

THE MSUNDUZI MUNICIPALITY



**HEAD: SUPPLY CHAIN MANAGEMENT
DR D. N. GAMBU**

333 Church Street, Private Bag X205, Pietermaritzburg, 3200
Telephone No. 033 – 392 2597

CONTRACT No. SCM 9 OF 26/27

CONSTRUCTION, UPGRADE AND COMMISSIONING OF PINE STREET PRIMARY SUB-STATION

Tenderer's Name:	
Postal Address:	
Contact Person:	
Telephone No:	
Cellular No:	
E-Mail Address:	
CSD Supplier No:	CIDB CRS No:

Tenders contained in sealed envelopes and marked with “**CONTRACT No. SCM 9 OF 26/27**” and the **Contract Description** must be placed in the Msunduzi Municipality's Central Stores, 2 Abattoir Road (off Kershaw Street), Pietermaritzburg, 3201, not later than **12h00** on **Wednesday, 08 September 2026**, when they will be opened in public. **Only Tenders placed in the Tender Box before the closing time above will be accepted.**

THE MSUNDUZI MUNICIPALITY

CONTRACT No. SCM 9 OF 26/27

CONSTRUCTION, UPGRADE AND COMMISSIONING OF PINE STREET PRIMARY SUB-STATION

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13.1	Tenderers are advised to check the number of pages, and should any be missing or duplicated, or the reproduction thereof indistinct, or any descriptions ambiguous, or if this document contains any obvious errors, they shall inform the Head: Supply Chain Management or the Engineer at once and have same rectified. No liability whatsoever will be incurred by the Council in respect of errors in any tender due to the Tenderer’s failure to observe this requirement.	
13.2	The tender closes at the Tender Box located at the Msunduzi Municipality’s Central Stores, 2 Abattoir Road (off Kershaw Street), Pietermaritzburg, 3201, at 12h00 on Wednesday, 09 September 2026 .	

THE MSUNDUZI MUNICIPALITY

TENDER SUBMISSION CHECKLIST

The Checklist below is attached hereto to assist Service Providers with the completion of the tender document. Service Providers are required to **TICK** the relevant boxes for verification purposes. Where information is not applicable to the tender, the symbols **N/A** must be inserted in the space provided.

It must be noted that the Council shall not be held liable for any loss or damage incurred to the Service Provider should the Service Provider fail to fulfil the requirements of the Tender.

No.	Description	<u>Service Provider to Tick (✓)</u>	<u>For Official Use Only</u>	
1	Has the Tender Document been completed in handwriting or typed and all corrections counter-signed? (No correction fluid used)			
2	Has all tendered amounts been arithmetically checked and the correct total amounts carried forward to the Summary Page and Tender Form?			
3	Has all information as required in terms of the Tender Document been submitted with the tender?			
4	Has the compulsory "Tender Briefing/Site Inspection" meeting been attended and has the "Tender Briefing/Site Inspection" certificate been completed and signed at the meeting?		D	
5	Have all Declarations contained in the Tender Document been completed and signed by the Tenderer, and before a Commissioner of Oaths (if applicable)?			
6	Has the "Tender Form" been completed and signed?		D	
7	Is a valid Tax Clearance Status Verification Pin attached to the Tender Document?			
8	Has the CSD Supplier Number and Unique Registration Reference Number been submitted with the Tender Document?			
9	Does the price includes VAT regardless of VAT status of being a VAT or Non-VAT Vendor. All prices must include VAT.			

****D: Failure to comply with these Sections will prejudice the tender.***

Name of Service Provider : _____

Signature : _____

Date : _____

THE MSUNDUZI MUNICIPALITY

CONTRACT No. SCM 9 OF 26/27

CONSTRUCTION, UPGRADE AND COMMISSIONING OF PINE STREET PRIMARY SUB-STATION

TENDER NOTICE

The Msunduzi Municipality hereby invites tenders from suitably qualified and experienced Tenderers for the above works. ***Only Tenderers who have a minimum CIDB Grading of 7 EP or higher will be considered for appointment.***

Tender documents will be made available to tenderers from **12h00 on Tuesday, 11 August 2026**. Tender documents can be downloaded and printed at the Tenderer's cost from the National Treasury e-Tender Publication Portal on **www.etenders.gov.za**.

Printed copies of the tender documents shall also be available from the Supply Chain Management Unit Offices, 5th Floor, A S Chetty Centre, 333 Church Street, Pietermaritzburg, 3201, as from the abovementioned date and time, at a non-refundable tender deposit fee of **R1 380.00 (including VAT)** for each document drawn. Only cash or EFT payments will be accepted.

For any technical related enquiries regarding the Specifications, Tenderers are to contact Lungisani Ntuli (Senior Technologist) on either Contact No.'s 033 392 579 0/082 724 3636 or e-mail lungisani.ntuli@msunduzi.gov.za

For any procurement related enquiries, Tenderers are to contact Vinesh Govender (Supply Chain Management Sub-Unit) on Telephone No. 033 – 392 2027 or e-mail address vinesh.govender@msunduzi.gov.za.

A **compulsory Tender Briefing Meeting** will be held at **10h00 prompt on Friday, 21 August 2026**, in the Electricity Department's Boardroom, 111 Havelock Road, Pietermaritzburg, 3201, from where all will travel in convoy to the site of works. An official will chair the meeting and answer queries raised by prospective Tenderers. Any amendment to the tender documentation arising from such answers will be circulated in terms of the meeting's attendance register.

