General Conditions of Contract (2015), will be issued to the Contractor by the Employers Agent/Employer on the commencement date and from time to time as required. The contractor will be supplied with 3 sets of unreduced paper prints of each drawing free of charge. Any additional prints required will be for the account of the Contractor.

The Contractor shall conform in all aspects to the drawings and specifications and to any written instructions, which the Employers Agent or his representative may provide him with during the contract. Should any difference or contradictions exist in the documents or dimensions used in the documents, the Contractor shall be responsible to obtain clarification, thereof from the Employers Agent. Such clarification shall be in writing and shall be final and binding.

Should the Contractor fail to seek clarification of any differences or contradictions, the Contractor shall be solely liable for any costs that may arise due to his failure in this regard.

The Employers Agents drawings included in this tender document are indicative, conceptual, generic drawings and do not pertain to any particular supplier or manufacturer.

Only figured dimensions may be used, and the drawings shall not be scaled unless the Contractor is so instructed by the Employers Agents in writing. The Employers Agents will upon written request provide any dimensions that may have been omitted from the drawings.

It is the Contractor's responsibility to ensure that work is carried out in accordance with the latest revision of the construction drawings.

# C3.2.4.1 Record Drawings ('As-built')

The Contractor shall mark up on drawings provided to him for this purpose the exact positions and details of all infrastructures, pipelines and the like constructed under this contract. The marked up drawings shall be handed to the Employers Agent monthly as the work progresses. The Certificate of Completion shall not be issued before the Employers Agent is in receipt of all marked up drawings and other as-built information.

## C3.2.5 CONSTRUCTION METHODS

Construction methods used shall be environmentally friendly as far as possible. No construction methods that will result in long term or permanent damage to the surrounding natural environment shall be allowed.

Care shall be taken when mixing, transporting and placing concrete to avoid spillage and wastage.

All construction work shall be undertaken in accordance with the Occupational Health and Safety Act, 1993 and Construction Regulations, 2014.

### C3.2.6 SERVICES KNOWN TO BE IN THE VICINITY OF THE WORKS SITE

Many known services cross the site of the works. These are shown on the drawings as far as possible. Before any work commences the exact positions of all services must be located and the services identified, marked and recorded on plan for inclusion in the as-built drawing.

The Contractor, shall however, ensure that prior to construction all the necessary Record Drawings and Way-leaves for all services have been obtained and verified on site by the relevant service providers in his presence. The Contractor must request in writing the relevant official to indicate the said services within 48 hours prior to the commencement of the work, after which the responsibility rests with the service department if the services are not indicated to the Contractor as requested.

The Contractor shall take whatever extra precautions are required to protect all existing services from damage during the period of the Contract. Any damage to existing services indicated by the relevant service providers or other damage as a result thereof, shall be for the Main Contractors account.

#### C3.3: PROCUREMENT

#### C3.3.1 SUBCONTRACTING: PORTION OF WORKS RESERVED FOR EME's SUBCONTRACTORS

This specification covers the requirements of the Employer for the use and development of EME's as subcontractors on civil engineering projects.

### C3.3.1.1 DEFINITIONS

For the purposes of the Scope of Works, the definitions given in the General Conditions of Contract for Construction Works (2015), the Standard Specifications and the Scope of Works, together with the following additional definitions shall apply:

- a) "Contract" shall have the meaning assigned thereto in Clause 1.1.1.7 of the General Conditions of Contract for Construction Works (2015).
- b) "Contractor" shall have the meaning assigned thereto in Clause 1.1.1.9 of the General Conditions of Contract for Construction Works (2015).
- c) "Main Contract": shall mean the contract entered into between the Employer, who is COGTA KZN, and the Contractor.
- d) "EME Committee": The EME Committee shall be selected after award of the Main Contract, and its members shall consist of:
  - The Contractor, or his/her representative
  - The Employers Agent, or his representative
  - The Community Liaison Officer
- e) "EME's Subcontract" shall mean the contract entered into between the Contractor and any EME subcontractor.
- f) "EME Work Package" shall mean that portion of the Works which shall be set aside for construction by an EME.
- g) "Exempted Micro Enterprise (EME)" shall mean an enterprise with annual total revenue of R10 million or less. The company or economic activity that is owned by black person(s) and where there is a substantial management control by black people.

#### C3.3.2 RESOURCE STANDARDS

All of the work will be sub contracted to EME's to expedite the objectives of RDP re-development programme and economic development.

## C3.3.4 PREFERRED SUBCONTRACTORS

Subcontractors shall be EME's. An EME's is defined as an enterprise with annual total revenue of R 10 million or less. The company or economic activity that is owned by black persons and where there is substantial management control by Black People. Ownership refers to economic interest, whilst management refers to the membership of any board or similar governing body of the enterprise. The Broad-Based Black Economic Empowerment Act No. 53 of 2003, principles shall apply to BE's. This bid is subjected to subcontracting as specified in the Preferential Procurement Regulations 2017 that subjects all potential tenderers meeting the 30% minimum subcontracting requirement to EMEs or QSEs that are 51% owned by the following enterprises:

(i) Black people with disabilities

## (ii) Black people who are military veterans

### Enterprises shall comply with the following:

- Business shall be registered within the MLM boundaries,
- Must be registered with the CIDB to a relevant class i.e CE, GB, ME etc.,
- Must have a current valid Tax Clearance Certificate.

### C3.3.5 SUBCONTRACTING PROCEDURES

A list of EME's will be provided to the contractor by the Department after the award of the contract. In cases where there is no database, EME's will be invited to submit their company profiles preference given to ward based EME's.

The Employer, Employers Agent together with the Contractor shall evaluate the tenders received in accordance with the provisions of the Standard Conditions of Tender contained in Annex F of Standard for Uniformity in Construction Procurement. The evaluation and adjudication panel shall comprise of equal representatives from the Employer, Employers Agent, the CLO (as an observer), Social facilitator and the Contractor. The Employer requires the EME Committee to form the Evaluation Panel.

The Contractor with assistance from the Employers Agent will draw up mini tender documents for the EME's to price. A closing date and the venue to submit will be announced. The main contractor then has to evaluate the rates and present them to the EME committee for approval. Rates are to be agreed by the EME committee.

The Contractor shall without delay award and enter into contract with the successful tendering subcontractor based on their accepted tender submission. Deviations from the tender document shall not be accepted by the employer and the SAFCEC Agreement shall be used.

The Contractor shall remain responsible for providing the subcontracted portion of the works as if the work had not been subcontracted.

## C3.3.6 ATTENDANCE ON SUBCONTRACTORS

An allowance is made in the bill of quantities for managing the Subcontractor during the course of the contract. The following items may be required:

- Allowance for procuring (tender) for the subcontract/s
- Allowance for mark up on the actual cost of the subcontract works
- Allowance for managing the subcontract
- Allowance for mentoring, supervising and site training
- Allowance to pay contractors within 30 days after submission of invoice

## C3.3.6.1 PROCEDURE FOR ENGAGING EME'S ON THE PROJECT

The conditions of subcontract shall stipulate that the tenderer must be registered with the Construction Industry Development Board, in the relevant category, according to the estimated value of the Work Package.

The Contractor, with assistance from the Employers Agent / Social facilitator, must undertake the following tasks in appointing EME's:

Get a list of EME's from the Department project manager or invite profiles of contractors;

- Together with the EME Committee, adjudicate and award the tenders;
- Sign a subcontract agreement for each Work Package with the successful EME subcontractor using the SAFCEC format;
- Assist and monitor the EME subcontractors with their work output and quality;
- Issue subject to the approval of the Employer a Certification of Completion to each EME subcontractor.

The Contractor shall ensure that EME's are appointed timeously, so as not to delay the programme on the Main Contract in any way.

The above tasks are more fully described below.

# C3.3.6.2 CONDITIONS OF TENDER

The conditions of the subcontract agreement shall be in accordance with the General Conditions of Contract for Construction Works (2015).

## The contract will also specify:

- The terms and conditions relating to the recruitment, employment and remuneration of workers engaged on the contract works; and
- Details of any training to be provided to the temporary workforce.
- Detail of accepted rates
- Payment terms which should be 7 days after issuing of an invoice on labour only contracts and where the main contractor is supplying material and plant. No early settlement discount will be charged.

#### C3.3.7 ATTENDANCE OF EME SUBCONTRACTORS

The Contractor shall closely manage and supervise all EME's and shall manage, guide and assist each EME in all aspects of management, execution and completion of his subcontract. This shall typically include assistance with planning his works, sourcing and ordering of materials, labour relations, monthly measurements and invoicing procedures etc. The extent and level of such management, guidance and assistance, to be provided by the Contractor shall be commensurate with the expertise of relevant EME and shall be directed at enabling the EME's to achieve the successful execution and completion of the subcontract.

A payment item shall be provided in the schedule of quantities in the Main Contract, in which the Contractor will be reimbursed on the basis of a percentage of the value of the subcontracts awarded, for his attendance on the EME subcontractors. This amount shall allow for:

- All costs incurred for advertising and adjudicating tenders, and for assistance afforded to prospective tenderers.
- All administrative, management and supervisory functions associated with the employment of the EME's.

The Contractor shall be required to appoint an EME Construction Manager who will be responsible to assist EME's as and when required. The EME Construction Manager's duties are specified in Clause PSA 5.11 below

#### **PSA 10.1 EME CONSTRUCTION MANAGER**

#### **Assistance to the EME Subcontractors**

The Contractor shall, in addition to the requirements of Clause 4.4 of the General Conditions of Contract for Construction Works (2015), guide, assist and mentor all eligible potential EME's wishing to submit tenders, in the proper completion and submission of their particular tenders, including advice and guidance on how to establish rates.

The Contractor shall employ on a full-time basis, a construction manager on the Contract who will manage the EME's and report on progress to the EME Committee. Such Construction Manager must be adequately experienced with EME work and the development thereof and will be subject to the approval of the Employer. The assistance rendered by the Construction Manager, shall *inter alia*:

- a) Be given at a level and to the extent which is commensurate with the expertise and resources of the EME.
- b) Be given in a manner which is neither prescriptive, dictatorial, nor coercive towards the EME;
- c) Not be utilized by the Contractor to manipulate the rates and prices submitted, to his advantage, and
- d) Be given in a manner which does not unfairly prejudice or favour any particular EME.

The EME Construction Manager will work with and manage the EME Subcontractors throughout the Contract but will only be on site during times when EME subcontractors are performing work.

The EME construction manager shall be a <u>dedicated resource</u> whose only responsibility is to manage the EME subcontractors and as such shall not be the site agent or any other person employed on the contract for other purposes.

### C3.3.8 CONTRACTOR'S OBLIGATIONS TO SUBCONTRACTED EME'S

# 1. Dispute Avoidance and Resolution Procedures

The Contractor shall at all times:

- (a) Apply the terms and conditions of the subcontract fairly and justly, taking due cognizance of the level of sophistication and experience of the particular EME concerned.
- (b) Closely manage and supervise all EME's and wherever feasible, give reasonable warning to EME's when any contravention of the terms of the subcontract has occurred or appears likely to occur. The Contractor shall whenever feasible, give the EME's reasonable opportunity to make good any such contravention or to avoid such contravention and shall render all reasonable assistance to the EME in this regard.

When taking any disciplinary actions or imposing any penalties as are provided for in the subcontract, the Contractor shall explain fully to the EME's that such actions are provided for in the subcontract.

If any dispute should arise between the Contractor and an EME such dispute shall be resolved in accordance with the provisions of the subcontract.

#### 2. QUALITY OF WORK AND PERFORMANCE OF THE EME SUBCONTRACTOR

### 2.1 QUALITY

The contractor shall be fully liable for the quality of work done by the EME as of that work is done by the main contractor. All works are to be done according to the specs and as specified in the tender document.

#### 2.2 PERFORMANCE

If the EME Subcontractor, in the opinion of the Employers Agent, fails to comply with the criteria as listed below, the Employers Agent shall issue a written warning to the Contractor, stating all the areas of non-compliance. A copy of the letter of warning shall be forwarded to the Employer. The criteria may include, but are not limited to, the following:

- (a) Acceptable standard of works as set out in the specifications in the subcontract.
- (b) Progress in accordance with the time constraints in the subcontract.
- (c) Punctual and full payment of the workforce and suppliers.
- (d) Site safety
- (e) Accommodation of traffic.

The EME Subcontractor shall have 21 days from the date of receipt of the letter of warning by the Contractor to address and rectify the issues raised by the Employers Agent, with the exception of points (d) and (e), for which the reaction time shall be 24 hours. Failure to do so will be sufficient grounds for the Contractor to terminate the subcontract, provided that the EME Committee is satisfied that the Contractor has made every effort to correct the performance by the EME Subcontractor.

### C3.3.9 ISSUING OF COMPLETION CERTIFICATE

The Contractor shall, within 7 days of the completion of each subcontract completed in accordance with the provisions of this specification, issue free of charge to the EME, a Certificate of Completion. The format, layout and appearance of certificates issued shall be agreed by the EME Committee, provided always that they shall be respectable and presentable in accordance with the general standards of normal business practice. All certificates issued shall be co-signed by the Employers Agent and a senior representative of the Contractor, who has been duly authorized thereto.

The Certificate of Completion shall provide the following information:

## (A) MAIN CONTRACT DATA:

- (i) Contract title:
- (ii) Contractor's full name and address:
- (iii) Employers Agent name and address;
- (iv) Employer's name.

### (B) SUBCONTRACT DATA:

- (i) EME name and address;
- (ii) Scope or extent of the subcontract works;
- (iii) Value of the subcontract works;
- (iv) Duration of the subcontract;
- (v) Date of completion of the subcontract;
- (vi) Description of the training undergone by the EME.

### C3.3.10 CONTRACTOR'S LIABILITY

No provision or requirement set out in this specification shall be deemed to relieve the Contractor of any liability or obligation under the contract, and in accordance with the provisions of Clause 4.4 of the General Conditions of Contract for Construction Works (2015), the Contractor shall be fully liable for the acts, defaults and neglects of any EMEs, his agents or employees, as fully as if they were the acts, defaults and neglects of the Contractor, his agents or employees.

#### C3.3.11 MEASUREMENT AND PAYMENT

Under the work packages set aside for EMEs, the EME shall be responsible for all labour, plant, equipment, tools, materials and any other incidentals that may be required to carry out the works in accordance with the specifications.

In cases where the EME is unable to have the above then the main contractor is to provide plant, equipment, tools, material and other items needed by the EME in order to implement his work and such contracts will be regarded as labour only sub-contractors.

The Main Contractor shall supervise and manage the EME work at all times in order to ensure compliance with the specifications and drawings.

The Main contractor shall pay EME's 7 days after issue of an Invoice. The main contractor will not charge EME's handling costs i.e. bank charges, early payment discounts etc.

## C3.3.11.1 Payment of EME's

EME's are to be invited to submit their payment certificates or claims fortnightly, and are to be paid by the contractor within 7 days.

Payment of EME's may not be delayed pending payment of the contractor by the Employer.

### C3.3.12 GENERAL

Claims for extension of time due to delays caused by EME's will not be entertained; the main contractor is to programme in his work factoring the use of EME's. Nonperformance of EME's shall be dealt with in terms of the clause 10 in the SAFCEC sub contractor agreement.

## **RETENTION**

A ten percent (10%) Excluding VAT of the sub contract value will be deducted as retention on EME with half to be released on issue of the completion certificate for the EME.

## **SUB CONTRACTING BY EME'S**

The Main contractor shall not permit the invited EME sub contractor to further sub contract on any other conditions than those applying in the project specification to subcontractors or EME subcontractor

## **JOINT VENTURING & CONSORTIUM**

The EME committee shall decide whether to permit the invited EME sub contractor to enter into Joint Ventures or form a consortium with an external EME.

## PENALTIES FOR NON COMPLIANCE WITH SUB CONTRACTING

Should the main contractor do the work that is earmarked for sub-contracting to EME's. The main contractor will be charged a penalty of 100% of value of any work he/she has done. The amount will be deducted from the monthly payment certificate.

#### C3.4: CONSTRUCTION

### C3.4.1 APPLICABLE SANS 2001 OR SANS 1200 STANDARDS FOR CONSTRUCTION WORKS

SANS 2001 standards do not apply to this contract

### C3.4.2 PARTICULAR SPECIFICATION

Applicable particular specifications included with the document are as follows:

ESKPVAAL7 : Environmental impact assessment procedure for Eskom

SPEC ENV : Environmental Management

ESKPBAAD6 : Environmental management policy OPR 6204 : Eskom Operating Regulations

EVS 005 : Quality requirements for quality related items and equipment

EVS 010 : Quality requirements for quality related services

EMP Electrification: Environmental Management Plan for Electrification of Abaqulusi ward 1 (63 connections), Abaqulusi ward 2 (200 connections), Abaqulusi ward 3 (69 connections), Abaqulusi ward 4 (101 connections) & Jozini ward 4 (213 connections)

### C3.4.3 MATERIALS AND SAMPLES

Where materials to be used on this contract are specified to comply with the requirements of a South African National Standard Specification and such material is available with the official SANS (SABS) mark, the material shall bear the official mark.

Materials or work which does not conform to the approved samples submitted in terms of Sub clause 7.4.1 of the Conditions of Contract, will be rejected. The Engineer reserves the right to submit samples to tests to ensure that the material represented by the sample meets the specification requirements.

The costs of any such tests conducted by or on behalf of the Engineer, the results of which indicate that the samples provided by the Contractor do not conform to the requirements of the Contract, shall, in accordance with the provisions of Subclause 7.4.4 of the Conditions of Contract, be for the Contractor's account.

### C3.4.4 CONSTRUCTION PLANT

All construction plant and equipment used on this contract shall be in good working order, well maintained, of adequate size and fit for purpose. No machinery that leaks oil, fuel or hydraulic fluids may be used on the Site. Any plant or equipment that, in the opinion of the Engineer, is not of adequate size or fit for use shall be removed from the Site on instruction from the Engineer and replaced with acceptable plant or equipment, all at the Contractor's cost.