Sealed tenders containing the original hand written priced tender document and a digital copy of the same on a CD/USB Flash Drive and endorsed on the envelope with the **"CONTRACT No."** and **"CONTRACT DESCRIPTION"**, must be placed in the Tender Box located at the Central Stores, 2 Abattoir Road, (Off Kershaw Road), Pietermaritzburg, 3201, (Co-ordinates: -29.6126297,30.3610014) not later than **12h00 on Wednesday, 09 September 2026**, when they will be publicly opened. Only tenders placed in the Tender Box shall be accepted. Under no circumstances whatsoever will any extension of time be allowed for submission of tenders.

Tender Validity Period: Four (4) months commencing from the closing date of tender.

Tender Evaluation & Adjudication Criteria: The tender shall be evaluated on a Two Stage Evaluation System, Stage One Functionality and Stage Two 80/20 Preference Point System.

Adjudication criteria will be as per the tender document, the allocation of points will be in line with specific goals as prescribed in terms of the Preferential Procurement Regulations, 2022 pertaining to the Preferential Procurement Policy Framework Act No. 5 of 2000, including Chapter 4 of the Public Procurement Act No. 28 of 2024.

The Functionality for Stage One shall be evaluated on the following criteria:

No.	Criteria	Max Points Awarded
1	Previous Experience of the bidder	25
2	Engineering Qualifications and Competency of Key Staff: Trade tested artisan	55
3	Plant, Tools and Equipment of the bidder.	20
Total Points Awarded		100
Minimum Threshold		80 Points

The allocation of Preference Points shall be according to the following Specific Goals:

Specific Goals	Maximum Points Awarded
Black Owned Enterprise	
100% Black African Owned	20

The Msunduzi Municipality does not bind itself to accept the lowest or any tender and reserves the right to accept the whole or any part of a tender. Each tenderer will be informed of the tender result.

The Msunduzi Municipality expects businesses within the Pietermaritzburg and Midlands Region to support its contract and BEE/SMME initiatives.

S F MNDEBELE (MUNICIPAL MANAGER)

THE MSUNDUZI MUNICIPALITY
STANDARD CONDITIONS OF TENDER

1. DOCUMENTS

This document comprises of the Standard Conditions of Tender, Standard Conditions of Contract (N/A), Special Conditions of Contract (N/A), Legislation, Definitions, Specifications, Pricing Schedule, Tender Form, Drawings (N/A), Data Sheets and Annexures thereto.

2. SUBMISSION OF TENDERS

Tenders must be made out on the Tender Form annexed hereto. Service Providers are advised that this document must be completed by being hand written or typed and submitted in its entirety. Failure to comply with this condition shall result in the tender being disqualified.

Service Providers using Courier Companies or any other mode of transport to deliver their tender documents must ensure that the tender documents are delivered to the Tender Box located at the Msunduzi Municipality's Central Stores, 2 Abattoir Road (off Kershaw Street), Pietermaritzburg, 3201, before the close of tenders. The Council shall not be held liable for any tender document which is not timeously delivered, mislaid or incorrectly delivered due to the negligence of the Courier Company or any other party involved in the delivery of the tender documents, including any employee of the Council.

Sealed tenders endorsed with the appropriate Contract Number and Contract Title must reach the Msunduzi Municipality's Central Stores, 2 Abattoir Road (off Kershaw Street), Pietermaritzburg, 3201, not later than the closing date and time stated in the public advertisement inviting tenders, when they will be opened in public. Tenders shall remain valid for four (4) calendar months from the date of opening, except for the initial five (5) working days grace period after the close of tenders within which period a Service Provider may be permitted to withdraw its tender subject to an application with good and sufficient reasons being submitted in writing to obtain approval of such withdrawal, at the sole discretion of the Head: Supply Chain Management.

All literature submitted must be securely attached to the tender. The Council shall not be held liable for any loss or damages sustained due to the Service Provider's failure to comply with this condition.

In the case of a Service Provider withdrawing its tender after the expiry of the grace period, the Council may refuse to receive or consider, for such period as it may think fit, any further tenders from that Service Provider.

3. COMMUNICATION WITH MEMBERS OF THE COUNCIL OR COUNCIL EMPLOYEES

Without detracting from any prevailing law, no Service Provider shall offer, promise or give any person or persons connected with the adjudication, or awarding of the tender, any gratuity, bonus, discount or consideration of any kind in connection with the obtaining of a contract. Nor shall any Service Provider communicate with any member of the Council or a Council employee on a question affecting the awarding of a contract which is the subject of a tender, during the period between the closing date of tenders and the date of notification of the successful Service Provider; provided always that the Head: Supply Chain Management may, in exceptional circumstances, obtain additional information from a Service Provider to enable her to formulate her recommendation to Council.

Any attempt to contravene this condition, which is brought to the notice of the Head: Supply Chain Management shall result in the disqualification of the Service Provider.

Prospective Service Providers are further advised that s118 of the Municipal Finance Management Act prohibits the interference, by any person, with the Supply Chain Management system of the Municipality and the amendment of or tampering with any tender, quotation, contract or tender after its submission.

4. IMPORT PERMITS

The Council will not undertake to secure any import permits or currency for the import of any goods or materials required for the execution of this contract. The Service Provider must apply directly for any import permits or currency needed. However, the Council will furnish the successful Service Provider with a supporting statement, if required.

5. REGISTRATION WITH THE CENTRAL SUPPLIER DATABASE (CSD)

The National Treasury's Central Supplier Database (CSD) has been open for registration from 01 September 2015. The CSD serves as one single source of supplier information to all spheres of government. Within this system, suppliers are required to register once when they do business with the state. This will significantly reduce the administrative burden for businesses, especially small and medium sized enterprises. The database interfaces with the South African Revenue Service (SARS), the Companies and Intellectual Property Commission (CIPC) and the payroll system. It will electronically verify a supplier's tax status and enable public sector officials doing business with the state to be identified.