Drip trays with absorbent material such as sand, shall be placed under all static plant and equipment at all times, whether such plant is in operation or not.

### C3.4.5 KNOWN SERVICES

Various services are known to exist within the vicinity of the Works. Their approximate positions are shown on the drawings but, although based on the best information available, the accuracy of their positions cannot be guaranteed. It is likely that other services not shown on the drawings also exist within the vicinity of the Works.

The contractor shall take full responsibility to ensure that existing services are not damaged during construction.

#### C3.4.6 TREATMENT OF EXISTING SERVICES

Before commencing with any excavation the Contractor shall confirm the name and telephone number of the relevant official(s) directly concerned with the known or suspected services, shall acquaint himself with the relevant positions of the control points of the services and shall have readily available the equipment necessary to shut-off and isolate any such service. The Contractor shall liaise closely with the relevant authorities or controlling bodies for the necessary temporary closure of any service during construction.

In addition to the requirements of Subclause 5.4 of SANS 1200A, the Contractor shall deal with the crossing of known existing services by the pipeline by:

- i. Notifying the Engineer's representative and the relevant authority at least 48 hours prior to executing the work.
- ii. Serving notice on the resident, occupier and / or owner of every affected property at least 36 hours in advance of any temporary disconnection, advising the nature, time and duration of the disconnection.
- iii. Excavating carefully by hand under the supervision of the Engineer's representative and / or the authority involved, on the line of the trench up to 2m, or such distance as may be necessary, in both directions from the indicated position to locate the exact position of the existing service(s).

#### C3.4.7 CONTINUANCE OF OPERATION OF EXISTING SERVICES

All existing services shall be maintained in operation, unless prior arrangements have been made with the relevant authority and written permission for an interruption of the service has been granted and adequate notice, as set out in C3.4.7 above, has been given to the affected residents.

Connecting into the existing water reticulation and sewer network may only be undertaken after the Employer has received 72 hours prior written notice of the date and times that the Contractor intends to carry out the work.

### C3.4.8 DAMAGE TO SERVICES

In the event that the Contractor damages an existing service, he shall immediately notify the relevant authority and arrange for the service to be isolated.

Once isolated, the Contractor shall arrange with the relevant authority for the repair of the damaged service. In the case of pipelines, the Contractor shall repair the service himself. In the case of damaged electric or communication cables, the Contractor shall arrange for the relevant authority to repair the damaged service.

In the case of known existing services, or services whose presence could be reasonably deducted on site, the cost of the repair of the service will be for the Contractor's account. In the case of unknown services, the Contractor will pay the relevant authority for the cost of repairing the damaged service and claim the actual cost of repair plus a maximum mark-up of 10% from the Employer. No payment for damaged unknown services will be made without an invoice or receipt of payment for the cost of the damage from the relevant authority.

# C3.4.9 SERVICE AND FACILITIES PROVIDED BY THE EMPLOYER

# Source of Water Supply

The Contractor may make application to the Municipality's Water Division for a clean water supply point, and shall bear all the costs for the installation of such supply point. Water used by the Contractor from the Employer's mains will be charged for at the tariffs ruling at the time of use.

The Contractor shall make himself thoroughly acquainted with the regulations relating to the use of water and shall take adequate measures to prevent the wastage of water.

The Employer accepts no responsibility for the shortage of water due to any cause whatsoever, nor additional costs incurred by the Contractor as a result of such shortage.

The Contractor shall take note that no direct payment will be made for any costs incurred for the provision of a water supply point nor for the cost of water drawn. Payment for the aforementioned shall be deemed to be covered by the rates and prices tendered and paid for the various items of work included under the Contract.

# Source of Power Supply

The Contractor is to make his own arrangements with the Electricity Department for a supply of electricity, if required, and shall pay establishment and consumption costs at the tariffs ruling at the time.

No separate payment will be made to the Contractor for the obtainment, distribution and consumption of electricity, the costs of which will be deemed to be in the Contractor's tendered rates and prices.

## Location of Camp and Materials storage area

The camp site and storage area will be indicated to tenderers at the site inspection for the contract.

The Contractor shall confine his camp and storage of materials to the areas designated. On completion of the construction works the surface of the areas utilised shall be reinstated.

#### C3.4.10 FACILITIES PROVIDED BY THE CONTRACTOR

# **Temporary Offices**

Site meetings will be held in the Contractor's site office.

# Sanitary Facilities

The Contractor shall supply an adequate number of chemical toilets for the use of his workforce. The number of toilets shall be based on one (1) toilet per fifteen personnel on site. Separate toilets shall be provided for males and females.

Toilets shall be positioned such that no member of the workforce is further than a maximum of 100m walking distance from a toilet. Under no circumstances may the surrounding area or bush be used as a toilet.

The Contractor shall, at his own expense, be responsible for safely and hygienically dealing with and disposing of all human excrement and similar matter generated on the

Site during the course of the Contract, to the satisfaction of the responsible health authorities in the area of the Site and the Engineer. All such excrement shall be removed from the Site and shall not be disposed of by the Contractor on the Site.

The Contractor shall further comply with any other requirements in this regard as may be stated in the Contract.

No separate payment will be made to the Contractor in respect of discharging his obligations in terms of this subclause and the costs thereof shall be deemed to be included within the Contractor's tendered Preliminary and General Items.

# **Telephone Facilities**

A site telephone will not be required by the Engineer, but the time-related tendered rate for the Contractors telephone shall include for local official calls by the Engineer or his Representative.

## Survey Equipment and Assistants

The Contractor shall, for the duration of the Contract, provide the following survey equipment for the exclusive use of the Engineer and his staff:

- 1 upright reading automatic level with tripod;
- 1 metric levelling staff with protective cover bag;
- 6 ranging rods;
- 1 x 100 metre Stilon tape measure;
- 1 ± 2 kg hammer.

All such survey equipment provided by the Contractor shall be in good condition, properly calibrated and fit for the purpose and shall be kept fully serviceable at all times by the Contractor at his own cost. The Contractor shall have any defective equipment repaired or replaced at his own cost within 12 hours after notification by the Engineer's staff.

Where required by the Engineer, the Contractor shall at his own cost, promptly arrange for the recalibration of survey equipment provided.

#### Site Instruction Book

The Contractor shall keep a triplicate book for site instructions on Site at all times.

## C3.4.11 SITE USAGE

The Contractor shall confine his activities to the site of the Works and to the area allocated to him for his site offices and materials storage. The Contractor may not use or damage in any way any area that falls outside the boundaries of the Site. Any area outside of the Site boundaries damaged by the Contractor shall be rehabilitated to the satisfaction of the Engineer at the Contractor's expense.

## C3.4.12 WATER FOR CONSTRUCTION PURPOSES

The Contractor shall, at his own expense, be responsible for obtaining and distributing all water as may be required for the purposes of executing the Contract, including water for both construction purposes and domestic use, as well as for making all arrangements in connection therewith. The Contractor shall further, at his own expense, be responsible for providing all necessaries for procuring, storing, transporting and applying water required for the execution of the Contract, including but not limited to all piping, valves, tanks, pumps, meters and other plant and equipment, as well as for all work and superintendence associated therewith.

The sources of all water utilised for the purposes of the Contract shall be subject to the prior approval of the Engineer, which approval shall not be unreasonably withheld.

The Contractor shall comply with all prevailing legislation in respect of drawing water from natural and other sources and shall, when required by the Engineer, produce proof of such compliance. The distribution of water shall be carried out by the Contractor strictly in accordance with the applicable laws and regulations.

All water provided by the Contractor for construction purposes shall be clean, free from undesirable concentrations of deleterious salts and other materials and shall comply with any further relevant specifications of the Contract. The Contractor shall, whenever reasonably required by the Engineer, produce test results demonstrating such compliance. Water provided by the Contractor for human consumption shall be healthy and potable to the satisfaction of the health authorities in the area of the Site.

No separate payment will be made to the Contractor for the obtainment, distribution and consumption of water, the costs of which will be deemed to be included in the Contractor's tendered rates.

### C3.4.13 SURVEY CONTROL AND SETTING OUT OF THE WORKS

Before commencement of work, the Contractor is to liaise with the Engineer to establish exactly the status of all boundary pegs in the Township. The position of all erf pegs found will be recorded on a marked-up print of the Township.

On completion of the Contract the pegs that have been unavoidably disturbed will be replaced by the Employer. Pegs which have, in the opinion of the Engineer, been disturbed due to the negligence of the Contractor will be replaced at the Contractor's cost.

## C3.4.14 SITE MAINTENANCE

During progress of the work and upon completion thereof, the Site of the Works shall be kept and left in a clean and orderly condition. The Contractor shall store materials and equipment for which he is responsible in an orderly manner, and shall keep the Site free from debris and obstructions.

## C3.4.15 TESTING AND QUALITY CONTROL

### a) Contractor to engage services of an independent laboratory

Notwithstanding the requirements of the Specifications pertaining to testing and quality control, the Contractor shall engage the services of an approved independent laboratory to undertake all testing of materials, the results of which are specified in, or may reasonably be inferred from, the Contract. These results will be taken into consideration by the Engineer in deciding whether the quality of materials utilised and workmanship achieved by the Contractor comply with the requirements of the Specifications. The aforegoing shall apply irrespective of whether the specifications indicate that the said testing is to be carried out by the Engineer or by the Contractor.

The Contractor shall be responsible for arranging with the independent testing laboratory for the timeous carrying out of all such testing specified in the Contract, at not less than the frequencies and in the manner specified. The Contractor shall promptly provide the Engineer with copies of the results of all such testing carried out by the independent laboratory.

For the purposes of this clause, an "independent laboratory" shall mean an "approved laboratory" (as defined in subclause PSA 7.2) which is not under the management or

control of the Contractor and in which the Contractor has no financial interest, nor which has any control or financial interest in the Contractor.

## b) Additional testing required by the Engineer

In addition to the provisions of subclause C3.4.19(a): Contractor to engage services of an independent laboratory, the Engineer shall be entitled at times during the Contract to require that the Contractor arrange with the independent laboratory to carry out any such tests, additional to those described in subclause C3.4.19(a) at such times and at such locations in the Works as the Engineer shall prescribe. The Contractor shall promptly and without delay arrange with the independent laboratory for carrying out all such additional testing as required by the Engineer, and copies of the test results shall be promptly submitted to the Engineer.

## c) Costs of testing

### i. Tests in terms of subclause C3.4.16(a)

The costs of all testing carried out by the independent laboratory in accordance with the requirements of subclause C3.4.16(a), above shall be borne by the Contractor and shall be deemed to be included in the tendered rates and prices for the respective items of work as listed in the Bill of Quantities and which require testing in terms of the Specifications. No separate payments will be made by the Employer to the Contractor in respect of any testing carried out in terms of subclause C3.4.16(a).

Where, as a result of the consistency of the materials varying or as a result of failure to meet the required specifications for the work, it becomes necessary to carry out additional tests (eg re-tests on rectified work and/or replacement materials), the costs of such additional testing shall be for the Contractor's account.

## ii. Additional tests required by the Engineer

The costs of any additional tests required by the Engineer in terms of subclause C3.4.16(b): Additional testing required by the Engineer, shall be reimbursed to the Contractor against substitution of the Provisional Sum allowed therefore in the Bill of Quantities; provided always that the costs of any such additional tests ordered by the Engineer, the results of which indicate that the quality of the materials utilised and/or the standard of workmanship achieved are/is not in accordance with the specifications, shall not be reimbursable to the Contractor.

### C3.4.16 ACCESS TO PROPERTIES

The Contractor shall organise the work to cause the least possible inconvenience to the public and to the property owners adjacent to or affected by the work, and except as hereunder provided, shall at all times provide and allow pedestrian and vehicular access to properties within or adjoining or affected by the area in which he is working. In this respect the Contractor's attention is drawn to Clause 8.1.2 of the Conditions of Contract.

If, as a result of restricted road reserve widths and the nature of the work, the construction of bypasses is not feasible, construction shall be carried out under traffic conditions to provide access to erven and properties.

Notwithstanding the aforegoing, the Contractor may, with the prior approval of the Engineer (which approval shall not be unreasonably withheld), make arrangements with and obtain the acceptance of the occupiers of erven and properties to close off part of a street, road, footpath or entrance temporarily, provided that the Contractor duly notifies the occupiers of the intended closure and its probable duration, and reopens the route as punctually as possible. Where possible, such streets, roads, footpaths and entrances shall be made safe and reopened to traffic overnight. Such closure shall not absolve the

Contractor from his obligations under the Contract to provide access at all times. Barricades, traffic signs, drums and other safety measures appropriate to the circumstances shall be provided by the Contractor to suit the specific conditions.

### C3.4.17 EMPLOYMENT OF LOCAL LABOUR

It is the intention that this Contract should make maximum use of the local labour force that is presently unemployed. To this end the Contractor shall limit the utilisation on the Contract of non-local employees to that of key personnel only and to employ and train local labour to the extent necessary for the execution and completion of this Contract.

The Contractor shall fill in the form entitled Key Personnel in the Forms to be completed by the Tenderer. The data stated on the above-mentioned form will be strictly monitored during the Contract period and any deviations therefrom shall be subject to the prior approval of the Engineer, which approval shall not be unreasonably withheld.

The minimum wages for local labour shall be those prescribed by SAFCEC for the area in which the Works falls.

#### C3.4.18 MONTHLY STATEMENT AND PAYMENT CERTIFICATES

The statement to be submitted by the Contractor in terms of Clause 6.10 of the Conditions of Contract shall be prepared by the Contractor at his own cost, strictly in accordance with the standard payment certificate prescribed by the Engineer, in digital electronic computer format. The Contractor shall, together with a copy of the digital electronic computer file of the statement, submit two (2) A4 size paper copies of the statement.

For the purposes of the Engineer's payment certificate, the Contractor shall subsequently be responsible, at his own cost, for making such adjustments to his statement as may be required by the Engineer for the purposes of accurately reflecting the actual quantities and amounts which the Engineer deems to be due and payable to the Contractor in the payment certificate.

The Contractor shall, at his own cost, make the said adjustments to the statement and return it to the Engineer within three (3) normal workings days from the date on which the Engineer communicated to the Contractor the adjustments required. The Contractor shall submit to the Engineer five (5) sets of A4 size paper copies of such adjusted statement, together with a copy of the electronic digital computer file thereof.

Any delay by the Contractor in making the said adjustments and submitting to the Engineer the requisite copies of the adjusted statement for the purposes of the Engineer's payment certificate will be added to the times allowed to the Engineer in terms of Subclause 6.10.4 of the Conditions of Contract to submit the signed payment certificate to the Employer and the Contractor. Any such delay will also be added to the period in which the Employer is required to make payment to the Contractor.

### C3.4.19 CONSTRUCTION IN RESTRICTED AREAS

Working space is sometimes restricted. The construction method used in these restricted areas largely depends on the Contractor's plant. Notwithstanding, measurement and payment will be strictly according to the specified cross-sections and dimensions irrespective of the method used, and the rates and prices tendered will be deemed to include full compensation for any difficulties encountered by the Contractor while working in restricted areas. No extra payment nor any claim for payment due to these difficulties will be considered.

## C3.4.20 WORKMANSHIP AND QUALITY CONTROL

The onus to produce work that conforms in quality and accuracy of detail to the requirements of the Specifications and Drawings rests with the Contractor, and the Contractor shall, at his own expense, institute a quality control system and provide suitably qualified and experienced engineers, foremen, surveyors, materials technicians, other technicians and technical staff, together with all transport, instruments and equipment to ensure adequate supervision and positive control of the Works at all times.

The cost of supervision and process control, including testing carried out by the Contractor, will be deemed to be included in the rates tendered for the related items of work.

The Contractor's attention is drawn to the provisions of the various Standardized Specifications regarding the minimum frequency of testing required. The Contractor shall, at his own discretion, increase this frequency where necessary to ensure adequate control.

On completion and submission of every part of the work to the Engineer for examination and measurement, the Contractor shall furnish the Engineer with the results of the relevant tests, measurements and levels to demonstrate the achievement of compliance with the Specifications.

# **C3.5: MANAGEMENT**

## **APPLICABLE SANS 1921 STANDARDS**

The following parts of SANS 1921 (Construction and management requirements for construction works) and associated specifications are applicable:

SANS 1921-1: General engineering and construction works

SANS 1921-2: Accommodation of traffic on public roads occupied by the contractor

SANS 1921-3: Structural steelwork

SANS 1921-4: Third party management support in works contracts

SANS 1921-5: Earthworks activities, which are to be performed by hand

SANS 1921-6: HIV / AIDS awareness

SANS 1921-	1: General engineering and construction works
Clause No	Specification data
4.1.7	The requirements for drawings, information and calculations for which the contractor is responsible are:
4.2.1	The responsibility strategy assigned to the contractor for the works is: State A, B or C
4.2.2	The structural engineer is:
4.2.3	Drawings and other information are to be submitted in accordance with the contractor's programme.
4.3	<ul> <li>The Contractor shall submit within the period stated in the Contract Data a suitable and realistic construction programme for the consideration of the Engineer.</li> <li>The programme shall be in the form of a Gant Chart and shall include the following details: <ul> <li>A work breakdown structure, identifying the major activity groups.</li> <li>For each activity group further details shall be provided with regard to the scheduled start and end dates of individual activities.</li> <li>The linkages between activities shall be clearly indicated and the logical network upon which the programme is based should be separately submitted to the engineer if requested. Any constraints shall be classified as being time-related or resource-related.</li> <li>The critical path(s) shall be clearly indicated and floats on non-critical activities shall be shown.</li> <li>The Contractor shall indicate the working hours per day, night, week and month allowed for in the programme.</li> </ul> </li></ul>

Clause No	Specification data				
Clause No	Where relevant the Contractor shall state the production rates for key activities, e.g. earthworks, etc.     Together with the programme as detailed above the contractor shall submit to the engineer a cash flow projection, indicating projected monthly invoice amounts. The cash flow projection shall be updated at monthly intervals to reflect actual payments to date and anticipated further payments.     The programme shall be reviewed at the monthly site meetings at which the Contractor shall provide sufficient detail that will allow the comparison of completed work per activity that has fallen behind. The updated programme shall be submitted to the Engineer at least two days prior to the monthly meetings.      If the programme has to be revised by reason of the Contractor falling behind his programme, he shall produce a revised programme showing how he intends to regain lost time in order to ensure completion of the Works within the time for completion as defined in the General Conditions of Contract or any granted extension of time. Any proposal to increase the tempo of work shall be accompanied by positive steps to increase production by providing more labour and plant on site, or by using the available labour and plant on site, or by using the available labour and plant on site, or by using the available labour and plant on site, or by using the available labour and plant to site, or by using the available labour and plant to site, or by using the available labour and plant to site, or by using the available labour and plant to site, or by using the available labour and plant to site, or by using the available labour and plant to site, or by using the available labour and plant to site, or by using the available labour and plant to site, or by using the available labour and plant to site, or by using the available labour and plant to site, or by using the available labour and plant to site, or by using the available labour and plant to site, or by using the available labour and plant to site available th				
4.12.2	<ul> <li>Microsoft Project format</li> <li>The samples of materials, workmanship and finishes that the contractor is to provide and deliver to the employer are:</li> </ul>				

Clause No	Specification data				
4.12.2	The fabrication drawings which the contractor is to provide and deliver to the client are				
4.14.3	The office accommodation, equipment, accommodation for site meetings and othe facilities for the use by the employer and his agents are:  • Site office complete with desk, 3 chairs, 2 filing cabinets and plan layout table Such an office shall be minimum 12m² in area with a hard floor, ceiling 3m in height, well ventilated with good lamination to provide sound proofing				
	<ul> <li>Site meeting room complete with conference table and 10 chairs. Such ar office shall be minimum 20m² in area with a hard floor, ceiling 3m in height well ventilated with good lamination to provide sound proofing.</li> <li>Electric lighting and power points in above rooms</li> <li>2 Carports</li> <li>Cell phone and/or telephone and fax facilities</li> </ul>				
	<ul> <li>Ablution facilities for the Engineer and his staff.</li> <li>Laboratory facilities</li> </ul>				
4.14.6	The requirements for the provision and erection of sign boards are:				
4.17.1	The requirements for the termination, diversion or maintenance of existing services are				
4.17.3	Services that are known to exist on the site are shown on the drawings				
4.17.4	The requirements for the detection apparatus are:				

SANS 1921-1	1: General engineering and construction works					
Clause No	Specification data					
4.18	The additional health and safety requirements are:					
4.22	The works to be undertaken by nominated and selected subcontractors comprise:					
Variations:						
4.1.10	Degree of accuracy II shall be applicable unless stated otherwise in the drawings or specification.					
4.2.4	The time frame for acceptance is 10 working days					
Additional c	lauses:					
4.1.1 p)	Add this new clause:  "Appoint a Community liaison officer (CLO) to assist with the community liaison with the beneficiary community."					
4.23	Add this new clause:  "4.23 Community participation"  Community participation consists of engagement of Project Steering Committees (PSC).  A PSC will be established for the project, by the Ward Councillor.					
	<ul> <li>The functions of the PSC will be to:</li> <li>Assist in monitoring the project.</li> <li>Ensure that the community provide assistance to the contractor to ensure that he can execute the contract in accordance with the specifications and within time.</li> <li>Encourage the community to participate in the Labour Intensive construction.</li> </ul>					

SANS 1921-1: General engineering and construction works						
Clause No	Specification data					
	<ul> <li>Identify skills, skilled personnel and suppliers in the towns.</li> <li>The PSC will not have the power to:</li> <li>Give any instructions to the contractor, except through the engineer.</li> <li>Become involved in the daily operations of the contractor or interfere with the contract works.</li> </ul>					
	A monthly meeting will be held with the PSC to discuss relevant matters. The site agent and resident engineer will attend the meetings. The contractor will have to report on progress, deviations from the programme, financial matters community related aspects, general problems and co-operation at the meeting. The PSC members will not receive any remuneration for attending, and they must provide their own transport."					

SANS 1921-	2: Accommodation of traffic on public roads occupied by the contractor					
Clause No	Specification data					
4.3.2	The contractor shall design all the temporary culverts					
4.6.1	The length of half-width roads under construction shall not exceed 4m km					
4.6.3	The length of road shall be limited to 4 km					
4.10.1  Variations:	<ul> <li>The contractor shall provide the following traffic control facilities:</li> <li>Traffic-control devices such as flagmen, STOP and GO signs, traffic signals.</li> <li>Statuary permanent and temporary road signs and barricades.</li> <li>Channelization devices and barricades including delineators, cones, road studs, road marking, etc.</li> <li>Barriers such as New Jersey, plastic movable barriers, etc.</li> <li>Warning Devices on plant and construction vehicles.</li> <li>Road markings.</li> </ul>					
Additional clauses:						
4.1.4	Add this new clause:  "Failure to maintain road signs, warning signs, etc, in a good condition shall constitute ample reason for the engineer to bring the works to a stop until the road signs, etc, have been repaired to his satisfaction.  The contractor may not commence constructional activities before adequate provision has been made to accommodate traffic in accordance with the requirements of this document and the South African Road Traffic Signs Manual Volume 2 Chapter 13.  The contractor shall submit proposals in connection with directional signs to the engineer for approval prior to construction."					

SANS 192	1-3 Structural steelwork					
Clause No	Specification data					
4.2.1	The responsibility strategy assigned to the steelwork contractor for the work is: specify A, B or C.					
4.2.2	The steelwork structural engineer is.					
4.3.2.1	The site will be ready for steelwork to commence on					
4.3.2.1	The requirements for sequencing of the works are:					
	The times for completing of the sections are:					
	The procedures to be followed are:					
	Matters that affect the program are:					
4.3.3.2	The steelwork contractor is required to provide the steelwork structural engineer with a detailed method statement for the erection of each structure at least 2 weeks before construction commences.					
4.4.2.4	The steelwork contractor is required to provide the following facilities for test purposes:					
4.4.3.4	The following items and procedures need to be tested / certified by a recognized body:					

SANS 1921	1-3 Structural steelwork				
Clause No	Specification data				
4.5.1.1	Information, drawings and calculations provided to the steelwork contractor will be provided in the following format:				
	and on the following media:				
4.5.1.2	The steelwark contractor is to provide information in the following formet:				
4.0.1.2	The steelwork contractor is to provide information in the following format:  Drawings in AutoCAD .dwg format				
	Programmes in Microsoft Project format				
	Data will be supplied on paper and on DVD / CD media.				
4.5.3.1 <i>or</i> 4.5.3.2	Or Drawings and other information are to be submitted in accordance with the steelwork contractor's accepted programme.				
4.5.3.4	The steelwork contractor is required to submit the following additional information with general arrangement drawings to the employer for approval:				
4500					
4.5.3.6	The steelwork contractor is required to submit "as erected " drawings				
4.7.6	The steelwork contractor is required to make his own arrangements for the provision of the following services:				
	Water				
	Electricity				
	Sanitary services				
4.7.9	The requirements for the provision and erection of sign boards are:				

SANS 1921-3 Structural steelwork					
Clause No	Specification data				
4.10.2	The requirements for the protection, termination, diversion or maintenance of existing services are:				
4.10.4	Services which are known to exist on site are:				
4.11.1	The specific health and safety requirements are:				
4.11.3	The steelwork contractor is required to submit a report on the assessment and management of risk.				
4.11.4	The steelwork contractor is required to enclose the steelwork for the protection of the public and others.				
Variations:					
Additional clauses:					

SANS 1921-4: Third –party management support in works contracts		
Clause No	Specification Data	
5.1.1(b)	The construction Manager is required to arrange for the supply of mechanical equipment and the supply and delivery of materials to site	
5.1.1(i)	The construction manager is required to provide the following site facilities:	
5.1.1(b)	The employer's policy pertaining to conditions of employment is as follows:	
5.1.1(h)	The following name boards are required:	
Variations:		
Additional clauses:		

SANS 1921-5: Earthworks activities that are to be performed by hand			
Clause No	Specification Data		
5.1	The depth of the trenches to be excavated by hand is 1,5m.		
Variations:	State variations, if any, for example specific compaction requirements		
Additional clauses			

SANS 1921-6: HIV / AIDS awareness					
Clause No	Specification Data				
4.2.1(a)	A qualified service provider is a service provider that is accredited by The MLM Health and Social Development and appears on the list of recognized service providers of the MLM Health and Social Development.  The contact particulars of qualified service providers are as follows:				
	Name	Tel	Fax	e-mail	
4.2.1 (a)	Apart for the initial programme, the HIV / AIDS awareness programme is to be repeated at 4-month intervals throughout the duration of the contract				ated
Variations:					
Additional clauses:					

### **MANAGEMENT OF THE WORKS**

## **Applicable SANS Standards**

The following SANS Standardized Specifications for Civil Engineering Construction Contracts are applicable:

i. SANS 1200 A: General

ii. SANS 1200 AB: Engineer's Office

The provisions of SANS 1200 A and SANS 1200 AB take precedent over the provision of any part of SANS 2001 that is applicable to the Contract. The variations and additions to these specifications are described in Section C3.4.

Further to the above, the SANS 1200 Standardized specifications listed in C3.4 are applicable.

### Particular or Generic Specifications

Refer to Clause C3.4.1

### PLANNING, PROGRAMMING AND CASH FLOW

### Programming and Cash Flow

Clause 5.6 of the General Conditions of Contact (GCC 2015) requires the Contractor to submit a programme for the execution of the works. The programme shall be presented in the form of a Gantt Chart.

In addition to the requirements of Clause 5.6, the format and information shown shall comply with the following:

- The various stages of work planned to be completed per month in sufficient detail to be able to assess construction progress,
- Sequence of work,
- · Resources intended to be utilized,
- The interdependence between resources and sequence of work,
- Clear indication of the critical path activities and their dependencies.
- Key dates in respect of information to be provided by the Employers Agent and/or others,
- Labour resources schedule which must distinguish between the Contractors permanent labour and the temporary employed labour from the local ward,
- The lead time for training of labour from the local ward.

If any change to the critical path occurs, the Contractor shall as soon as is practicable notify the Employers Agent in writing.

When drawing up the programme the Contractor shall, among other issues, take into consideration and make allowance for:

- Expected weather conditions and their effects,
- Known physical conditions or artificial obstructions,
- Searching for, dealing with and carrying out alterations to the existing services,
- The procurement process of EME's in accordance with section C3.3,
- The provision and implementation of the Environmental Management Plan (EMP) in terms of the Environmental Management Specification and Environmental Impact Assessment (EIA) conditions,
- The restrictions on the length of trench open at any one time as specified,
- The accommodation and safeguarding of public access and traffic,
- The lead time required for compliance with the Site Specific Health and Safety Specification and Site Specific Baseline Risk Assessment which are included in this document.
- Provision and implementation of the Health and Safety Plan in terms of the 2014 Construction regulations and the Occupational Health and Safety Act (1993)
- Election day,

- Official builders break,
- Special non-working days, and
- Non-working days.

Failure to produce a detailed programme may prejudice the Contractor in any claim for an extension of time.

Failure to comply with these requirements will entitle the Employers Agent to use a programme based on his own assumptions for the purpose of evaluating claims for extension of time or additional payments.

## Employers Agent Inspection and Approval of the Works

The Contractor shall allow reasonable time in his programme for the Employers Agent to carry out examination of the work before covering up. Requests for inspections should be made in writing to the Employers Agent at least 24 hours before such inspections are required. Requests for inspections should coincide with the Employers Agent Representative daily site visit.

If the Employers Agent attends with the purpose of examining any part or materials of the works at the date and time agreed on with the Contractor and it is found that the works or materials are not ready for inspection, the Contractor shall be responsible for the cost of that visit by the Engineer.

The Employers Agent Representative will visit the site approximately daily for the purpose of supervision of the Contract and inspection and approval of completed work. The Contractor shall therefore arrange his working programme in such a way that all work is inspected and approved at the required time. Under no circumstances shall he proceed with any activity that covers up previous work before the previous work has been approved in writing (e.g. no trench shall be backfilled until the laid pipes and bedding have been inspected and approved).

# C3.5.2.4.1 Review of Progress

The Contractor shall review his progress each month and should progress lag behind the latest accepted programme by more than two (2) weeks, he shall submit a revised programme and method statement of how he proposes making up lost time. If, in the opinion of the Employers Agent, such revised programme will not make up lost time, the Employers Agent shall have the right to request the Contractor to reorganize his work in a manner which will ensure an acceptable programme. Claims for additional payments to meet any cost incurred due to such reorganization will not be accepted.

The Contractor is required together with his monthly updated programme to submit a cash flow indicating the anticipated total and monthly expenditure value for the contract at the monthly site/progress meetings.

The programme and cash flow will be reviewed at the monthly site meetings at which time the contractor shall provide sufficient detail that will allow a comparison of completed work per activity against the original approved programme. The Contractor shall indicate what resources and programme changes he intends to implement in order to remedy any activity that has fallen behind. The Employers Agent may demand from the contractor a major revision of the programme. Such a revision shall be submitted for approval within fourteen (14) days of the demand.

### **SEQUENCE OF THE WORKS**

The Contractor may elect to undertake the work in any sequence he chooses, unless prior arrangements are made between the Employer, Employer's Agent and the Contractor.

The Contractor shall submit to the Employers Agent for approval at the start of the contract a detailed plan of action that set out the sequence of construction of the works. The approved plan of action shall be amended in consultation with the Employers Agent.

### SOFTWARE APPLICATION FOR PROGRAMMING

Microsoft Project format.

## **METHODS AND PROCEDURES**

### C3.5.6.1 Safeguarding & protection of excavations

Portions of the work will be carried out within residential areas. Excavations will be barricaded off, at all times, with clearly visible protection measures. Where deep excavations exist, the barricading shall be adequate to prevent accidental entry.

## C3.5.6.3 Disposal of excess material

A Municipal disposal site is located approximately 750m from the centre of the town of Centane. There are no charges to be incurred for spoiling material at the disposal site however the Contractor shall not spoil material in one particular place but shall grade and level the site where he has spoiled material to the requirements of COGTA KZN.

## C3.5.6.4 Giving notice of work to be covered up

The Contractor shall give the Employers Agent reasonable time to accommodate examinations in his programme, in which case times for inspection can be agreed on. Requests for examination of work shall be made in the site request book at least 24 hours before the examination is required.

## C3.5.6.5 Cost of test specimens and tests

The Contractor must make allowance in his Tender for all such services and tests required from him. It is the duty of the Contractor to, at his own cost and by means of the necessary tests, prove to the Employers Agent or his representative that the works and compaction where prescribed, comply with the specification.

## C3.5.6.6 Progress Photographs

The Contractor shall set up a system of taking digital photographs on site on a weekly basis to monitor the progress of works. This digital photography shall be labelled with the date, location and description of the photograph and a copy handed to the Employers Agent on a CD or other storage medium on a weekly basis for safe storage. The format shall be JPG, BMP or any other common format.

## C3.5.6.7 Materials handling, use and storage

All materials shall be stored in the designated Contractor's camp area or as indicated by the Employers Agent. Any material to be stored and handled must be done in such a way as not to endanger any person on site or cause damage to the environment. The Contractor shall also

ensure that all suppliers or delivery vehicles abide by all restrictions and procedures (speed limits, dust control, "no-go areas" etc.).

#### **QUALITY PLANS AND CONTROL**

Quality Control Plans, methods and testing shall be as specified in the contract.

### **ENVIRONMENTAL**

The Contractor shall prior to the commencement of any construction prepare and submit an Environmental Management Plan (EMP), for approval by the Employers Agent.

The EMP shall clearly demonstrate how the Contractor intends mitigating damage to the environment, as a result of their construction activities.

The Contractor shall further appoint a competent Environmental Control Officer (ECO), who shall inspect all construction related activities, who will be responsible for monitoring the Contractor's operations on site, as well as compliance with regard to the EMP and associated legislation and who shall report on non-compliance items.

# No additional payment will be made in this regard.

Further, the ECO will submit his/her Environmental Audits at monthly site meetings, for discussion by all role players.

The Contractor will be liable to pay the fines as indicated in the Contract Data paragraph 35 and 51 for recurring non-compliances.

#### a) Sand and dust control

The Contractor shall, for the duration of the contract, take appropriate measures to control the dust and soil movement which may arise due to his operations.

### b) Environmental Management

The Contractor will be required to compile a comprehensive EMP, which should address the management and monitoring of environmental impacts related to this contract.

The EMP should therefore identify potential environmental impacts and should further demonstrate how they would be mitigated and controlled.

# c) Environmental Impact

The Contractor shall, for the duration of the Contract, ensure that good housekeeping practices are adhered to by all his staff and that of his subcontractors (including EME's).

### d) Environmental Methods and Procedures

The following together with the Construction Environmental Management Programme, shall be applied with regard to the operation and maintenance of the site:

- The site shall at all times be kept in a neat and tidy condition. Papers and packaging shall be binned and removed from site and waste stockpiles shall be properly demarcated and the water removed at regular intervals and disposed of at a registered waste disposal site.
- Natural vegetation shall not be damaged unnecessarily and the working areas of the site be kept to the minimum reasonable possible for construction. An environmental awareness training programme for the construction staff should be implemented by the Contractor/Subcontractor(s) and all workers made aware of the recommended mitigation measures to be implemented.
- No wild animal (birds, snakes, lizards, game etc.) domestic stock or indigenous plants are to be disturbed unnecessarily in any way by the construction activities or by the construction staff.