All prospective suppliers can register any time on the CSD website www.csd.gov.za. Prospective suppliers may also visit the Provincial Treasury Database office situated at Treasury House, Ground Floor, 145 Chief Albert Luthuli Road, Pietermaritzburg, from 08h00 to 15h00, Mondays to Fridays, for any assistance with on-line registration on CSD.

For further information or enquiries, please contact 033 – 897 4516 / 033 – 897 4212 / 033 – 897 4624 / 033 – 897 4535 / 033 – 897 4676 / 033 – 897 4509 or Toll-Free at 0800 201 049 during office hours or via e-mail at database@kzntreasury.gov.za.

With effect from 01 July 2016, the Msunduzi Municipality will not award any tender to a supplier not registered as a prospective supplier on the CSD. Negotiations for the tender award will only be concluded with the qualify Service Provider(s) who is/are registered on the CSD on or after 01 April 2016.

In order for Council to verify your Company's registration with CSD, Service Providers are required to furnish the following information for verification purposes:

CSD Supplier Number	
Unique Registration Reference Number	

6. TAX CLEARANCE CERTIFICATE REQUIREMENTS

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

Service Providers shall be required to submit, together with the tender document, a valid Tax Clearance Certificate and a Tax Compliance Status Verification Pin issued by SARS.

Failure to submit a valid Tax Clearance Certificate and a Tax Compliance Status Verification Pin, the Council reserves the right to verify the same on National Treasury's Central Supplier's Database.

Should the Tax status becomes non-compliant prior to the final award of the contract being made, the Council reserves the right to request the Service Provider to rectify their tax matters.

In this instance, the Service Provider shall be given seven (7) working days written notice in which to comply. Should the Service Provider fail to comply with this request, the Council further reserves the right to make no award to the Service Provider and the Council shall not be held liable for any loss or damages sustained by the Service Provider.

7. **RATES**

The prices, rates or percentages quoted in the proposal shall be deemed to include all costs, including but not limited to materials, plant, labour, patent rights and royalties, freight, insurance, customs, railage, delivery, etc, unless the Service Provider states otherwise in the proposal.

- **"Price"** means an amount of money tendered for goods or services and includes all applicable taxes less unconditional discounts.
- **Section 64(1) of the VAT Act states:** Any price charged by a vendor for a taxable supply is deemed to include VAT, whether or not explicitly stated. Thus, even if bidder B's invoice does not explicitly include VAT, the price is considered VAT inclusive.
- **NB:** when submitting this tender bidders are advised that regardless of the VAT status of being a VAT or non VAT vendor the price must include VAT
- Further to the above the price shall be deemed to be VAT inclusive regardless of whether the bidder is the VAT vendor or not.

8. **INCOMPLETE TENDERING**

Tenders may be rejected if they show any additional, conditional or incomplete offers or irregularities of any kind in either the Tender Form or the Pricing Schedule.

Partial awards **may** be made where this is perceived by the Head: Supply Chain Management or the Bid Evaluation Committee. Council reserves the right to take into account the principle of the distribution of works in order to empower SMME's and or Local Suppliers.

Should there be any difference or discrepancy between the prices and particulars contained in the Tender Form and those contained in any covering letter or pricing schedule submitted by the Service Provider, the prices and particulars contained in the Tender Form shall prevail.

9. **ACCEPTANCE OF ANY TENDER**

- 9.1 The Council does not bind itself to accept the lowest or any tender and reserves the right to accept the whole or any part of a tender.
- 9.2 The procedure/s which shall be followed with the acceptance of a tender are as follows:

- 9.2.1 Where in the tender document, Service Providers are required to submit Works Insurance, Sureties, Public Liability Insurance or any other provisional criteria, a letter of Provisional Acceptance will be sent to the successful Service Provider/s stipulating which amount or rate/s have been accepted and the requirements for the final award.
- 9.2.2 In this instance, the Service Provider/s shall be required to satisfy the requirements of the Provisional Letter of Acceptance within fourteen (14) days from date of issue of the Provisional Letter of Acceptance.
- 9.2.3 Should the Service Provider/s, fails to comply with the requirements of such provisional acceptance within the period specified in same or any variation thereto, and the Council elects not to confirm the provisional acceptance of the tender on that ground, the Council may refuse to receive or consider for such period as it may think fit, any further tenders from that/those Service Provider(s).
- 9.2.4 Once the requirements of the Provisional Letter of Acceptance have been satisfied, a Final Letter of Acceptance will be sent by the Head: Supply Chain Management to the successful Service Provider/s
- 9.2.5 Prior to the undertaking of any works, the successful Service Provider/s shall be required to enter into a Service Level Agreement (SLA) with the Council to address any post award qualification requirements as per the tender document.
- 9.2.6 Once the SLA has been concluded, the Tender, Provisional Letter of Acceptance, the Final Letter of Acceptance and the SLA, shall constitute a binding agreement between the Service Provider/s and the Council.
- 9.2.7 Should the Service Provider/s fail to enter into a contract when called upon to do so, then the Council may refuse to receive or consider for such period as it may think fit, any further tenders from that/those Service Provider/s.
- 9.3 Where no Insurances, Sureties or any other provisional criteria are required, a Final Letter of Acceptance stipulating which rate/s has been accepted will be sent by the Head: Supply Chain Management to the successful Service Provider/s notifying the Service Provider/s of Council's intent to make an award of the contract.
- 9.4 Prior to the undertaking of any works, the successful Service Provider/s shall be required to enter into a Service Level Agreement (SLA) with the Council to address any post award qualification requirements as per the tender document.
- 9.5 Once the SLA has been concluded, the Tender, the Final Letter of Acceptance and the SLA, shall constitute a binding agreement between the Service Provider/s and the Council.
- 9.6 Should the Service Provider/s fail to enter into a contract when called upon to do so, then the Council may refuse to receive or consider for such period as it may think fit, any further tenders from that/those Service Provider/s.