- All topsoil (containing indigenous plant seeds, rootstock etc.) removed that may be required in future rehabilitation should be carefully stockpiled for later rehabilitation.
- Measures need to be taken to ensure that contamination from the work camp and laydown site does not pollute adjacent areas. This should include the diversion of natural run-off away from the works and the containment thereof in drainage retention areas, where applicable.
- Water from dewatering operations shall be disposed of so as not to return to the working area nor the cause to damage or erosion to surrounding areas.
- Dust from stockpiles and access roads shall be controlled by watering.
- Precautions need to be taken against oil spillage from heavy equipment through the use of sand or sawdust drip trays. All material (including soil) contaminated with hydrocarbons should be disposed of as hazardous waste at a registered waste disposal site.
- Any object of historical interest may be uncovered in the course of the works shall immediately be protected and reported to the Employers Agent for further action. There is a legal requirement to report any archaeological site of cultural significance to the National Monuments Council, according to the National Heritage Act (Act 25 of 1999).
- Access to the site shall be given to all sub-contractors and other contractors who may be appointed from time to time to allow them to complete their portion of the works.
- The contractor shall check and supervise his own work and the work of his subcontractors to ensure that all work is carried out to the specified time schedule, safety and quality standards.
- The contractor is responsible for the care, safekeeping and security of the works including all plant and materials whether in store, on site or already installed.
- Site records the Contractor shall maintain a diary reporting the daily progress referencing the area of work, any problems experienced, weather, plant complement and labour complement.
- <u>Final audit:</u> On completion of the work, but before the construction site is handed back to the Employer, a thorough environmental inspection or audit impacted by the construction activities shall be carried out and any 'problematic' or damaged areas shall be made good or rehabilitated to the satisfaction of all parties.

### e) Fires and Burning Vegetation

Under no circumstances whatsoever may fires e lit at the site of the works.

# f) Preservation of Flora and Fauna and Soil Conservation

### The Contractor shall:

- a. Take all precautions to prevent:
  - i. any damage to trees, shrubs and the surrounding natural environment,
  - ii. fires
  - iii. loss or injury to domestic or wild animals from any lands used or occupied by the Contractor
- b. Refrain from destroying, removing or clearing tree's, timber and scrub to any extent greater than is absolutely necessary for the execution of the contract
- c. Ensure that no vegetation, trees or shrubs outside the site boundaries are disturbed, damaged or destroyed. A penalty of R1 000.00 per incident will be charged to the Contractor. Refer to paragraph 54 of the Contract Data.
- d. Take care to cause the minimum disturbance to fauna and flora
- e. Take measures as to ensure that his employees are aware of an abide by all laws and restrictions governing the hunting, disturbing capturing or destroying of animals and birds in the vicinity of the camp and the works or the taking of fish from water, and
- f. Prohibit all firearms from the site and temporary camps.

# g) Protection of Trees, Shrubs and Surrounding Environment

The Contractor shall ensure that no trees, shrubs or surrounding natural environment outside the site boundaries are disturbed, damaged or destroyed. A penalty of R1 000.00 per tree or shrub damaged or destroyed or for damage to the surrounding environment will be charged to the Contractor. The Employers Agent shall have the right to permanently exclude any person from the site who causes damage to the natural environment.

# ACCOMMODATION OF TRAFFIC ON PUBLIC ROADS OCCUPIED BY THE CONTRACTOR

The operation of construction vehicles on existing roads shall be limited to traffic with an axle load not exceeding that allowed by the Road Traffic Ordnance of the authority concerned, or any amendment thereof.

If the Contractor uses existing roads for the hauling of materials to or from site, he shall be held responsible to clear any spillage caused by his activities on or near the roads by whatever means necessary and immediately. No additional payment will be made for the clearance of spillage and all other relevant costs.

Where work is to be executed close to existing residential properties, the Contactor shall ensure that at all times pedestrian and vehicle access are provided for house owners to their properties. Where crossing of existing driveways are to be done, the Contractor must liaise with the relevant property owners regarding the time and period when such access will not be available. However, access shall be made available between 17:00 and 07:00 on weekdays and on Saturdays and Sundays.

### TESTING, COMPLETION, COMMISSIONING, AND CORRECTION OF DEFECTS

Practical completion of the works will only be considered once the connections to the existing mains are completed and all lines and manhole structures are completed, tested and approved.

# FORMAT OF COMMUNICATION

Throughout the construction period, the Contractor shall supply and maintain the following documentation that shall be kept on site, accessible to both the Contractor and the Employers Agent or representative at all times:

#### a) Site Request / Instruction book:

For the Contractor to provide the Employers Agent or Representative with information required, for giving notification in writing of inspections, drawings, etc., required by the Contractor, and for use by the Employers Agent or Representative for the purpose of writing day-to-day instructions or confirming verbal information or instructions given to the Contractor.

# b) Health and Safety File

Containing the site and safety hierarchy, contact details, safety plan, audits, safety equipment, safety training, injuries log, inspections and all other relevant safety data

## c) Quality Control File

Containing Quality Assurance and Quality Control Forms to be operated and maintained by the Contractor.

#### d) Measurement File

Containing records of work measurement and calculations

#### e) Daily Register

Listing labour and plant status. A complete record of staff employed on the Contract is to be kept on site for use by the Employers Agent.

### f) Daily Contract Diary

For recording the work carried out on site each day – shall reference the specific area of work and shall be signed by the Construction Manager and the Employers Agents Representative.

- g) Monthly Labour Return Schedule
- h) One full set of contract drawings and contract documents.
- i) Construction Programme

# The site diary shall record the following:

- Progress of works
- Contractors and subcontractors personnel on site
- Delays, possible delays and inclement weather

- Delivery of materials to site
- Plant and equipment on site

All communications regarding the contract shall be channelled through the Employers Agent and/or his authorised representative.

A site book in triplicate will be provided by the Contractor in which relevant matters shall be recorded and signed by the Employers Agent and the Construction Manager.

All communication shall be noted and recorded in the minutes of the monthly progress meetings.

#### WEATHER CONDITIONS

## Recording of weather

The Contractor shall provide and erect a rain gauge on site. All rainfall and other adverse weather conditions affecting the contractual time for completion in terms of Clause 5.5 of GCC 2015 shall be recorded in the site diary.

The site diary shall be handed to the Employers Agent Representative for his signature no later than 7 days after rain that is considered to justify an extension of time that may occur.

### Extension of Time Resulting from Abnormal Rainfall

Extension of time will not be considered for normal rainfall but only abnormal rainfall or saturated conditions and will be calculated in accordance with the following method:

- a) The Contractor shall, in his programme, allow for the anticipated number of working days on which work could be delayed- as given in the Contract Data.
- b) Extension of time will be calculated for each calendar month or part thereof over the full period for the completion of the Work, plus any approved extension thereof, as follows:
  - A delay caused by abnormal rainfall will only be accepted for extension of time if, in the opinion of the Employers Agent, it delays an item or items which lie on the critical path determined by the Contractor's programme. Only delays on normal working days will be considered.
  - ii) Abnormal rainfall will be considered to be days, as approved, on which rain delayed operations, less the anticipated number of days given in the Schedule as found in the Contract Data..
  - iii) The net extension of time determined for each month, which may be negative, shall accumulate algebraically to determine the net number of days for extension of time due to abnormal rainfall, but a negative total at the end of the construction period will not be taken into account.
  - iv) Where a portion of a month is involved, a pro rata number of days shall be calculated.

### **KEY PERSONNEL AND SUPERVISION**

A schedule of key personnel to be used on site, including contact particulars, is to be provided to the Employers Agent before commencement of works.

The Key Personnel presented as part of the tender submission in returnable schedule T2.2.8: Organogram and T2.2.9: Key Personnel as listed in paragraph 41s) of the Tender Data shall apply. If the personnel indicated are no longer available, personnel with similar or better qualifications and experience shall be presented to the Employers Agent for approval.

#### **NORMAL WORKING HOURS**

Normal working hours shall be those as stated in the Government Gazette for Civil Engineering and Roadmaking Industries as applicable to a 5 (five) day week, Monday's to Friday's.

#### **MANAGEMENT MEETING**

The Employers Agent, Contractors designated representative(s), Employer and other Agents/Consultants/Subcontractors as required shall hold meetings related to the progress of the works, technical issues, quality, health and safety and environmental compliance and subcontractor co-ordination matters at regular intervals not exceeding 4 weeks, or at such other times may be necessary. The representatives of the Employers Agent, Contractor and Employer and their delegated authority will be confirmed at the Inaugural Site meeting.

The Contractor shall attend all progress/site meetings and ensure that all persons under his jurisdiction are notified timeously of all progress/site meetings should their attendance be required. All persons attending progress/site meetings are to have the necessary delegated authority in respect of aspects such as planning, change managements, health and safety and environmental.

## **ELECTRONIC PAYMENTS**

The Contractor will be responsible for supplying correct bank details to the employer for electronic payments and the Employer will not be held responsible for any incorrect bank details supplied by the Contractor.

The Contractors tax invoice shall contain the following information as a minimum:

- Contract number and description
- Date of invoice
- Invoice number
- Clearly stipulate the words "Tax Invoice"
- Be addressed to the MLM
- Contain the details of the MLM
- Contain the banking details, Vat number
- Contain the logo of the contractor or contractors in the case of a joint venture

## **BONDS AND GUARANTEES**

The Contractor shall deliver to the Employer the original fixed performance guarantee before commencement of works. The guarantee shall be held by the Employer for safekeeping until completion of the work.

No bonds are accepted.

## **PAYMENT CERTIFICATES**

Payment certificates are to be agreed upon by the Construction Manager and Employers Agent Representative and signed by them and submitted to the Employers Agent by the 25th day of each month.

Payment certificates shall be submitted in the form of the Bill of Quantities. Columns shall be provided showing the previous quantity, current quantity and total quantity claimed under each item. Calculations to substantiate the quantities claimed must be submitted with each monthly claim. A declaration of ownership of unused materials must be submitted together with any claim made for payment of unused materials on site. No payment for materials on site will be made without such a declaration. A pro forma declaration of ownership is included in this document.

Payment certificates are to be agreed upon by the Construction Manager and Employers Agent Representative. Once agreed, the Contractor is to submit a signed payment certificate to the Employers Agent for certification including a signed tax invoice addressed to the MLM.

#### **INSURANCE PROVIDED BY THE EMPLOYER**

Copies of the insurance may be obtained from the Employer, if required. Refer to the Contract Data for full details of the insurance provided by the Employer.

#### **NEATNESS OF THE SITE**

Progressive and systematic finishing and tidying will form part of this contract. Spoil, rubble, materials, equipment or unfinished operations shall not be allowed to accumulate unnecessarily and in the event of this happening, the Employers Agent shall have the right to withhold payment for as long as the condition prevails in respect of the relevant works in the area(s) concerned.

The general neatness and tidiness of the site is of particular concern. The Contractor shall therefore, on a day-to-day basis, keep the Works in a condition acceptable to the Employers Agent.

#### MAINTENANCE OF ACCESS AND STREETS

The operation of construction vehicles on existing roads or streets shall be limited to traffic with an axle load not exceeding that allowed by the Road Traffic Ordinance of the authority concerned, or any amendment thereof.

All access roads used by the Contractor shall be maintained for the duration of the contract and shall be rehabilitated to their original condition on completion of the contract. The Contractor must note that no additional payment will be made for construction, maintenance and rehabilitation of any access roads to the site.

#### PROTECTING THE SITE

The Contractor shall be solely responsible for the protection of the Site against all damage to property, services, terrain, trees etc. If in the normal execution of this Contract, disturbance to the Site of the Works is necessary, the Contractor shall obtain the prior permission of the Employers Agent. After completion of this work, the Contractor shall reinstate the area concerned to its original condition at his own cost or as covered under the rates in the Bill of Quantities. The Employers Agent ruling of what was the original condition of the Site or part thereof shall be final.

If the Contractor fails to reinstate the Site, the Employer shall do the reinstatement and the Employers Agent shall establish the extent of the work as well as its costs. The Employers Agent ruling shall be final and payment for the work will be deducted from the Contractor's monthly certificate.

The Contractor shall ensure that his actions do not cause any nuisance to the public. Should spillages occur, the Contractor must adequately disinfect the work site, including the container area.

#### PROTECTION OF THE WORKS AGAINST FLOODING

The Contractor shall provide sumps, pumps, furrows, berms and/or coffer dams to divert water flow away from construction activities; and any other temporary measure/works as may be necessary to minimise damage, inconvenience or interference, for 24 hours a day 7 days a week throughout the period of construction, to adequately protect the works from flooding and damage.

The Contractors programme must include and item and information regarding the dealing with water.

#### **LANDOWNERS**

The Contractor is to ensure that all landowners are notified 1 month prior to construction commencing in their properties. The Contractor shall submit copies of the notification to the Employers Agent.

The Contractor is to minimise disruption and ensure access and security for the landowners are maintained at all times. The following measures are to be adhered to for the duration of the contract:

- The construction of activities should proceed as discussed with the landowner and Employers Representative
- Landowner to have access to his property at all times
- Temporary fences to be installed as required by the Contractor without limiting access to the landowner
- Tidying up, removing temporary fencing, reinstating existing fencing and opening the existing access to be performed before completion of the contract

## FORMS FOR CONTRACT ADMINISTRATION

Pro forma approval forms to be used on this contract shall be provided by the Employers Agent at the inaugural meeting.

Forms for reporting on employment of local labour (EPWP) are attached as annexure E to this document. These reports shall be submitted monthly to the Employers Agent in accordance with the stipulated requirements.

#### PROOF OF COMPLIANCE WITH THE LAW

Refer to clause 4.3.1 (paragraph 10) of the Contract Data.

## **C3.6: HEALTH AND SAFETY REQUIREMENTS AND PROCEDURES**

#### C3.6.1 HEALTH AND SAFETY REQUIREMENTS AND PROCEDURES

- a) In terms of the provisions of Section 37(2) of the Occupational Health and Safety Amendment Act, 1993 (Act 85 of 1993) hereinafter referred to as the Act, the following arrangements and procedures shall apply between the Contractor and the Employer to ensure compliance by the Contractor with the provisions of the Act:
  - (i) The Contractor undertakes to acquaint the appropriate officials and employees of the Contractor with all relevant provisions of the Act and the Regulations promulgated in terms of the Act.
  - (ii) The Contractor undertakes that all relevant duties, obligations and prohibitions imposed in terms of the Act and Regulations on the Contractor will be fully complied with.
  - (iii) The Contractor accepts sole liability for such due compliance with the relevant duties, obligations and prohibitions imposed by the Act and Regulations and expressly absolves the Employer from himself being obliged to comply with any of the aforesaid duties, obligations and prohibitions, with the exception of such duties, obligations and prohibitions expressly assigned to the Employer in terms of the Act and its associated Regulations.
  - (iv) The Contractor agrees that any duly authorised officials of the Employer shall be entitled, although not obliged, to take such steps as may be necessary to monitor that the Contractor has conformed to his undertakings as described in paragraphs (i) and (ii) above, which steps may include, but will not be limited to, the right to inspect any appropriate site or premises occupied by the Contractor, or any appropriate records or safety plans held by the Contractor.
  - (v) The Contractor shall be obliged to report forthwith to the Employer and Employers Agent any investigation, complaint or criminal charge which may arise as a consequence of the provisions of the Act and Regulations, pursuant to work performed in terms of this Contract, and shall, on written demand, provide full details in writing, to the Employer and Employers Agent, of such investigation, complaint or criminal charge.
  - (vi) The Contractor shall furthermore, in compliance with Constructional Regulations 2014 (Government Gazette No. 10113, dated 07 February 2014) to the Act acquaint himself with the requirements of the Employer's health and safety specification as laid down in regulation 4(1)(a) of the Construction Regulation 2014, and prepare a suitably and sufficiently documented health and safety plan as contemplated in regulation 5(1) of the Construction Regulation 2014 for approval by the Employer or his assigned agent. The Contractor's health and safety plan and risk assessment shall be submitted for approval, to the Employer or his agent, within 14 days of the Commencement Date and shall be implemented and maintained from the commencement of the Works. The Contractor shall at all times be responsible for full compliance with the approved plan as well as with the Construction Regulations and no extension of time will be considered for delays due to non-compliance with the abovementioned plan or regulations.
  - (vii) The Employer, or his assigned agent, reserves the right to conduct periodic audits, as contemplated in the Construction Regulations 2014, to monitor that the Contractor is compliant in respect of his obligations. Failure by the Contractor to comply with the requirements of these Regulations shall entitle the Employers Agent, at the request of the Employer or his agent, to suspend all or any part of the Works, with no recourse whatsoever by the Contractor for any damages incurred as a result of such suspension, until such time that the Employer or his agents are satisfied that the issues in which the Contractor has been in default have been rectified.

(viii) The proposed type of work, materials to be used and potential hazards likely to be encountered on this Contract are detailed in the C3.3: Construction, the Bill of Quantities, the Drawings, and in the Employers' Site Specific Health and Safety Specification (regulation 5(1a-c) of the Construction Regulations, 2014, Site Specific Baseline Risk Assessment which is included in this document.

Payment items are included in the Bill of Quantities to cover the Contractor's cost for compliance with the OHS Act and the abovementioned regulations.

As per Clause 5(1)(a-c) of the 2014 Construction Regulations a Site Specific Health and Safety Specification and Site Specific Baseline Risk Assessment is included in this contract.

Furthermore, any reference to the "Machinery and Occupational Safety Act" in any specification shall be replaced with reference to the "Occupational Health and Safety Act, 1993."

## C3.6.2 GENERAL SAFETY

The Contractor Shall be the responsible party on site to ensure that the provisions of the Occupational health and Safety Act No. 85 of 1993 and the Construction Regulations (2014) are strictly adhered to and administered for the duration of the contract (i.e. until the completion certificate is issued). The COGTA KZN will not be held liable for safety on site.

## C3.6.3 PROTECTION OF THE PUBLIC

The Contractor shall at all times ensure that his operations do not endanger any member of the public, or any municipal staff working on, or visiting the site.

As the site is a Wastewater Treatment Works staffed by municipal employees the Contractor shall take special precautions to prevent public access to any danger areas on the Works, e.g. by temporary barricades and/or fencing. The Contractor shall maintain barricades and/or fencing for the duration of the Contract.