Unless otherwise stipulated in the covering letter submitted with the tender, the Service Provider shall have waived, renounced and abandoned any conditions printed or written upon any stationery used for the purpose of, or in connection with, the submission of the tender which are in conflict with the Council's Conditions of Tender and the Standard Conditions of Contract.

The Service Provider is warned that any material divergence from the official conditions or specification may render the tender liable to disqualification.

10. DOMICILIUM CITANDI ET EXECUTANDI

For the purpose of the service of all documents and the giving of notice as may be required in terms of this contract, or as a result of any action arising in conjunction with it, the Council chooses City Hall, 169 Chief Albert Luthuli Street (formerly Commercial Road), Pietermaritzburg as its *domicilium citandi et executandi*.

The Service Provider's *domicilium citandi et executandi* shall be whatever street address is given in the Tender Form attached hereto. Either party may, at any time, give one (1) month notice, in writing, of a change of its *domicilium citandi et executandi* provided that such address shall be within the Republic of South Africa.

11. DATA SHEETS

11.1 Service Providers should complete, in full, all the Data Sheets attached to this document. These include, but are not limited to, the following:

- Declaration of Interest (MBD 4);
- Authority to Sign Document;
- Pricing Schedule (MBD 3.1 / 3.2 / 3.3 as applicable);
- Declaration of Bidder's Past Head: Supply Chain Management Practices (MBD 8);
- Certificate of Independent Bid Determination (MBD 9); and
- Any other applicable Data Sheets or forms contained within the tender documentation.

Where Data Sheets and/or any other documentation are required to be commissioned, such documents must be duly stamped and signed by a Commissioner of Oaths, where applicable. Failure to complete and submit the required documentation in its entirety may result in the disqualification of the bid and render the offer non-responsive.

11.2 Completion of Tender Form

It is a compulsory requirement that the Tender Form be fully completed and signed by an authorised representative of the bidder. Failure to comply with this provision will render the bid unresponsive (invalid) and such bids will not be considered for adjudication.

12. PROHIBITION ON AWARDS TO PERSONS IN THE SERVICE OF THE STATE

The Head: Supply Chain Management Municipal Regulations read in conjunction with Msunduzi Head: Supply Chain Management policy states that the Council may not make any award to a person:

- (a) Who is in the service of the state;
- (b) If that person is not a natural person, of which and director, manager, principal shareholder or stakeholder is a person in the service of the state; or
- (c) Who is an advisor or consultant contracted with the municipality or municipal entity.

13. MUNICIPAL FEES

All Service Providers are to sign the Declaration herein declaring that their Municipal Fees are in order, or that proper arrangements have been made with the Council. Service Providers must include the relevant account numbers in the declaration.

14. APPEALS AND/OR OBJECTIONS

Any Service Provider aggrieved by decisions or actions taken by the Municipality must lodge within fourteen (14) calendar days of the date of the decision or action, a written objection or complaint to the Municipal Manager / Supply Chain Management. The appeal must be submitted in writing with the grounds of appeal within the stipulated fourteen (14) days. No appeal/objection will be entertained should the afore-mentioned condition not be adhered to, and the Municipality shall not be held liable for any loss or damages sustained by the Service Provider due to the Service Provider's failure to adhere to the above condition.

15. PREFERENCE POINTS CLAIMED IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022

Service Providers claiming preference points shall be required to complete Annexure "B" hereto in its entirety and to fully comply with the General Conditions, Definitions and Directives stated therein.

In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, 2022, Preference Points must be awarded for Specific Goals stated in the tender.

Service Providers are required to submit proof or documentation required in terms of this tender to claim points for Specific Goals. Failure to do so shall result in no Preference Points being awarded to the Service Provider and the Council shall not be held liable for any loss or damages in this regard.

16. JOINT VENTURE AGREEMENTS AND CONSORTIUMS

Service Providers intending to tender in the form of Joint Ventures/Consortiums **should submit** the following documentation together with the tender:

- (1) Tax Compliance Status Verification Pins issued by SARS of all parties of the Joint Venture/Consortium.
- (2) CSD Reports of all parties of the Joint Venture/Consortium.
- (3) Signed copies of:
 - (a) The Declaration of Interest Form,
 - (b) The Declaration of Bidder's Past Supply Chain Management Practices Form, and
 - (c) The Certificate of Independent Bid Determination Form.
- (4) An undertaking duly signed by all parties of the Joint Venture/Consortium indicating their intention to enter into an agreement for the purposes of this contract.

Further to the above, the name of the Joint Venture/Consortium should appear on the relevant pages of the document.

17. ADJUDICATION CRITERIA

The tender shall be evaluated on a Two Stage Evaluation System – Stage One: Functionality and Stage Two: 80/20 Point System in accordance with the Msunduzi Municipality's Supply Chain Management Policy (incorporating Preferential Procurement) as prescribed in terms of the Preferential Procurement Regulations 2022, pertaining to the Preferential Procurement

18. COMBATIVE TENDERING

The Supply Chain Management Regulations states that Combative tendering practices are unethical and illegal. These include but are not limited to:

- (i) Suggestions to fictitious lower quotations,
- (ii) Reference to non-existent competition,
- (iii) Exploiting errors in tenders,
- (iv) Soliciting tenders from Service Providers whose names appear on the list of restricted Service Providers/Suppliers/Persons, and
- (v) Submission of two tenders by a Service Provider.

Any attempt by a Service Provider to contravene this condition which is brought to the notice of the Municipal Manager or the Head: Supply Chain Management shall result in the disqualification of the tender. The Council further reserves the right to take any other action as it may deem necessary.