## C3.6.4 BARRICADES AND LIGHTING

The construction site must be secure and it is the responsibility of the Contractor to ensure the safety of his staff and all staff working on or visitors to the site in accordance with the Occupation Health and Safety Act No. 85 of 1993, Construction Regulations 2014, Site Specific Health and Safety Specification and Site Specific Baseline Risk Assessment included in this contract.

# C3.6.5 TRAFFIC CONTROL ON ROADS

The Contractor has to erect and maintain road signs for the duration of the contract to warn both public and motorists about construction activities taking place.

If the Employers Agent deems the road where the Contractor is working busy, the Contractor shall provide an alternative route for both public and motorists.

## C3.6.6 MEASURES AGAINST DISEASE AND EPIDEMICS

The Contractor has to take cognisance of the prevalence of STD's, TB and waterborne diseases. The Contractor must ensure the safety of his workers and surrounding community against the spread of these diseases.

Refer to the Occupational Health and Safety Act no. 85 of 1993 and Construction Regulations 2014 for sanitary and hygiene requirements.

Where applicable (e.g. such as work being conducted at Wastewater Treatment Works hepatitis A and B vaccinations are required) the contractor shall ensure that all employees (permanent and temporary) receive the necessary vaccinations required.

## C3.6.7 HIV/AIDS AWARENESS

The following are the minimum requirements to be provided by the Contractor:

- Monthly talks on HIV and AIDS
- Provision of condoms
- Voluntary counselling and testing (VCT's)
- Company policy on HIV/AIDS.

## For further information, refer to the following documents:

- Occupation Health and Safety Act, Act 85 of 1993
- Construction Regulations, 2014

#### **C3.7: SPECIFICATION DATA**

PSA General (SABS 1200 A)
PSGA Concrete (small works) (SABS 1200 GA)
PSM Roads (general) (SABS 1200 M)
PSMM Ancillary roadworks (SABS 1200 MM)

ENV Environmental Management
OH Occupational Health and Safety

The prefix "PSA" indicates an amendment to SABS 1200 A, "PSDB" to SABS 1200 DB and so on. The numbers following these prefixes are the relevant sub-clause numbers in SABS 1200.

An asterisk (\*) placed next to a PS sub-clause number denotes the inclusion of an additional sub-clause for which no equivalent appears in SABS 1200.

Further to the above it should be noted that where in a specific standardized specification reference is made to a sub-clause in another standardized specification, any amendment or addition to the sub-clause referred to, as provided for in the project specification, shall apply.

#### **DETAILED PROJECT SPECIFICATION**

## 3.1 Preliminaries and General Cost and Site Establishment

## **Work Specification**

- The Contractor shall allow for the following specific requirements of Employer.
  - a) Office accommodation for meetings held on site.
- In addition to the specific requirements of *Employer*, detailed above, the contractor shall allow for his own preliminaries and/or overhead costs as required for the execution of the contract. It shall be divided into the following two sections:
- A Fixed-charge item such as: (SANS 1200A 8.3) Contractual requirements.

Establishment of facilities on site such as plant, sheds, water, electricity,

## lighting, etc

- Removal of facilities from site after completion of work.
- Any other fixed-charge items.
- B Time related items such as: (SANS 1200A -
- 8.4) Contractual requirements.
- Operation & maintenance of facilities on site.
- Supervision.
- Company and head office overhead costs. Other time related items.

## **Material Specification**

- The specific contractor shall supply, transport and off-load his own facilities such as sheds, water, electricity, lighting, etc. on the site.
- The contractor shall also be responsible to remove all facilities established on site after his work is completed.

#### 3.2 Site Works

- · Importing shall include:
  - a) Imported soil shall be used for the soil/cement mixture and shall not consist of any excavated Black Turf.
  - b) The layers shall be compacted to a minimum density of 90% MOD AASHTO before the next layer of soil/cement mixture is placed.
  - c) For stayed poles with concrete anchors, the pole shall not be erected until the concrete has had 21 days in which to cure.
- Bush clearing shall include:

The requirements of ESKASABG3, **STANDARD FOR BUSH CLEARANCE AND MAINTENANCE** WITHIN OVERHEAD POWERLINE SERVITUDES to adhered to at all times.

# Special reference from the above standard with respect to the Contractors responsibility is made below:

#### The Contractor/Employer shall:

- a) remain on all existing roads and tracks and within the servitude area and not deviate therefrom;
- b) keep *Employers* gates locked and leave property owners' gates closed or as agreed to in writing between *Employers* and the land owner;
- c) not interfere with the property owners' activities;
- d) request permission for the use of water;
- e) provide appropriate toilet facilities;
- f) not make fires;
- g) not litter;
- h) not drop fences;
- i) not collect firewood without consent; and
- not disturb or remove stones/rock from the site (i.e. archaeological and heritage sites).

## Warranty shall be obtained from the *Contractor* that:

- a) He or she knows and understands the dangers involved in clearing bush in or around power lines and the dangers of the spread of fire.
- b) He or she understands and will comply with the *Employers* procedures.
- c) He or she understands that he/she must be authorized by the relevant *Employers* representative, in writing in terms of Contractor's ORHVS regulations. Employer must declare him or her competent.
- d) He or she is a competent person and is a registered pest control operator or shall ensure that any chemical clearing shall be done under the supervision of a registered pest control operator.
- e) He or she is able to and shall comply with, all legislation pertaining to the nature of the work to be done and all things incidental thereto.
- f) He or she shall appoint a land owner liaison officer, who shall personally contact all affected land owners and users telephonically or in writing and obtain their permission before any trees or bushes are cut, regardless of any previous arrangements or agreements. This shall not be applicable in the case where the *Employer* has undertaken this requirement.
- g) For all affected power lines a list of property owners shall be supplied, by Employer, to the contractor to enable him to obtain the owners' consent.

#### 3.3 Installing of MV Equipment, which includes MV switchgear, sectionalized, transformer etc.

- Equipment insulators installations shall include:
  - ✓ The vibration dampers shall be installed in the entire span greater than 180m

length, and torque according to the manufacturer's specifications.

- Installation of MV transformer earthing shall include:
  - ✓ Where the MV and LV earth electrodes are separated at transformer installations, the transformer's LV windings shall be protected against insulation breakdown by install a neutral surge arrester between the LV neutral terminal and the tank earth.
  - For 22kV and 11kV MV systems, the maximum allowable resistance of the transformer earth electrode is  $29\Omega$  as per DST\_34-1985. o A minimum separation distance of 5m shall be maintained between the MV and LV earth electrodes at transformer installations.

## 3.4 Support for overhead Distribution

#### 3.4.1 Support of Overhead Distribution which includes installation of stays, poles, x-arms, etc.

- Installing stay rod assembly shall include:
  - ✓ Risk of collapse and keeping excavations free of water shall be included in the quoted rate. o Digging of holes of the installation of stays rod to D-DT-0350. o A rectangular stepped hole shall be dug so that the length of the hole is in line to the projected line the stay wire. The hole shall be large enough for the stay plate to fit in. Once the hole is dug, the front face of the lower step shall be undercut to accommodate the stay plate.
  - ✓ A 80 mm wide slot shall be cut in the steps at 45° to allow for the stay rod. This is absolutely essential as without this the stay rod will cut into the ground when tensioning or with a good rain and cause the pole to lean or possibly break.
  - ✓ All excavations shall be kept covered or barricaded in a manner accepted by Eskom to prevent injury to people or livestock when no casting is done.
  - ✓ The Contractor shall notify the Clerk of Works upon completion of the excavation for the stay rod. No concrete shall be placed until the Clerk of Works has inspected the excavations and acknowledge his approval.
  - ✓ The stay plate shall be placed up against undisturbed soil on the pole side of the hole.

    o After a stay has been planted to the required depth, the soil that is to be filled into the
    hole shall be at optimum moisture content; if the soil is held in the hand and squeezed,
    it shall stay compacted after opening the hand.
  - ✓ The hole shall be filled with 250 mm of soil at a time. Each layer of soil shall be compacted with a mechanical or hand compactor until no further settlement occurs. Once it is compacted a further 250 mm layer shall be added and compacted. This shall be done to each layer of soil until the stay hole is filled up to ground level with compacted soil.
  - ✓ If the soil removed is a very loose soil and does not stay squeezed together when slightly moist, then cement shall be added to the slightly moistened soil.
  - ✓ To every five wheelbarrows of excavated soil, add one pocket of cement: this makes a

- 1/10 mix. The cement shall be properly mixed with the soil then added to the hole in 250mm layers and compacted. The cement mix shall be allowed to set for two days before tension is put on the stay.
- ✓ If the soil removed from the hole is clay, an import soil shall be used to backfill the hole
  as specified above. This import soil shall be river concrete sand. To every five
  wheelbarrows of import soil add one pocket of cement. The cement shall be properly
  mixed with the soil then added to the hole in 250 mm layers and compacted. The cement
  mix shall be allowed to set for two days before tension is put on the stay.
- ✓ If the hole is waterlogged, the water shall be removed before the soil is replaced, an import soil that is cement stabilized as specified above shall be used to backfill the hole.
- ✓ For construction purposes the correct hole type shall be installed for the type of soil conditions and stay rod assembly to be installed.
- ✓ Excavation nominations shall be done by the *Contractor* before construction of the line takes place. o The nominations shall be done in the vicinity of each supporting structure position where the stay rod is to be installed.
- ✓ The nominated excavations shall be re-evaluated on site by the *Contractor*, in conjunction with the Clerk of Works, after the excavation of the stay rod hole has been done.

## Installing of stays shall include:

- ✓ Wind stays shall follow the requirements of D-DT-0341, D-DT-3124. o The stay wires shall be handled with care to prevent damage to the individual strands. o Ensure that the stay rod is firm to the ground before re-attaching it to the stay. o The stay shall be tensioned in accordance with the applicable design drawing as above using an approved load locker until no further upward movement occurs. The post installation load, as shown in table 1 column 2 below, shall be applied to the stay and held for two minutes.No upward movement of the stay shall be allowed during the two minute pre-tensioning.
- ✓ If the stay is unable to sustain the required post installation load, then an alternative stay size shall be installed and the process repeated.
- ✓ After the stay is pre tensioned the stay rod shall be marked with red spray paint just above the ground line. This is to indicate that the *Contractor* installing the stays has installed the stay in accordance with this document and load locked the stay in accordance with table 1 below.
- ✓ No stays shall be planted without the relevant stay plates fitted on the stay rod.

# 3.4.2 Overhead Support which includes the completion of all civil works for the excavation of pole and stay foundations

- Excavation shall include:
- ✓ Excavations shall include digging and drilling holes of between 0.8m 2m for normal applications and >2m for special applications as in D-DT-0332.

- ✓ All excavations shall be kept covered or barricaded, if not attended to, in a manner accepted by Employer to prevent injury to people or livestock.
- ✓ The Contractor shall notify the Clerk of Works upon completion of the excavation for the pole foundation. No shuttering, reinforcing steel or concrete shall be placed until the Clerk of Works has inspected the excavations and acknowledge his approval.
- ✓ Removal of excavated Black Turf or any other soil unsuitable for backfilling and transporting it to borrow pits.
- ✓ The excavated material shall be disposed of in borrow pits or a suitable place, indicated
  by the Employer site representative or the Employer environmental representative.
- ✓ The Contractor shall make his own arrangements for the provision to dispose of the
  excavated material on such a disposal place.
- ✓ Free haul shall be the distance within a radius of 1.5km from the pole position. Limited haul shall be the first 1km beyond the end of the free haul distance by the shortest practicable route.
- ✓ Long haul shall be the remainder of the distance beyond the limited haul by the shortest practicable route.
- Backfilling shall include:

Compacting the excavated pole hole where for normal application backfill material will be used. For special applications where the pole planting depth exceeds 2m, backfilling shall include the use of soil cement to reinforce the pole foundation.

- Importing soil shall include:
- ✓ The Contractor shall be responsible for supplying imported soil. If not otherwise
  specified, the imported soil shall be in accordance to SANS 1200.
- ✓ The imported soil shall not contain notable quantities of organic matter or stones of average dimension exceeding 150mm.
- ✓ Transporting imported soil from borrow pits to pole position. o In areas where the excavated soil is Black Turf, imported soil shall be used for the soil/cement mixture.
- ✓ The Contractor shall make his own arrangements for the provision of a suitable borrowpit for importing soil.
- ✓ Free haul shall be the distance within a radius of 1.5km from the pole position. o Limited haul shall be the first 1km beyond the end of the free haul distance by the shortest practical route.
- ✓ Long haul shall be the remainder of the distance beyond the limited haul by the shortest practical route.

# 3.5 MV overhead distribution system, which includes stringing, jointing, damage repair and making off of conductors.

- Stringing conductors shall include:
- ✓ Conductors shall not be left in contact with the ground, vegetable matter or any

- conducting or semiconducting material.
- ✓ Wood lagging shall be used to protect the conductor when working at ground level. o Where temporary stays are required, the *Contractor* shall be responsible for making the suitable arrangements.
- Conductor joints shall include:
- ✓ Only persons who have passed *Employer* approved compression jointing training and have proof of this are permitted to perform this work on the *Employers* network.
- ✓ Each coded jointer shall further be issued with his own unique identification number or sign, which he shall use to punch completed joints as a register of his acceptance.
- ✓ The number of joints over the total length of the line shall be kept to a minimum.
  - Joints shall not be installed in spans crossing railways, proclaimed roads, power or communication lines.
  - In no case shall there shall be more than one joint in a given span.
  - Joints shall not be installed in spans that are dead-ended at both ends.
  - No joint shall pass through a stringing pulley.
  - Joints shall, as far as possible, be made in the middle third of a span. No joint shall be placed within 20m of a structure.
- Conductor damage repair shall include:
  - ✓ Damage to conductors caused by the *Contractor* shall be repaired in a manner determined by *the Clerk of Works*, at the expense of the *Contractor*.
  - ✓ Where there is repeated damage in the same span, or in consecutive spans, the
    entire conductor in such spans shall be replaced.

## 3.6 Labelling of Structures

- Pole identification labels shall include:
  - ✓ Fitting of labels 1.8m above ground level, stamped onto an aluminum plate.
  - ✓ Label as in D-DT-2949.

## 3.7 LV Overhead Distribution System

- Conductor stringing, jointing and damage repair shall be in accordance with section 3.5 above.
- The assembling and erection of the LV structures such be in accordance with the relevant drawings. The applicable structure drawings are specified elsewhere in this document.
- The fuse switch unit shall be installed at below the transformer just below the LV open wire conductors. Refer to D-DT-0299 sheet 4 for the relevant details.
- The pole top boxes shall be the 2 and 4-way type with a 50A miniature circuit breaker. Where a 60A customer is connected to the same pole top box a 63A miniature circuit breaker shall be included in accordance with D-DT2955.

- The LV distribution earthing system employed would be the T-N-C-S earthing system in accordance with SANS 10142-2 and the Eskom Distribution Standard Earthing Standard.
- An LV crow's foot earthing resistance shall be performed at each transformer.
- At earth continuity test shall be performed at the LV distributor point of each customer and must be recorded.
- This is to ensure the integrity of the earthing system and important to ensure safety of the customer installation.
- All LV earthing at the transformer shall be done as per D-D-T0627.
- When testing LV earthing at the transformer Crows' foot, the resistance value of the soil should not be less than 70 ohms, if so the contractor and the COW of works to consult the Project Engineer.

#### 3.8 LV House Connections

- A 6mm<sup>2</sup> concentric airdac shall be used to connect the houses from the pole top box and/or service poles.
- The following commissioning tests shall be performed on every new installation, in the order listed. The first three tests are tests of the supply to the installation. The test shall be performed in accordance with Distribution standard DISASAAS3. The last two tests are tests of the installation itself.
  - Insulation test on the service cable;
  - Test to ensure that the live and neutral connectors have not been reversed on the supply side;
  - Test of effectiveness of supplier's protective conductor (Earth loop impedance test)
     (defined in

```
SANS10142-1); Voltage level and Polarity test (defined in SANS10142-1); o Earth leakage trip test.
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**Note 1:** A full COC must be issued for 20 amp installations where the meter is installed outside the house or for 60 Amp installations. Only an accredited person may issue a full COC.

**Note 2:** The person who carries out the tests for the issue of an abridged COC must be suitably trained to do so. He need not be accredited in terms of the OHS act Electrical Installation Regulations, but his direct supervisor must be

- A total of 344 20A ECU prepayment meters shall be installed. Included shall be 344 passive bases to mount the meters. All meters shall be sealed as required.
- Direct house connections (from pole top box to house) shall be made for approximately 276
  connections and 68 indirect connections (from pole top box to service pole to house) shall be
  made for connections.

## LOW VOLTAGE PROTECTION PHILOSOPHY FOR LOW CONSUMPTION AREAS

The association between fault level and fuse operating time is as follows:

- a) 80 A fuse (10 s pre-arcing time) = 290 A fault level; 80 A fuse (100 s pre-arcing time) = 200 A fault level; level;
- b) 63 A fuse (10 s pre-arcing time) = 210 A fault level; 63 A fuse (100 s pre-arcing time) = 150 A fault level.

# LV distributor protection

The assumed range of LV conductors will be protected against overload and short-circuit by an 63 A fuse as the current ratings of the conductors are greater than the fuse rating.

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# SPECIFICATION ENV: ENVIRONMENTAL MANAGEMENT

# 1. Scope

This Specification covers the requirements for controlling the impact on the environment of construction activities.

# 2. Interpretations

The following supporting specifications shall apply: SANS 1200 A or SANS 1200 AA, as applicable;

#### 3. Definitions

For the purposes of this Specification the definitions and abbreviations given in the applicable specifications listed in 2.1 and the following definitions and abbreviations shall apply:

#### 3.1 Environment

Environment means the surroundings within which humans exist and that are made up of -

- i. the land, water and atmosphere of the earth;
- ii. micro-organisms, plant and animal life;
- iii. any part or combination of i) and ii) and the interrelationships among and between them;
- iv. the physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and wellbeing.

## 3.2 Potentially Hazardous Substance

A Potentially Hazardous Substance is a substance which, in the reasonable opinion of the Engineer/ ECO/EO, can have a deleterious effect on the environment.

#### 3.3 Method Statement

The Method Statement is a written submission by the Contractor to the Engineer/ECO/EO, in response to the Specification or a request by the Engineer/ECO/EO, setting out the plant, materials, labour and method the Contractor proposes using to carry out an activity, identified by the relevant specification or the Engineer/ECO/EO when requesting the Method Statement, in such detail that the Engineer/ECO/EO is enabled to assess whether the Contractor's proposal is in accordance with the Specifications and/or will produce results in accordance with the Specifications.

The Method Statement shall cover applicable details with regard to:

- i. construction procedures,
- ii. materials and equipment to be used,
- iii. getting the equipment to and from site,
- iv. how the equipment/ material will be moved while on site,
- v. how and where material will be stored,
- vi. the containment (or action to be taken if containment is not possible) of leaks or spills of any liquid or material that may occur,
- vii. timing and location of activities,
- viii. compliance/ non-compliance with the Specifications,
- ix. any other information deemed necessary by the Engineer/ECO/EO.

#### 3.4 Reasonable

Reasonable means, unless the context indicates otherwise, reasonable in the opinion of the Engineer/ECO/EO after he has consulted with a person, not an employee of the Client Directorate, suitably experienced in "environmental implementation plans" and "environmental management plans" (both as defined in the National Environmental Management Act, No 107 of 1998).

#### 3.5 Solid Waste

Solid waste, means all solid waste, including construction debris, chemical waste, excess cement/ concrete, wrapping materials, timber, tins and cans, drums, wire, nails, domestic waste, dead vegetation, asphalt products, etc.

#### 3.6 Contaminated Water

Contaminated water is water contaminated by the Contractor's activities containing cements, concrete, lime, paint products, thinners, turpentine, chemicals, fuels, oils, washing detergents, etc.

## 3.7 Working Area

The Working Area means any area within the boundaries of the Site where construction is taking place.

## 3.8 Contractor's Camp

The Contractor's Camp is the area designated for all the Contractor's temporary offices, storage areas, plant parking areas, staff welfare facilities etc.

## 4. Requirements

#### 4.1 Materials

## 4.1.1 Materials handling, use and storage

The Contractor shall ensure that any delivery drivers are informed of all procedures and restrictions (including "no go" areas) required to comply with the Specifications. The Contractor shall ensure that these delivery drivers are supervised during off loading, by someone with an adequate understanding of the requirements of the Specifications.

Materials shall be appropriately secured to ensure safe passage between destinations. Loads including, but not limited to sand, stone chip, fine vegetation, refuse, paper and cement, shall have appropriate cover to prevent them spilling from the vehicle during transit. The Contractor shall be responsible for any clean-up resulting from the failure by his employees or suppliers to properly secure transported materials.

All manufactured and/ or imported material shall be stored within the Contractor's camp, and, if so required by the Project Specification, out of the rain. All lay down areas outside of the construction camp shall be subject to the Engineer/ECO/EO's approval. Provide specifications for location, demarcation, permitted heights, stabilisation, weed-, dust- and erosion control of stockpiles.

#### 4.1.2 Hazardous substances

Hazardous chemical substances (as defined in the Regulations for Hazardous Chemical Substances) used during construction shall be stored in secondary containers. The relevant Material Safety Data Sheets (MSDS) shall be available on Site. Procedures detailed in the MSDSs shall be followed in the event of an emergency situation.

If potentially hazardous substances are to be stored on site, the Contractor shall provide a Method Statement detailing the substances/ materials to be used, together with the storage, handling and disposal procedures of the materials. Hazardous substances shall be stored out of flood risk areas and disposal of these substances shall be at a licensed waste disposal facility.

### 4.2 Plant

#### 4.2.1 Fuel and Oil

Unless allowed by the Project Specification, fuel shall not be stored on site but shall be transported to the site as and when required.

Where reasonably practical, plant shall be refuelled at a designated re-fuelling area or at the workshop as applicable. If it is not reasonably practical then the surface under the temporary refuelling area shall be protected against pollution to the reasonable satisfaction of the Engineer/ECO/EO prior to any refuelling activities. The Contractor shall ensure that there is always a supply of absorbent material (not saw dust) readily available to absorb/ breakdown and where possible is designed to encapsulate minor hydrocarbon spillage. The quantity of such materials shall be able to handle a minimum of 200l of hydrocarbon liquid spill. This material must be approved by the Engineer/ECO/EO prior to any refuelling or maintenance activities.

A Method Statement must be provided detailing how these liquids will be stored, handled and disposed of. SANS 10131: Installation of above-ground tanks must be adhered to.

## 4.2.2 Ablution facilities

Washing, whether of the person or of personal effects and acts of excretion and urination are strictly prohibited other than at the facilities provided.

The Contractor shall ensure that no spillage occurs when toilets are cleaned or emptied and that the contents are properly stored and removed from the Site.

Provision shall be made for employee facilities including: shelter, toilets and washing facilities. Toilet facilities supplied by the Contractor for the workers shall occur at a maximum ratio of 1 toilet per 30 workers (preferred 1:15). Sanitation facilities shall be located within 100 m from any point of work, but not closer than 50 m to any water body. Toilets shall be within the Contractor's Camp and at work areas more than 50m from the Contractor's Camp. All temporary/ portable toilets shall be secured to the ground to the satisfaction of the Engineer/ECO/EO to prevent them toppling due to wind or any other cause. These facilities shall be maintained in a hygienic state and serviced regularly. Toilet paper shall be provided. Discharge of waste from toilets into the environment and burial of waste is strictly prohibited.

## 4.2.3 Eating areas

The Contractor shall designate eating areas, subject to the approval of the Engineer/ECO/EO. These shall be clearly demarcated. The feeding or leaving of food for any animal is strictly prohibited. Sufficient bins as specified in Section 4.2.4 of this Specification shall be present in this area.

Any cooking on Site shall be done on well-maintained gas cookers with fire extinguishers present.

#### 4.2.4 Solid waste management

The site shall be kept neat and clean at all times. Littering is prohibited.

No on-site burying or dumping of any waste materials, vegetation, litter or refuse shall occur. The Contractor shall provide scavenger and weatherproof bins with lids of sufficient number and capacity to store the solid waste produced on a daily basis. The lids shall be kept firmly on the bins at all times. Bins shall not be allowed to become overfull and shall be emptied regularly, at least once a week. Waste from bins may be temporarily stored on Site in a central waste area that is weatherproof and scavenger-proof, and which the Engineer/ECO/EO has approved.

All solid waste shall be disposed of off site at an approved landfill site. The Contractor shall supply the Engineer/ECO/EO with a certificate of disposal.

#### 4.2.5 Contaminated Water Management

Potential pollutants of any kind and in any form shall be kept, stored, and used in such a manner that any escape can be contained and the water table not endangered. Water containing such pollutants as cements, concrete, lime, chemicals and fuels shall be discharged into a conservancy tank for removal from the site to a licensed disposal facility. This particularly applies to water emanating from concrete batching plants and concrete swills, and to runoff from fuel depots/workshops/truck washing areas. Wash down areas shall be placed and constructed in such a manner so as to ensure that the surrounding areas are not polluted.

Should it be necessary to dispose of contaminated water into the municipal sewer or stormwater system, written permission is required from the Engineer/ECO/EO/relevant Municipal Official.

Should contaminated water be released into the environment, specifically into a water course, monitoring thereof shall commence in accordance to the National Water Act, 1998 (Act 36 of 1998) Section 21(f) — refer to GN 399 (26 March 2004). Contaminated water must not be released into the environment without authorisation from the relevant authority.

A Method Statement is required from the Contractor detailing the management of contaminated water.

The Contractor shall notify the Engineer/ECO/EO immediately of any pollution incidents on Site.

#### 4.2.6 Site structures

All site establishment components (as well as equipment), shall be positioned to limit visual intrusion on neighbours and the size of area disturbed. The type and colour of roofing and cladding materials to the Contractor's temporary structures shall be selected to reduce reflection.

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## **4.2.7** Lights

The Contractor shall ensure that any lighting installed on the site for his activities does not interfere with road traffic or cause a reasonably avoidable disturbance to the surrounding community or other users of the area.

Lighting installed shall, as far as practically possible, be energy efficient. Lighting utilised on site shall be turned off when not in use.

## 4.2.8 Workshop, equipment maintenance and storage

Where practical, all maintenance of equipment and vehicles on Site shall be performed in the workshop. If it is necessary to do maintenance outside of the workshop area, the Contractor shall obtain the approval of the Engineer/ECO/EO prior to commencing activities.

The Contractor shall ensure that in his workshop and other plant maintenance facilities, including those areas where, after obtaining the Engineer/ECO/EO 's approval, the Contractor carries out emergency plant maintenance, there is no contamination of the soil, water sources or vegetation. The workshop shall have a smooth impermeable floor either constructed of concrete or thick plastic covered with sufficient sand to protect the plastic from damage. The floor shall be bunded and sloped towards an oil trap or sump to contain any spillages of substances (e.g. oil). The Engineer/ECO/EO must approve a Method Statement detailing the design and construction of the workshop. When servicing equipment, drip trays shall be used to collect the waste oil and other lubricants. Drip trays shall also be provided in construction areas for stationary plant (such as compressors) and for "parked" plant (such as scrapers, loaders, vehicles). Drip trays, sumps and bunds must be emptied regularly, especially before a known rain event and after a rain event, and the contents disposed of at a licensed disposal facility.

All vehicles and equipment shall be kept in good working order and serviced regularly. Leaking equipment shall be repaired immediately or removed from the Site.

The washing of equipment shall be restricted to urgent or preventative maintenance requirements only. All washing shall be undertaken in the workshop or maintenance areas, and these areas must be equipped with a suitable impermeable floor and sump/oil trap. The use of detergents for washing shall be restricted to low phosphate/ nitrate and low sudsing-type detergents.

#### 4.2.9 Noise

The Contractor shall limit noise levels (e.g. install and maintain silencers on machinery). The provisions of SANS 1200A Subclause 4.1 regarding "built-up areas" shall apply to all areas within audible distance of residents whether in urban, peri-urban or rural areas.

Appropriate directional and intensity settings are to be maintained on all hooters and sirens.

No amplified music shall be allowed on Site. The use of radios, tape recorders, compact disc players, television sets etc shall not be permitted unless the volume is kept sufficiently low as to avoid any intrusion on members of the public within range. The Contractor shall not use sound amplification equipment on Site unless in emergency situations.

Construction activities generating output levels of 85 dB (A) or more, in residential areas, shall be confined to the hours 08h00 to 17h00 Mondays to Fridays. Should the Contractor need to work outside normal working hours, the surrounding communities shall be informed prior to the work taking place.

## 4.3 Methods and Procedures

#### 4.3.1 Method Statements

The Contractor shall not commence the activity until the Method Statement has been approved and shall, except in the case of emergency activities, allow a period of two weeks for approval of the Method Statement by the Engineer/ECO/EO. Such approval shall not unreasonably be withheld.

The Engineer/ECO/EO may require changes to a Method Statement if the proposal does not comply with the specification or if, in the reasonable opinion of the Engineer/ECO/EO, the proposal may result in, or carries a greater than reasonable risk of, damage to the environment in excess of that permitted by the Specifications.

Approved Method Statements shall be readily available on the site and shall be communicated to all relevant personnel. The Contractor shall carry out the Works in accordance with the approved Method Statement. Approval of the Method Statement shall not absolve the Contractor from any of his obligations or responsibilities in terms of the Contract.

## 4.3.2 Environmental Awareness Training

Within seven days of the Commencement Date, the Contractor's site staff including foremen, and site management staff shall attend an environmental awareness training course, of approximately one-hour duration. The Contractor shall liaise with the Engineer prior to the Commencement Date to fix a date and venue for the course. The contractor shall provide a suitable venue with facilities as required by the Specification Data and ensure that the specified employees attend the course.

Any new employees coming on to the site after the initial training course and the Contractor's suppliers and subcontractors shall also attend this course. The Contractor shall ensure that all attendees sign an attendance register, and shall provide the Engineer with a copy of the attendance register the day after each course.

## 4.3.3 Contractor's Environmental Representative

The Contractor shall appoint an environmental representative (called an Environmental Site Officer) who shall be responsible for undertaking a daily site inspection to monitor compliance with this Specification and the relevant Project Specification. The Contractor shall forward the name of the environmental representative to the Engineer/ECO/EO for his approval seven days prior to the date of the environmental awareness training course. The Contractor's environmental representative shall complete daily Site Inspection Forms and these shall be submitted to the Engineer/ECO/EO once a week.

## 4.3.4 Site Division and Site Demarcation

The Contractor shall restrict all his activities, materials, equipment and personnel to within the area specified. The area of the site shall be fenced where possible.

A Method Statement detailing the layout and method of establishment of the construction camp (including all buildings, hostels, offices, lay down yards, vehicle wash areas, fuel storage areas, batching areas and other infrastructure required for the running of the project) shall be provided.

## 4.3.5 Access routes / haul roads

On the Site, and, if so required by the Project Specification, within such distance of the Site as may be stated, the Contractor shall control the movement of all vehicles and plant including that of his suppliers so that they remain on designated routes, are distributed so as not to cause an undue concentration of traffic and that all relevant laws are complied with. In addition such vehicles and plant shall be so routed and operated as to minimise disruption to regular users of the routes not on the Site. On gravel or earth roads on Site and within 500m of the Site, the vehicles of the Contractor and his suppliers shall not exceed a speed of 20 km/hr as far as possible the Contractor shall use existing access and haul routes. Damage to the existing access roads as a result of construction activities shall be repaired to the satisfaction of the Engineer/ECO/EO, using material similar to that originally used. The cost of the repairs shall be borne by the Contractor.

#### 4.3.6 Construction Personnel Information Posters

As required by the Project Specification, the Contractor shall erect and maintain information posters for the information of his employees depicting actions to be taken to ensure compliance with aspects of the Specifications. Such posters shall be erected at the eating areas and any other locations specified by the Engineer/ECO/EO.

#### 4.3.7 Fire Control

No fires may be lit on site. Any fires, which occur, shall be reported to the Engineer/ECO/EO immediately. Smoking shall not be permitted in those areas where it is a fire hazard. Such areas shall include the workshop and fuel storage areas and any areas where the vegetation or other material is such as to make liable the rapid spread of an initial flame. In terms of the National Environmental Management: Air Quality Act and Community Fire Safety Bylaw, burning is not permitted as a disposal method.

The Contractor shall ensure that there is basic fire-fighting equipment available on Site at all times. This shall include at least rubber beaters when working in urban open spaces and fynbos areas, and at least one fire extinguisher of the appropriate type when welding or other "hot" activities are undertaken.

## 4.3.8 Emergency Procedures

The Contractor shall ensure that his employees are aware of the procedure to be followed for dealing with spills and leaks, which shall include notifying the Engineer/ECO/EO and the relevant authorities. The Contractor shall ensure that the necessary materials and equipment for dealing with spills and leaks is available on Site at all times. Treatment and remediation of the spill areas shall be undertaken to the reasonable satisfaction of the Engineer/ECO/EO.

In the event of a hydrocarbon spill, the source of the spillage shall be isolated, and the spillage contained. The area shall be cordoned off and secured. The Contractor shall ensure that there is always a supply of absorbent material readily available to absorb/ breakdown and where possible is designed to encapsulate minor hydrocarbon spillage. The quantity of such materials shall be able to handle a minimum of 200 l of hydrocarbon liquid spill.

## 4.3.9 Safety

Telephone numbers of emergency services, including the local fire fighting service, shall be posted conspicuously in the Contractor's office near the telephone.

No unauthorised firearms are permitted on Site.

#### 4.3.10 Community Relations

The Contractor shall record any complaints or queries from the public, as well as the action taken in response, in the site request book. Complaints and associated responses shall be communicated to the Engineer on a weekly basis. The Contractor's contact details shall be posted on the site board to enable the public to telephone should they have any queries or complaints.

#### 4.3.11 Protection of Natural Features

The Contractor shall not deface, paint, damage or mark any natural features (e.g. rock formations) situated in or around the Site for survey or other purposes unless agreed beforehand with the Engineer/ECO/EO. Any features affected by the Contractor in contravention of this clause shall be restored/ rehabilitated to the satisfaction of the Engineer/ECO/EO.