19. ALTERATIONS BY TENDERER

If a tenderer wishes to submit alternative proposals for consideration or wishes to change the Conditions of Contract, Specifications, Quantities or Drawings, or to qualify the tender in any way, such changes and/or proposals are to be listed in Annexure "A" hereto, failing which the tender will be deemed to be unqualified.

It must be clearly understood that the Council will be under no obligation to accept any such qualification.

20. COMPULSORY SITE INSPECTION/TENDER BRIEFING MEETING

Where in the tender document reference is made to a compulsory Site Inspection/Tender Briefing Meeting, Service Providers shall be required to attend the meeting prompt on the date and time mentioned in the tender document. Service Providers are to ensure that they complete and sign the Attendance Register circulated at the meeting. Service Providers shall also be required to complete and sign the Site Inspection/Tender Briefing Meeting Certificate attached hereto prior to the commencement of the meeting, and to also ensure that the Site Inspection/Tender Briefing Certificate is duly signed by the authorised official at the end of the meeting.

Only one representative per Company or Consortium will be allowed to attend the above meeting. No person will be allowed to represent more than one Company at the meeting.

An official will Chair the meeting and answer queries raised by prospective Service Providers. Any amendment to the tender documentation arising from such answers will be circulated in terms of the meeting's attendance register.

Tenders will not be considered from Service Providers who do not attend the meeting and whose Site Inspection/Tender Briefing Certificate had not been signed by the authorised official.

THE MSUNDUZI MUNICIPALITY

LEGISLATION

1.0 GENERAL

- 1.1 Contractors will be deemed by virtue of submitting a tender to have undertaken to be aware of and comply fully for all purposes under this contract with all current legislation and related regulations. The following Acts, as amended from time to time, are listed for the attention of the Contractor, without prejudice and without in any way relieving the Contractor of the obligation to continuously comply with all the laws of South Africa for the entire duration of this contract, the cost of so doing being expressly included in the contract sum. It is the sole duty of the Contractor to ensure that it acquaints itself and complies with all applicable legislation. **The Council shall not be liable in any way whatsoever for any errors or omissions in the legislation listed herein.**

2.0 THE OCCUPATIONAL, HEALTH AND SAFETY ACT (ACT 85 OF 1993) (OHS ACT)

- 2.1 The OHS Act covers *inter alia* "any work in connection with –

- a) the erection, maintenance, alteration, renovation, repair, demolition or dismantling of an addition to a building;
- b) the installation, erection or dismantling of machinery;
- c) the construction, maintenance, demolition or dismantling of any bridge, dam, canal, railway, street, runway, sewer or water reticulation system or work on any similar project;
- d) the moving of earth, clearing of land or making of an excavation or work on any similar project." (General Administrative Regulations Clause 1).

It is recorded that the subject of this contract falls within the scope of the foregoing work definition, and that the Employer in terms of this contract is the Mandator and that the Contractor is the Mandatory in terms of the OHS Act.

- 2.2 The OHS Act covers *inter alia* "any work in connection with -

- a) the erection, maintenance, alteration, renovation, repair, demolition or dismantling of an addition to a building;
- b) the installation, erection or dismantling of machinery;
- c) the construction, maintenance, demolition or dismantling of any bridge, dam, canal, railway, street, runway, sewer or water reticulation system or work on any similar project; and
- d) the moving of earth, clearing of land or making of an excavation or work on any similar project." (General Administrative Regulations Clause 1).

It is recorded that the subject of this contract falls within the scope of the foregoing work definition, and that the Employer in terms of this contract is the Mandator and that the Contractor is the Mandatory in terms of the OHS Act.

- 2.3 The arrangements and procedures to ensure compliance by the Mandatory with the provisions of the OHS Act referred to in the Agreement, between the Employer and the Contractor in this contract are:

- 2.3.1 The Mandatory shall keep a record of all incidents in terms of Clause 10 (1) of the General Administration Regulations (GAR).

- 2.3.2 The Mandatory shall cause every incident to be investigated in terms of Clause 10 (2) of the GAR.
- 2.3.3 The Mandatory shall cause all such records to be examined by a Safety Committee in terms of Clause 10 (3) of the GAR.
- 2.3.4 The Mandatory shall on demand furnish the divisional inspector with such returns as may be required in terms of Clause 14 of the GAR.
- 2.3.5 The Mandatory shall charge a full-time employee designated in writing by the Mandatory with the duty of supervising the performance of the work (or the Mandatory may personally undertake this duty) in terms of Clause 11 of the General Safety Regulations.
- 2.3.6 The Mandatory shall, before commencing or carrying out the work, inform the divisional inspector in writing of: -
 - a) the address of the premises on which such work will be carried out;
 - b) the nature of such work;
 - c) the date on which it is expected that such work will be commenced; and
 - d) the date on which it is expected that such work will be completed.

all in terms of Clause 15c of the GAR

- 2.3.7 The Mandatory shall comply with all other aspects of the OHS Act relative to the nature of the works and shall scrupulously observe and execute any instruction given by an official inspector with reference thereto.

3.0 THE COMPENSATION FOR OCCUPATIONAL INJURIES AND DISEASES ACT (ACT 130 of 1993) (COID ACT)

- 3.1 Contractors are required to register as employers in terms of the COID Act.
- 3.2 Contractors must pay the assessments due in terms of the COID Act relative to their employee records including all sub-contractors and community based labour.
- 3.3 In this specific contract the Contractor further acknowledges that the Employer shall have the right, without prejudice, to deduct any shortfall in compensation due to any employee of the Contractor (or sub-contractor) from monies due or which may become due to the Contractor, and so effect settlement of the matter.