The Contractor shall not permit his employees to make use of any natural water sources (e.g. springs, streams, open water bodies) for the purposes of swimming, personal washing and the washing of machinery or clothes.

#### 4.3.12 Protection of Flora and Fauna

Except to the extent necessary for the carrying out of the Works, flora shall not be removed, damaged or disturbed nor shall any vegetation be planted.

Trapping, poisoning and/ or shooting of animals is strictly forbidden. No domestic pets or livestock are permitted on Site.

Where the use of herbicides, pesticides and other poisonous substances has been specified, the Contractor shall submit a Method Statement.

#### 4.3.13 Erosion and Sedimentation Control

The Contractor shall take all reasonable measures to limit erosion and sedimentation due to the construction activities and shall, in addition, comply with such detailed measures as may be required by the Project Specification. Where erosion and/or sedimentation, whether on or off the Site, occurs despite the Contractor complying with the foregoing, rectification shall be carried out in accordance with details specified by the Engineer/ECO/EO. Where erosion and/or sedimentation occur due to the fault of the Contractor, rectification shall be carried out to the reasonable requirements of the Engineer/ECO/EO.

Any runnels or erosion channels developed during the construction period or during the vegetation establishment period shall be backfilled and compacted, and the areas restored to a proper condition. Stabilisation of cleared areas to prevent and control erosion shall be actively managed. The method of stabilisation shall be determined in consultation with the Engineer/ECO/EO.

## 4.3.14 Protection of Archaeological and Palaeontology Remains

The Contractor shall take reasonable precautions to prevent any persons from removing or damaging any fossils, coins, articles of value or antiquity and structures and other remains of archaeological interest discovered on the Site, immediately upon discovery thereof and before removal. The Contractor shall inform the Engineer immediately of such a discovery and carry out the Engineers instructions for dealing therewith. All works within the vicinity of the discovery must cease immediately and the area shall be cordoned off until such a time as the Engineer authorises resumption of the works in writing.

## 4.3.15 Stockpiling

The Engineer shall identify suitable sites for stockpiling. Stockpiles shall be convex in shape, shall be no higher than 2m and shall be located so as to cause minimal disturbances. Where required, appropriate precautions

shall be taken to prevent the erosion and limit the compaction of the stockpile. The Contractor shall ensure that all stockpiles do not cause the damming of water or run off, it is itself washed away.

#### 4.3.16 Dust

The Contractor shall take reasonable measures to minimise the generation of dust as a result of construction activities to the satisfaction of the Engineer. Appropriate dust suppression measures, e.g. dampening with water, shall be used when dust generation is unavoidable, particularly during prolonged periods of dry weather. Dust suppression measures shall be agreed upon in consultation with the Engineer.

## 5. Compliance with Requirements and Penalties

## 5.1 Compliance

Environmental management is concerned not only with the final results of the Contractor's operations to carry out the Works but also with the control of how those operations are carried out. Tolerance with respect to environmental matters applies not only to the finished product but also to the standard of the day-to-day operations required to complete the Works.

It is thus required that the Contractor shall comply with the environmental requirements on an ongoing basis and any failure on his part to do so will entitle the Engineer/ECO/EO to certify the imposition of a fine subject to the details set out in the Project Specification.

## 6. Measurement and Payment

## 6.1 Basic principles

Except as specified in the Specification Data or as billed, no separate measurement and payment will be made to cover the costs of complying with the provisions of this specification and such costs shall be deemed to be covered by the rates tendered for the items in the Schedule of Quantities completed by the Contractor when submitting his tender.

**SPECIFICATION OH: OCCUPATIONAL HEALTH & SAFETY** 

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#### **SPECIFICATION OH: OCCUPATIONAL HEALTH & SAFETY**

#### 1. Scope

This Specification covers the health and safety aspects required of, and that shall be implemented during the construction and/or demolition work and/or plant installation specified in the Project Specification and standard specifications, shown on the drawings and/or scheduled in the Schedule of Quantities. It covers temporary and permanent work.

This Specification does not replace, take precedence over nor detract from the Occupational Health and Safety Act or its Construction Regulations, 2014, but is a supplementary specification as required in terms of the Regulations. Partial references to or quotes from the Regulations do not imply that the sections not referred to or quoted from are of lesser importance or are not applicable. The Principal Contractor will remain responsible to fully address the full Construction Regulations in his Health and Safety Plan and in his implementation thereof.

## 2. Interpretations

The following supporting specifications shall apply:

- SANS 1200 A, AA, AD and AH
- Occupational Health and Safety Act (Act No. 85 of 1993)
- Construction Regulations, 2014

The following specification may be required:

- SANS 1200 D
- SANS 1200 DM
- SANS 1200 DB

## 3. Definitions

For the purpose of this Specification the definitions and abbreviations given in the applicable of the specifications listed in 2.1, the definitions given in the Construction Regulations and the following definitions and abbreviations shall apply:

H&S: Health and Safety

OHS: Occupational Health and Safety

OHSA: Occupational Health and Safety Act, 1993

CR: Construction Regulations, 2014 of the OHS Act (Act No. 85 of 1993)

PPE: Personal Protective Equipment

## 4. General Provisions

## 4.1 General

All the work included in this Contract shall, for the purpose of complying with the OHS Act and the Construction Regulations, be deemed to be "construction work".

In complying with the OHS Act and its Construction Regulations, the Contractor shall consider all aspects of the Works, necessary temporary work, such as traffic accommodation, and conditions existing on site, such as utility services, ground and foundation conditions, surrounding land use, pedestrian and vehicular traffic and anticipated weather conditions, and take into account the construction methods and materials to be used.

The Contractor shall take full responsibility for the prevention of unhealthy or unsafe working conditions and practices and for the promotion of a healthy and safe site and healthy and safe working practices on site.

The Contractor shall be responsible for the health and safety aspects of his subcontractors and shall have the responsibilities and carry out the duties towards his subcontractors that the Employer has towards the Contractor.

With a few exceptions, the Standard Specifications and the Project Specification are "end result specifications" and not "method specifications". As the methods of construction to be used are generally determined by the Contractor, detailed safety requirements applicable to all the operations to be carried out on Site are not provided in these documents. The Contractor shall apply all relevant safety regulations and requirements to the work methods he chooses and materials to be used.

The failure or refusal of the Contractor to comply with safety requirements or to take the necessary precautions for the health and safety of its employees and others on site as required by statutory authorities or as ordered by the Engineer, shall be sufficient cause for the reduction of payment of the relevant scheduled item and/or the suspension of payments under this Contract and/or for the Engineer to order a temporary halt of work within the affected areas until the specified or ordered requirement have been complied with to the satisfaction of the Engineer. No extension of time will be granted and any costs associated with such halt in construction or the provision of required or necessary precautions ordered by the Engineer shall be to the Contractor's expense.

## 4.2 Compensation of Occupational Injuries and Diseases Act 130 of 1993 (COID Act)

The Principal Contractor shall submit to the Municipality or its Agent, within 14 days from receipt of the Letter of acceptance from the Municipality, proof of registration as an employer, with the Department of Labour.

The methods set out in these statements shall be implemented on site.

Such method statements shall be available on site.

#### 4.3 Risk Assessment

As far as is reasonably practicable, ergonomic-related hazards as well as environmental requirements shall be addressed in the risk assessment.

The Contractor's risk assessment shall be readily accessible to all persons on the Site at all times.

The Contractor shall submit to the Municipality or its Agent for its approval, a health and safety plan, as stipulated in the Letter of Acceptance prior to the site being handed over to the Principal Contractor. The health and safety plan shall include a risk assessment (CR 9), and shall include the name of the competent person appointed by the Contractor to carry out the risk assessment (CR 9(1)). It shall also include the Contractor's actions to ensure that all his Subcontractors fully comply with the Regulations, as required in the appropriate sub clauses of CR 7.

The Agent and the Contractor's construction safety officer (where such an appointment is required or exists for the project), or, where no safety officer is required nor has been appointed, the Contractor's construction supervisor shall review the risk assessment at monthly intervals. A written record of their assessment shall be placed on the Health and Safety File.

Risk assessments of all required activities shall form an integral part of the Health and Safety plan. All risk assessments shall be conducted in terms of an acceptable methodology, prior to commencement of work, according to the provisions of CR 9 and shall cover at least the following, as appropriate:

Excavations

- Backfilling in trenches
- Identification of existing services
- Clearing of vegetation, boulders etc
- Work in the vicinity of houses or other affected parties
- Movement of Construction Vehicles
- Work with Construction Vehicles
- Confined Spaces
- Work near water (including coffer dams)
- Demolition
- Temporary earthworks and stockpiling
- Work in trafficked conditions, and the Accommodation of traffic
- Control of access of public/pedestrians to excavations
- All work near overhead power lines and underground cables
- Fuel storage
- All health hazards that can be present during any of the above activities and should include individual
  dusts, gases, fumes, vapours, noise, extreme temperatures, illumination,
   Vibration and ergonomic hazards.
- Night work
- Work in incremental weather (note the temperatures expected in winter)

The above list is by no means exhaustive and should not be limited to these activities, but must cover all activities that forms part of the said construction work. Each activity must be split down to individual task and all associated hazards identified and listed in the risk assessment. This ensures that critical tasks and subsequent critical hazards are not missed.

## Reference should be made to:

- Methodology used to do risk assessments (Frequency, Consequence, Likelihood and ratings for each)
- Expected activities and processes to be covered
- High risks anticipated

Risk assessments are to be handed to the agent prior to commencement of work.

The agent reserves the right to stop any work if such work is not conducted in terms of the recommendations of the risk assessment.

Risk assessments are to cover safety as well as health hazards.

The Principal Contractor shall ensure that all employees under his control are conversant with the content of the health and safety plan and shall outline to employees what role they are expected to play in ensuring health and safety on the construction site. A copy of this training material must form part of the H&S Plan as well as copies of attendance registers.

The Principal Contractor shall ensure that all Contractors are informed, instructed and trained by a competent person regarding any hazard and related work procedures before any work commences on site, and thereafter at monthly intervals. A copy of this training material must form part of the H&S Plan as well as copies of attendance registers.

## 4.4 Health and Safety Plan

Without limiting his obligations and liabilities in terms of the Construction Regulations, 2014 of the OHS Act, the Contractor, in his health and safety plan to be submitted in terms of the Special Conditions of Contract, shall inter alia deal with the safety provisions he will set up in respect of the aspects specified below. After performing the risk assessment, the Contractor shall prepare the health and safety plan for approval by the Employer. The health and safety plan shall include, but not be limited to, the following:

- Thermal Requirements as stated in Environmental Regulations for Workplaces. No employer shall require or permit an employee to work in an environment in which the time-weighted average drybulb temperature taken over a period of four hours is less than 6 degrees Celsius, unless the employer takes reasonable measures to protect such employee against the cold and further takes all precautions necessary for the safety of such employee: Provided that, where outdoor work is performed, the employer shall take such measures and such precautions in an environment in which the actual dry-bulb temperature is less than 6 degrees Celsius at any time.
- The health and safety management structure including the names of all designated persons such as
  the Site Agent, the Construction (Health and) Safety Officer and all other specifically appointed
  persons, listing their knowledge, training experience and qualifications in the work for which they are
  appointed.
- Health and safety method statements and procedures to be adopted to mitigate, reduce or control
  the risks and hazards that have been identified in the risk assessment and in the Project Specification
  and to ensure compliance with the OHS Act. Aspects to be dealt with shall include, if applicable:
  - Control of the movement of construction vehicles;
  - The storage, transport, stacking use and disposal of materials (in particular explosives, flammable liquids and materials that give off hazardous fumes);
  - The use of tools, vehicles and plant;
  - Public vehicular and pedestrian traffic accommodation measures;
  - Security, access control and the exclusion of unauthorised persons;
  - Temporary support structures;
  - Dealing with working at height, including fall protection;
  - Excavation work including potential collapse and slipping of excavated faces;
  - Workshop activities, manufacture and maintenance work.
- The formation and operation of a health and safety committee on site;
- Medical fitness assessment of drivers and operators;
- Medical facilities and arrangements on site;
- Fire and emergency procedures;
- Commissioning and testing procedures;
- Induction and training of persons on and visiting the site;
- The provision and use of temporary services;

- Compliance with wayleaves, permissions and permits;
- Safety equipment, devices and clothing to be employed;
- General housekeeping, site organisation and layouts to enhance safety;
- Other specific aspects of work such as electrical installations and machinery, tunnelling, structures and working in water environments;
- Emergency procedures (including fire precautions);
- Procedures for reporting incidents, including standard forms for this purpose;
- Provision of welfare facilities;
- The programme and format of inspections;
- Arrangements for monitoring, control and auditing to ensure compliance with the health and safety plan;
- Procedures for addressing non-compliance and remedial measures;
- A periodic review of the health and safety plan.

The Contractor shall discuss the health and safety plan with the Employer or his/her appointed Agent with respect to health and safety matters or the Engineer and amend it as necessary in order to achieve approval.

The approved health and safety plan shall be implemented and maintained on the site for the duration of construction, and shall be readily accessible to all persons at all times.

## 4.5 Training

All employees shall be trained in the tasks they are to perform and in use of the tools they are required to use.

All operators shall be trained in the use and operation of the plant they are required to operate.

Before any work commences and thereafter at such times as may be determined in the risk assessment, the Contractor shall ensure that all his employees on site are informed, instructed and trained by a competent person regarding the risks and hazards identified in the risk assessment and their related and other work procedures.

Every employee shall carry proof of his or her health and safety induction training.

Employees required to erect, move or dismantle formwork and support work shall have been adequately trained.

## 5. Requirements

## 5.1 Materials

#### **5.1.1** Hazardous Substances

Hazardous chemical substances (as defined in the Regulations for Hazardous Chemical Substances) used during construction shall be stored in secondary containers. The relevant Material Safety Data Sheets (MSDS) shall be available on Site. Procedures detailed in the MSDSs shall be followed in the event of an emergency situation.

If potentially hazardous substances are to be stored on site, the Contractor shall provide a Method Statement detailing the substances/ materials to be used, together with the storage, handling, staff training and disposal procedures of the materials.

The Contractor shall submit with his health and safety plan, method statements detailing the storage, transport, handling, use and disposal of each hazardous substance to be used or brought on to site, including copies of the Material Data Safety Sheets referred to in 4.1.1 above.

The methods set out in these statements shall be implemented on site.

Such method statements shall be available on site.

#### 5.1.2 Storage, Stacking and Use

#### 5.1.2.1 General

In addition to Subclause 4.2 of SANS 1200 A, a competent person shall be appointed in writing with the duty of supervising all storage and stacking operations. (See also section 28 of the Construction Regulations).

#### 5.1.2.3 Fuel and Oil

The Contractor shall demarcate bulk fuel storage and refuelling areas and provide adequate security and control.

#### 5.1.2.4 Asbestos

The Principal Contractor shall ensure that all asbestos work is done only by registered "Asbestos Contractor" as prescribed by the Asbestos Regulations, 2002. The Principal Contractor shall submit an Asbestos Certificate from the Department of Labour which refers to the prescribed requirements. The Principal Contractor shall notify the Municipality or its Agent, if there are any asbestos materials to be used on site. Note: **There is a possibility of AC cement abandoned water pipes.** 

## 5.2 Plant

#### 5.2.1 General

"Construction Plant" encompasses all types of plant including, but not limited to, excavators, road-building machines, pavers, compressors, pumps, generators, welding plants, cranes and road vehicles.

The Contractor shall ensure that all such plant complies with the requirements of the OHSA. The Contractor shall inspect and keep records of inspections of plant and equipment used on site. Only authorised persons are to operate plant and machinery, under proper supervision. Appropriate safety equipment and clothing shall be provided for the operators and maintained in good condition at all times.

The Contractor shall ensure that any hired plant and machinery brought to site is safe for use. The necessary requirements as stipulated by the OHSA. The Contractor shall ensure that operators hired with machinery undergo a health and safety induction talk, and that they are issued with the necessary PPE and clothing. The relevant appointment letters as well as copies of the intended inspection registers must form part of the H&S Plan.

## 5.2.2 Personal Protective Equipment (PPE) and Clothing

Where appropriate, employees and visitors shall be provided free with the necessary and recommended protective clothing and equipment.

The Contractor shall ensure that all workers are issued with, and wear, Hard Hats, Steel-Toe Safety Shoes and Overalls. The Contractor shall make provision for, and keep adequate quantities of, SABS-approved PPE or clothing on site at all times. The Contractor shall clearly outline the procedures to be followed when PPE or Clothing is:

- Lost or Stolen
- Worn Out or Damaged

This procedure must be included in the H&S Plan as well as a copy of the register for issuing PPE.

#### 5.2.3 Construction Vehicles and Mobile Plant

Construction vehicles and mobile plant shall be equipped with an electrically operated acoustic signalling device and a reversing alarm.

A competent person shall be appointed to inspect, on a daily basis, prior to use, construction vehicles and mobile plant and shall record the findings of such inspections in a register.

The Contractor shall ensure that:

- i. no person rides on any construction vehicle or mobile plant other than in a safe place provided thereon for that purpose;
- ii. Operators and drivers follow demarcated routes and contain their operations within demarcated operating areas.

Refer to the provisions of CR 23

## 5.2.4 Formwork, Scaffolding and Support Work

The Contractor shall submit as part of his H&S Plan, the appointment letter of the competent person(s) appointed to supervise all formwork operations in terms of CR 17 and all scaffolding operations, in terms of CR 16. The Contractor shall ensure that all scaffolding, formwork and support work, including freestanding scaffolding, complies with the requirements of the General Safety Regulations and CR 17 and CR 16 of the Construction Regulations. A copy of the intended daily inspection register must also be submitted as part of the H&S Plan.

A competent person(s) shall be appointed in writing to the duty of supervising all formwork, scaffolding and support work operations. All formwork, scaffolding and support work structures shall be adequately designed, erected, supported, braced and maintained so as to support the loads they are to carry.

Formwork, scaffolding and support work equipment shall be examined and checked before use by the aforesaid competent person(s).

Refer to the provisions of CR 16; CR 17; CR 10

## 5.2.5 Radioactive Sources

The use, care and storage of radioactive materials such as in nucleonic density testing machines shall conform to the requirements of the Hazardous Substances Act No. 15 of 1995 and its regulations. Such devices, except while being actively used by the operator, shall be safely secured.

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## 5.2.6 Lifting Machinery and Tackle