4.0 THE LABOUR RELATIONS ACT (ACT 66 of 1995) (LR ACT)

- 4.1 Contractors are required to register as employers in terms of the LR Act.
- 4.2 Contractors are required to pay all employee and employer contributions to the Unemployment Benefits Fund, other than in respect of casual employees defined as persons who work for less than eight hours in any one week, or in respect of persons who by virtue of lawful reasons are exempt therefrom.

5.0 THE BASIC CONDITIONS OF EMPLOYMENT ACT (ACT 3 of 1983) (BCE ACT)

- 5.1 Contractors in their capacity as employers are required to comply with the provisions of the BCE Act with special reference to their employees' terms and conditions of employment.

6.0 THE INCOME TAX ACT (ACT 58 of 1962)

- 6.1 Contractors in their capacity both as business enterprises and employers are obliged to register and comply with the requirements of the Receiver of Revenue.

7.0 THE VALUE ADDED TAX ACT (ACT 89 of 1991)

- 7.1 Contractors in their capacity as business enterprises are required, if their annual turnover exceeds or is expected to exceed R150 000 by the end of February each year, to register as VAT vendors with the Receiver of Revenue for the purpose of paying, recovering, charging and returning VAT to the State via the Receiver of Revenue.
- 7.2 It is recorded that the Employer in this contract is registered as a VAT vendor.

8.0 THE ENGINEERING PROFESSION ACT OF SOUTH AFRICA (ACT 114 of 1990)

- 8.1 Where work undertaken in connection with this contract falls within the meaning of "*kinds of work reserved for professional engineers*" as fully set out in the Engineering Profession Act of South Africa 1990, or any amendments thereof, only persons registered in terms of the above Act, may assume full responsibility, according to competency under the Act, for the respective sections and phases of such work, as described in the Act, particularly in regard to design, supervision of construction and installation, and commission where applicable.
- 8.2 The Service Provider shall submit a certificate with the tender certifying compliance with all these requirements in connection with the preparation and submission of the tender and shall give an undertaking to comply in full during the contract period. Where applicable the Service Provider shall submit at the time of tendering the name(s), qualifications and address(es) of the Professional Engineer(s) responsible for the various disciplines and portions of the work comprising this contract.

9.0 GENERAL CONDITIONS OF THE CONTRACT

The General Conditions of Contract will form part of this bid documents and may not be amended.

10.0 NON-COMPLIANCE

- 10.1 The Employer in this contract will not under any circumstances be, or become party to, any act or omission by the Contractor and/or the Contractor's Sub-contractors and/or employees, which contravenes South African law.
- 10.2 Notwithstanding anything to the contrary in this tender document, and in addition to any other remedies the Council may have, if at any time during this contract, the Council discovers any contravention of the laws expressly mentioned herein or any other applicable law, then the Council shall have the right to cancel this contract forthwith. In such event, the Council shall not be liable for any loss or damages caused by such cancellation.

THE MSUNDUZI MUNICIPALITY

DEFINITIONS

The following definitions apply:

"Council/Municipality" means The Msunduzi Municipality.

"Director: Supply Chain Management" means the Head: Supply Chain Management of the day of the Msunduzi Municipality or the Manager's duly appointed Representative.

"Service Provider/Contractor" means the Person, Firm, Service Provider or Company whose tender has been accepted by the Msunduzi Municipality and includes the Service Provider's heirs, executors, administrators, trustees, judicial managers or liquidators, as the case may be, but not, except with the written consent of the Council, any assignee of the Service Provider.

"Special Conditions" means any addition to or departure from or amendment of these Standard Conditions as set out in Annexure "A" hereof.

"Drawings" means the drawings referred to in the Specification and any modification of such drawings approved in writing by the Engineer and such other drawings as may from time to time be furnished or approved in writing by the Engineer.

"Contract Document" means the Conditions of Tender, Scope of Contract, Terms of Reference, these Definitions, Special Conditions (if any), Equipment Specifications, Rates, Percentages and Prices, Tender Form and Annexures thereto. Any amendments to the contract document agreed to by the Council and the Service Provider, Provisional Letter of Acceptance and the Letter of Final Acceptance.

"Goods" means the equipment, plant, vehicles, service or materials to be supplied in accordance with the Contract.

"The Tender" means the written offer made by the Service Provider to the Council.

"Preferential Procurement Policy" means the Preferential Procurement Policy Framework Act, 2000 (Act No 5 of 2000).

"SARS" means the South African Revenue Services.

THE MSUNDUZI MUNICIPALITY

CONTRACT No. SCM 9 OF 26/27

CONSTRUCTION, UPGRADE AND COMMISSIONING OF PINE STREET PRIMARY SUB-STATION

SPECIFICATION

1.0 SCOPE OF CONTRACT

Pine Street Sub-station is currently being fed by 2 x 3-core 630mm² Aluminium oil filled cables from Retief Street Sub-station at 33kV. The capacity and age of this cable are not suitable for future load growth. This must be cut over onto the 132kV, 240MVA circuit which runs from Retief to Archbell passing Pine Street and ends at Prince Alfred Street Sub-station as per the Network Development Plan (NDP).

The scope of work is:

1.1 Civil Work

Construct a new GIS switch room building and cable basement. A new transformer bay will be required to allow the first 132/11kV transformer to be installed. The second transformer will be installed on one of the existing transformer bases. The existing base will need to be checked to see if it can accommodate the new 40MVA weight if the base is not able to accommodate then a new base will be required or alteration from the existing.

1.2 132 kV Gas Insulated Indoor Switchgear (GIS)

Collect the GIS from Northdale primary Sub-station, install and commission 132kV cable and 132kV GIS. A new 132kV gas insulated switchboard consisting of two transformer feeder bays, a bus-section bay, and four network cable feeder bays must be installed in a new 132kV GIS switch room with 132kV cable basement.

Terminate the 132kV cable onto the 132kV GIS and 40MVA, 132/11kV, Ynd1 Power Transformers.

1.3 132/11 kV 40MVA Transformers

Two new 132/11k, 40MVA transformers will be installed. One can possibly be installed on an existing base and one on a new base. The existing base needs to be checked by a civil engineer for suitability for the new 40MVA transformer.

1.4 132 kV Protection

1.4.1 Cable Differential Protection Schemes

Four Cable fibre differential scheme will be required for the 132kV cable feeders and must include thermal overcurrent, standard inverse and high set features. These schemes must provide all supervisory inputs, alarms and control for the overall monitoring and control of the circuit breaker bay including the isolator statuses of the respective breaker bay. This scheme must be linked to the supervisory gateway.

1.4.2 **132kv Bus-Zone Protection**

A new low impedance two zone busbar scheme is required for the 132kV bus. These schemes must provide all supervisory inputs, alarms and control for the overall monitoring and control of the bus-section circuit breaker bay including the isolator statuses of the respective section bay. This scheme must be linked to the supervisory gateway.

1.4.3 **132/11kV Transformer Differential Protection Schemes**

Two Transformer differential schemes will be required on the two 132/11kV transformers consisting of High voltage restricted Earth Fault (HVREF), low voltage restricted Earth Fault (LVREF), transformer differential protection, overcurrent & earth fault and on-load tap-change control schemes. These schemes must provide all supervisory inputs and alarms and control for the overall monitoring of the insulation and temperature control required for ONAF operation. This scheme must be linked to the supervisory gateway.

2.0 **PROJECT CHAMPION**

For any enquiries, Tenderers are to contact the Project Champion, as follows:

NAME	:	Lungisani Ntuli
DESIGNATION	:	Senior Technologist
TELEPHONE No.	:	033 – 392 5790
CELLULAR No.	:	082 724 3636
E-MAIL	:	lungisani.ntuli@msunduzi.gov.za

3.0 **DETAILED SPECIFICATION.**

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

The 132KV indoor GIS has been stored outside at the Northdale primary Sub-station for a long period of time. On pickup of materials from the Msunduzi municipality holding location, the Implementing Agent must check off each item on a Materials Movement Form, sign and date the form and forward a copy of the signed off form to the ESS Project Manager as soon as possible. This form will include the description of each item, quantity, date, name and signature of recipient.

The Constructor must check as far as practicable that the issued plant, equipment and materials appear to be in undamaged condition and are the correct items before leaving the Msunduzi's ESS storage depot. These major plant items are stored in large wooden crates, by visual inspection of the condition of crates which have over time become worn-out. These needs to be uncrated for checking before despatch as contract/item numbers/ descriptions on the outside of the crates are no longer visible at this stage.

Any defects or damage found are to be reported to the Project Manager and recorded on the Materials Movement Form. All equipment and materials leaving the storage site without a defect register will be deemed to have been supplied in undamaged condition.

The Constructor must ensure that no equipment is damaged because of reasonable handling during loading, transportation to site, unloading and site works. Any damage caused by inadequate handling by the Constructor or their Sub-Implementing Agents will be rectified at the expense of the Constructor.

The Constructor must obtain all necessary road traffic permits and be responsible for the payment of all charges. All Regulations, including load limits on roads and bridges along the planned transport route(s) must be observed.

3.1 Stage 1: Installation and commissioning of 132kV Cable and 132kV GIS Switchgear (Refer to Drawing No.: MSU-008-01-01-00)

3.1.1 Construction Of 132kv Switch Room

- Relocate control cables in the new switch room area and demolish the existing control cable trench.
- Relocate auxiliary supply transformers.
- Construct a safety barricade between the new switch room site and the existing 33kV yard to access gate.
- A new switch room must be constructed to accommodate the new 132kV GIS switchgear.
- Construct a new control cable trench from the control room to the existing yard trench.
- Remove existing walls in the existing control room and construct a new cable trench.

3.1.2 Installation and commissioning of 132kV Cable and Switchgear

- Specialist High Voltage Cable Sub-Implementing Agent to swing 132kV City Grid Cable from Prince Alfred Sub-station onto new 132kV switchgear and terminate onto new GIS feeder bay with Tyco PHVS dry type terminations.
- Specialist Sub-Implementing Agent to Pick up HV Cable drum, transport and install three free issue 1200mm² single core 132kV CSA cables to a newly constructed cut-in joint bay and join onto 132kV City Grid Cable to Retief Street Sub-station and terminate onto new Retief Street 132kV switchgear feeder-bay with Tyco PHVS dry type terminations.
- Install three new single core 132kV cable joints in cable circuit to Retief Sub-station.
- Supply and install new 132kV protection panels with cable differential feeder schemes to match the remote ends and install all secondary cables and wiring in the modified control room.
- Supply and install a new 7 Bay 132kV Bus-Zone protection scheme and 132kV Bus-Section control panel.
- Test and commission all 132kV feeders and Bus bar protection and control panels.
- Test and Commission 132kV switchgear and cable circuits to Prince Alfred and Retief Sub-stations.

3.2 Stage 2: Pick-up Transport, Install, Assemble and commissioning of 132/11kV Transformer T2 (Drawing No.: MSU-008-01-02-00)

3.2.1 Yard Civils

- Remove the yard safety barricade erected for the construction of the GIS switch room.
- Check Plinth suitability for new transformers.
- Removal of 33kV equipment plinths, control cable trench and old transformer bund and construct new T2 bund for 40MVA transformers.

3.2.2 Installation and commissioning of 132/11kV Transformer T2

- Decommission and remove existing MV and LV secondary cables and Protection panel for existing 33/11kV transformer T2.