The Principal Contractor shall ensure that lifting machinery and tackle is inspected before use and monthly. The Principal Contractor shall appoint a competent person, in writing, to supervise all lifting operations. The competent person shall ensure that:

- All lifting machinery and tackle have a safe working load clearly indicated;
- Regular inspections and servicing of lifting equipment is carried out;
- Records are kept of inspections and of service certificates;
- There is proper supervision in terms of guiding the loads, which includes a trained banksman to direct the movement and placing of loads.

The relevant appointment letters as well as copies of the intended inspection registers must form part of the H&S Plan.

#### 5.2.7 Ladders and Ladder work

The Contractor shall ensure that all ladders and the use thereof comply with the requirements of Regulation 13 of the General Safety Regulations. Ladders shall be numbered and inspected regularly and a record of inspections maintained in the health and safety file.

Copies of the intended inspection register must form part of the H&S Plan

## 5.2.8 Explosive Power Tools

The Contractor shall ensure that the use and storage of all explosive powered tools is in compliance with CR 19. The Contractor shall ensure that:

- A competent person undertakes routine inspections;
- Only authorised persons use the tools;
- There are safe working procedures applied;
- · Awareness training is carried out and compliance is enforced at all times; and
- PPE and clothing is provided and maintained.

Copies of the intended inspection register must form part of the H&S Plan

#### 5.2.9 Other Items of Plant

Plant not specifically referred to above shall be inspected, operated and maintained in a manner that assures the health and safety of all persons on the site. In particular, the requirements of the Construction Regulations shall be complied with in regard to:

Material hoists: CR 19Batch plants: CR 20

Explosive powered tools: CR 21

Cranes: CR 22

#### 6 Site Establishment and Management

## 6.1 Construction Safety Officer and other appointments

The Contractor shall appoint a competent employee in writing as his full-time Construction Health and Safety Officer to assist in the control of all safety related aspects on the site. Where practicable, the Construction

(Health and) Safety Officer shall give input into the health and safety plan. Any such input shall be recorded in the health and safety file. The Construction (Health and) Safety Officer shall carry out regular and random checks of all parts of the site where work is taking place.

The Contractor shall appoint such other competent persons to specific roles as required elsewhere in this Specification and/or the Construction Regulations.

The officer will comply with CR2017 regarding registration with SACPCMP

## 6.2 Safety of the general public

The Contractor shall be responsible for the safe and easy passage of public traffic past and/or over sections of roads and the site of which he has occupation. The Contractor shall take the necessary care at all times in all his operations and use of his equipment to protect the public and to facilitate the flow of pedestrian and vehicular traffic.

## 6.3 Barricading etc

Openings and edges where there is a risk of a person falling through or off shall be adequately guarded, fenced or barricaded. (See also Subclause 5.1.1.1 of SANS 1200 D, if applicable.)

Excavations where the safety of persons may be endangered shall be adequately barricaded or fenced and shall be illuminated at night.

#### 6.4 Signage

Routes followed by site vehicles and plant and operating areas shall be adequately signposted and demarcated.

Notices shall be conspicuously placed at all openings and edges where there is a risk of a person falling through or off same.

Warning signs shall be placed alongside exposed excavations including box cuts and in which persons are working.

#### 6.5 Access to the site

The Contractor shall ensure that access to the site is controlled and that all visitors to the site undergo health and safety induction pertaining to the hazards prevalent on the site and are provided with the necessary protective clothing and equipment.

## 6.6 Wayleaves, permissions and permits

The Contractor shall abide by the health and safety conditions imposed by any wayleaves, permissions or permits.

## 6.7 Reporting of infringements, improvements and incidents

The Contractor shall establish a procedure for the reporting of health and safety infringements and suggested improvements to the Construction (Health and) Safety Officer who shall record all such infringements and suggested improvements.

All incidents shall be reported strictly in accordance with the requirements of section 24 of the OHS Act and the General Conditions of Contract.

## 6.8 Works committee

The Contractor shall establish a health and safety works committee on site. The committee shall comprise:

- Construction (Health and) Safety Officer;
- Representatives of the contractor's supervisory staff;
- Representatives of the various categories of the Contractor's workforce elected by the workforce.

A member of the Engineer's staff, nominated by the Engineer shall be notified of meetings and shall be free to attend.

The Contractor shall ensure that no loss of pay or benefits apply to any employee elected to the committee.

The functions of the health and safety works committee shall be to, inter alia:

- review, consider and report on any health and safety aspect on site, including health and safety
  procedures and method statements with the purpose of monitoring their effectiveness or
  shortcomings and to recommend changes where considered necessary;
- carry out regular inspections, review results and make recommendations where necessary;
- Investigate unsafe practices.

The committee shall meet at regular intervals not exceeding one month. Minutes of the meetings shall be kept by the Contractor and copied to the Engineer within 10 days of each meeting.

#### 6.9 Outbreak of illness

In the event of any outbreak of illness of a highly contagious or epidemic nature, the Contractor shall comply with and carry out such regulations, orders and requirements as may be made by the relevant authorities.

### 6.10 First aid

The Contractor shall ensure that the necessary first aid facilities and emergency evacuation equipment is available on site whenever persons are working on site.

Each foreman or work crew member shall be trained in first aid and shall possess a valid certificate to that effect issued by the Red Cross Society of SA, St Johns Ambulance or equivalent, within 3 months of their appointment.

## 6.11 Lighting and power circuits (site camp)

All lighting and power circuits shall be fitted with earth leakage systems. Such systems shall be tested monthly and any circuit where the earth leakage system is malfunctioning shall be repaired immediately or removed and replaced with a satisfactory unit. A COC must be supplied in the H&S file on site.

#### 6.12 Notification of construction work

Before carrying out any work the Contractor shall issue any applicable notification in terms of section 4(1) of the Construction Regulations, i.e.:

- Working at a height where there is a risk of falling;
- Include the demolition of a structure
- Excavating
- Include the use of explosives to perform construction work
- For contracts longer than 30 days or involving more than 300 person days.

# 6.13 Health and safety documentation

The Contractor shall provide and maintain on site a health and safety file. The health and safety file shall be made available upon request. The health and safety file shall contain a copy of:

- the completed notification form, if applicable, in terms of 6.13 above,
- the risk assessment in terms of 4.3 above,
- the approved health and safety plan prepared in terms of 4.4 above (including that of any subcontractors),
- a record of all drawings, designs and materials used etc.

On completion of construction the file shall be handed over to the Employer.

- Where applicable, the Contractor shall maintain on site:
- a record of any input to the health and safety plan by the Construction (Health and) Safety Officer,
- a comprehensive and updated list of all subcontractors on site including a copy of their agreements and the type of work being done,
- a register of the issuing and receipt of unspent and spent cartridges,
- a register of inspection of construction vehicles and mobile plant,
- a register of excavation and shoring inspections,
- records of fitness for and training of employees working at elevated positions,
- records of structure inspections by the designer,
- a register of formwork and support work inspections,
- findings of daily inspections of construction vehicles and mobile plant,
- a register of inspections of all temporary electrical installations and machinery,
- minutes of health and safety committee meetings.

# 7 Specific aspects of construction

# 7.1 Fall protection (this includes the risk of falling into an excavation)

For work where there is a fall risk, the Contractor shall:

- designate a competent person responsible for the preparation of a fall protection plan as part of the health and safety plan,
- employ on work at elevated positions only those who have been evaluated and shown to be
  physically and psychologically fit for such work,
- Erect suitable fall prevention and, if necessary, fall arrest equipment.

Refer to the provisions of CR 10

#### 7.2 Structures

The Contractor shall take all reasonably practical steps to prevent the uncontrolled collapse of any new and existing structure, or part thereof, which may be temporarily weak or unstable due to construction work being carried out.

No structure shall be loaded in a manner that would render it unsafe. Note should be taken of existing boundary walls.

Refer to the provisions of CR 11

### 7.3 Excavation work (note the possibility of unmarked hidden services)

Without limiting his responsibility for the safety of his workers in any excavation, the Contractor shall ensure the safety of his workers in trenches and excavations in terms of the provisions of the OHS Act. The Contractor may choose to batter excavations to a safe slope if sufficient space is available, or adequately shore the excavations.

A competent person shall be appointed in writing to supervise the carrying out of all excavation work.

Before excavation work begins, the Contractor shall evaluate as far as is reasonably practicable, the stability of the ground.

The Contractor shall not permit or require any person to work in an excavation that has not been adequately shored or braced or the sides of which are not sloped to at least the maximum angle of repose.

Should the Contractor consider that an excavation is in stable material and consequently no shoring is required for that excavation, he shall provide to the Engineer, in terms of Sub-regulation 13(2)(b)(ii)(aa) a written statement to that effect signed by the competent person appointed in terms of Sub-regulation 13(1).

Where the stability of an adjoining building, structure or road is likely to be affected by an excavation, the Contractor shall ensure that steps are taken to ensure the safety of the building, structure or road.

Every excavation, including all shoring and bracing, shall be inspected by the above competent person:

- a) daily, prior to each shift,
- b) after every blasting operation,
- c) after an unexpected fall of ground,
- d) after substantial damage to supports, and
- e) after rain.

The results of such inspections shall be recorded in a register.

A person who is competent in the use of explosives for excavation work, shall be appointed to develop a method statement in accordance with the applicable explosives legislation.

Refer to the provisions of CR 13

# 7.4 Demolition work

A competent person shall be appointed in writing to supervise and control all demolition work.

Prior to any demolition work being carried out a detailed structural engineering survey of the structure to be demolished shall be carried out and the method of demolition shall be ascertained therefrom.

Refer to the provisions of CR 14

# 7.5 Electrical installations and machinery

A competent person shall be appointed to and shall inspect and control all temporary electrical installations and machinery.

Refer to the provisions of CR 24

#### 7.6 Water environments

Where construction work is carried out close to or over water, provision shall be made for preventing employees from falling into the water and for rescuing employees in danger of drowning. Employees shall be provided with and shall wear lifejackets.

Refer to the provisions of CR 26

# 7.7 Housekeeping

Refer to the provisions of CR 27

#### 7.8 Fire precautions

Suitable and sufficient fire-extinguishing equipment shall be placed at strategic locations.

A competent person shall be appointed to and shall inspect at regular intervals, the fire extinguishing equipment.

A sufficient number of employees shall be trained in the use of the fire extinguishing equipment.

Where appropriate signs shall indicate fire escape routes.

Refer to the provisions of CR 29

# 7.9 Welfare provisions

Refer to the provisions of CR 30

#### 7.10 Small diameter shafts and test pits

Work in small diameter shafts and test pits shall comply with the Code of Practice: The Safety of Persons Working in Small Diameter Shafts and Test Pits for Civil Engineering Purposes, available from the South African Institution of Civil Engineers or the South African Association of Engineering Geologists.

# 8 Audits by the Employer

The Contractor shall permit the Employer to regularly audit, at an agreed interval, the implementation and maintenance of the approved health and safety plan and shall co-operate and provide all the required documentation, as may be required, in this regard.

As a result of such audits the Employer may order improvements to be made to the health and safety plan.

# 9 Variations

Should any variations be ordered or design amendments issued the Engineer will inform the Contractor of all the associated potential hazards to ensure that the health and safety aspects of the work ordered are taken into account.

# 10 Testing

# 10.1 Fall protection

Fall protection equipment shall be tested for adequacy after erection.

#### 10.2 Boatswain's chair

Each boatswain's chair shall be performance tested immediately after it has been erected.

# 11. Measurement and Payment

#### 11.1 Basic principles

In addition to those aspects covered by 11.2 below, Occupational Health and Safety aspects related to particular items of work will be held to be covered by the tendered sum or rate for that work.

#### 11.2 Scheduled items

11.2.1	General safety obligations
	Hait, Cum
•••••	Unit: Sum

Compliance with the general health and safety obligations will be measured and paid by the sum. This item may be scheduled as a fixed charge item and a time-related item.

The tendered sum(s) shall cover the cost, not included under the scheduled work items (see 11.1) nor under 11.2.2 to 11.2.6 below, of establishing and maintaining, on an on-going basis, the general health safety systems and general compliance with the Act and its construction regulations.

systems and general compliance with the Act and its construction regulations.
11.2.2 Risk assessment
Unit: Sum
Risk assessment will be measured and paid by the sum. This work may be scheduled as a fixed-charge item only.
The tendered sum shall cover the cost of carrying out a risk assessment required at the start of the Contract and any subsequent risk assessment that is proved necessary as the work proceeds and the inclusion thereof in the health and safety plan.
11.2.3 Health and safety plan

The health and safety plan will be measured and paid by the sum. This item may be scheduled as a fixed-charge item and a time-related item.

The tendered sums shall cover the Contractor's cost of the preparation, approval process, maintenance and implementation of an approved health and safety.

11.2.4 Construction Safety Officer and other appointments

The Construction (Health and) Safety Officer and other appointments will be measured and paid by the sum. This item may be scheduled as a time-related item only.

The tendered sum shall cover the cost of the provision of a Construction (Health and) Safety Officer and such other appointments of competent persons as required on the site in terms of the Act.

Note that a safety officer must comply with CR 2017

11.2.5	iraining				
		 	 	 Uni	t: Sum

Training, as required by the Construction Regulations will be measured and paid by the sum. Training may be scheduled as a fixed-charge item only and may, through sub items, distinguish between the various aspects of training.

The tendered sum/s shall cover the cost of the required training.

11.2.6 Medical assessment of employees

 Unit: Sum

Medical assessment of employees will be measured and paid by the sum. This work may be scheduled as a fixed-charge item only.

The tendered sum shall cover the cost of having the Contractor's employees medically assessed with regard to their medical fitness for the work they will be required to perform and/or vehicles or plant they are required to operate and the provision of the appropriate certificate.

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**SBD 6.2** 

# DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS

This Standard Bidding Document (SBD) must form part of all bids invited. It contains general information and serves as a declaration form for local content (local production and local content are used interchangeably).

Before completing this declaration, bidders must study the General Conditions, Definitions, Directives applicable in respect of Local Content as prescribed in the Preferential Procurement Regulations, 2017, the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:2011 (Edition 1) and the Guidance on the Calculation of Local Content together with the Local Content Declaration Templates [Annex C (Local Content Declaration: Summary Schedule), D (Imported Content Declaration: Supporting Schedule to Annex C) and E (Local Content Declaration: Supporting Schedule to Annex C)].

#### 1. General Conditions

- 1.1. Preferential Procurement Regulations, 2017 (Regulation 8) make provision for the promotion of local production and content.
- 1.2. Regulation 8.(2) prescribes that in the case of designated sectors, organs of state must advertise such tenders with the specific bidding condition that only locally produced or manufactured goods, with a stipulated minimum threshold for local production and content will be considered.
- 1.3. Where necessary, for tenders referred to in paragraph 1.2 above, a two stage bidding process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage price and B-BBEE.
- 1.4. A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.
- 1.5. The local content (LC) expressed as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 2011 as follows:

$$LC = [1 - x / y] * 100$$

#### Where

- x is the imported content in Rand
- y is the bid price in Rand excluding value added tax (VAT)

Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by South African Reserve Bank (SARB) on the date of advertisement of the bid as indicated in paragraph 3.1 below.

The SABS approved technical specification number SATS 1286:2011 is accessible on http://www.thedti.gov.za/industrial development/ip.jsp at no cost.

1.6. A bid may be disqualified if this Declaration Certificate and the Annex C (Local Content Declaration: Summary Schedule) are not submitted as part of the bid documentation;

2. The stipulated minimum threshold(s) for local production and content (refer to Annex A of SATS 1286:2011) for this bid is/are as follows:

	of SATS 1200.2011) for this blu is/are	as follows.	
	Description of services, works or goods	Stipulated minimum threshold	
	Residential Electricity Meters (Prepaid Electricity N	Meters) 70%	
	Electrical cables	90%	
	Transformers	80%	
3.	Does any portion of the goods or service have any imported content?  (Tick applicable box)  YES NO	ces offered	
31	prescribed in paragraph 1.5 of the gen SARB for the specific currency on the		
	•	ation is accessible on <a href="https://www.resbank.co.za">www.resbank.co.za</a> It the appropriate currency in the table below (reference)	er to
	Currency	Rates of exchange	
	US Dollar	tatoo or oxonango	
	Pound Sterling		
	Euro		
	Yen		
	Other		
	Other		
		es are experienced in meeting the stipulated mining informed accordingly in order for the dti to verify	
		ENT DECLARATION X B OF SATS 1286:2011)	
LE EX	GALLY RESPONSIBLE PERSON NO	CHIEF FINANCIAL OFFICER OR OTHER MINATED IN WRITING BY THE CHIEF ON WITH MANAGEMENT RESPONSIBILITY OR INDIVIDUAL)	
	RESPECT OF BID NO.		
198	SUED BY: (Procurement Authority / Name	,	
NB			
1		d submit this declaration cannot be transferred ve, auditor or any other third party acting on	

Guidance on the Calculation of Local Content together with Local Content Declaration

and

E)

D

Templates

(Annex

C,

2

is

accessible

on

	E and then consolidate the information submitted with the bid documentation order to substantiate the declaration D and E should be kept by the bidders for 5 years. The successful bidder is required and E with the actual values for the durant submitted.	n at the closing date and time made in paragraph (c) below or verification purposes for a per red to continuously update Dec	e of the bid in Declarations riod of at least
do l	e undersigned, nereby declare, in my capacity as		
	ty), the following:	a ara aral lua avula dara	
(a)	The facts contained herein are within my	own personal knowledge.	
(b)	I have satisfied myself that:		
	(i) the goods/services/works to be d comply with the minimum local cor as measured in terms of SATS 12	ntent requirements as specified	
(c)	The local content percentage (%) indiction formula given in clause 3 of SATS 128 paragraph 3.1 above and the information been consolidated in Declaration C:	86:2011, the rates of exchang	e indicated in
Bi	d price, excluding VAT (y)		R
Im	nported content (x), as calculated in terms	of SATS 1286:2011	R
St	tipulated minimum threshold for local cont	ent (paragraph 3 above)	
Lo	ocal content %, as calculated in terms of S.	ATS 1286:2011	
con The give	ne bid is for more than one product, the Intained in Declaration C shall be used in a local content percentages for each product in clause 3 of SATS 1286:2011, the rapper and the information contained in Declaration contained in Declaration to product the product in terms of the respective percentages.	nstead of the table above. duct has been calculated usin tes of exchange indicated in p claration D and E.  / Institution has the right to re	ig the formula paragraph 3.1
	local content be verified in terms of the r	equirements of SATS 1286:201	11.
(e)	I understand that the awarding of the information furnished in this application incorrect data, or data that are not veri result in the Procurement Authority / Inst provided for in Regulation 14 of the I promulgated under the Preferential Polic of 2000).	n. I also understand that the fiable as described in SATS 12 titution imposing any or all of the Preferential Procurement Regressions.	submission of 286:2011, may e remedies as ulations, 2017
	SIGNATURE:		
	WITNESS No. 1	DATE:	
	WITNESS No. 2	DATE:	

http://www.thedti.gov.za/industrial\_development/ip.jsp. Bidders should first complete Declaration D. After completing Declaration D, bidders should complete Declaration