- Decommission and disassemble the existing 33/11kV 30MVA transformer T2 and load and transport it to Northdale Sub-station and prepare it for long term storage.
- Pick up new 132/11kV 40MVA Transformer T2 from Northdale Sub-station and load, transport, off-load and assemble it at Pine Street Sub-station on existing T2 bay.
- Pick up and install a new T2 NEC/R/Aux from Northdale Sub-station onto the new plinth at Pine Street Sub-station.

3.2.3 Supply and Installation of Primary and Secondary Cabling for Transformer T2

- Supply and install new galvanized cable support structures for both HV and MV single core cables complete with conductor support clamps.
- Supply and install new LV yard change-over panel and cables to new T2 NEC/R/Aux picked up from Northdale primary Sub-station.
- Supply and install new 1x630mm² per phase MV cables from T2 NEC/R/Aux Type C terminals to T2 with Size 3 inner cone separable connectors.
- Supply and install new 35mm² 4-Core LV cable from T2 NEC/R/Aux to Change-over panel.
- Supply and install new 16mm² 4-Core LV cable from Change-over panel to control room DB.
- Supply, Install and cable new Transformer Bay protection and tap change Scheme panel for T2.
- Supply and install new 3 x 630mm² Cu 1-Core HDPE CWS cable per phase between 11kV switchgear, and 132/11kV 40MVA transformer T2 11kV terminals and terminate cable on the transformer with Size 3 inner cone separable connectors, terminations onto the 11kV switchgear will be heat-shrink type indoor terminations.
- Supply and install new 1 x 630 mm² Al 1-Core HDPE CWS cable per phase between T2 and NEC/R/Aux and terminate with Size 3 inner cone separable connectors on T2 and Type C screen separable terminations on the NEC/R/Aux T2.
- Install all 300mm² Cu equivalent "Copper Weld Camo" equipment earth bonding leads to the existing earth matt.
- Pick up from Northdale Sub-station, Transport and Install new free issue 400mm² CSA 132kV transformer cable circuit from the new GIS switch gear to the new 40 MVA transformer and terminate both ends using Tyco type PHVS and PHVT 145kV dry type terminations.
- Supply, Install and terminate new secondary control cables from transformer T2 to new transformer T2 protection and control panel.
- Supply, Install and terminate new secondary control cables from existing 11kV T2 Circuit Breaker to new transformer T2 protection and control panel.
- Test and Commission 132/11kV transformer T2 and associated switchgear.

3.3 Stage 3 - Pick-up, Transport, Install, Assemble and commissioning of 132/11kV Transformer T1 (Drawing No.: MSU-008-01-03-00)

3.3.1 Civils

- Removal of 33kV equipment plinths, control cable trench and old transformer bund and construct new T1 bund for 40MVA transformer.
- Extend access to new GIS switchroom and install 6 x 160 cable duct crossing.

3.3.2 Pick-up Transport, Install, Assemble and commissioning of 132/11kV Transformer T1

- Decommission and remove existing MV and LV secondary cables and Protection panel for existing 33/11kV transformer T1.
- Decommission and disassemble the existing 33/11kV 30MVA transformer T1 and load and transport it to Northdale Sub-station, off-load and prepare it for long term storage.
- Install new 132/11kV Transformer T1 and T1 NEC/R/Aux onto existing plinths.

3.3.3 Supply and Installation of Primary and Secondary Cabling for Transformer T1

- Supply and install new galvanized cable support structures for both HV and MV single core cables complete with conductor support clamps.
- Supply and install new 35mm² 4 Core LV cable from NEC/R/Aux T1 to Change-over panel.
- Supply and install new transformer protection and tap change Scheme panel for T1.
- Supply and install new 3 x 630 mm² Cu 1 Core HDPE CWS cable per phase between 11kV switchgear, and 132/11kV 40MVA transformer T1 11kV Size 3 terminals and terminate cable on the transformer with Size 3 inner cone separable connectors, terminations onto the 11kV switchgear will be heat-shrink type indoor terminations.
- Supply and install new 1 x 630 mm² Al 1 Core HDPE CWS cable per phase between T1 and NEC/R/Aux and terminate with Size 3 inner cone separable connectors on T1 and Type C screen separable terminations on the NEC/R/Aux T1.
- Supply and install all 300mm² Cu equivalent "Copper Weld Camo" equipment earth bonding leads to the existing earth matt.
- Pick up, Transport and Install new free issue 400mm² CSA 132kV transformer cable circuit from the new GIS switch gear to the new 40 MVA transformer and terminate both.
- Supply, Install and terminate new secondary control cables from transformer T1 to new transformer T1 protection and control panel.
- Supply, Install and terminate new secondary control cables from existing 11kV Circuit Breaker T1 to new transformer T1 protection and control panel.
- Test and Commission 132/11kV transformer T1 and associated switchgear.

3.4 THE WORKS

3.4.1 Geotechnical Report

All civil design must be based off a thorough geotechnical investigation specific to the site by a registered Geotechnical Engineer. A check of the suitability of existing geotechnical information should be carried out prior to conducting a new investigation.

As geotechnical work within Sub-stations can be restrictive and costly a full geotechnical investigation is usually carried out to assist in the design of future works. All Geotechnical Reports must be loaded into the USB with 'GEOTECH' in the title and given to Drawings Office.

3.4.2 Survey

All civil design levels and set out must be based off a survey by a Registered Surveyor.

For existing Sub-stations with yard stone the contour survey of existing yard must be of Ground Level not Stone Level to determine surface drainage. All Survey must be loaded into the USB with "SURVEY" in the title and given to Drawings Office.

3.4.3 Earthworks

An average of 100mm of yard stone is to be stripped off the yard terrace. The topsoil removed shall be stockpiled in an accessible position adjacent to the site. This topsoil shall be used later as stipulated by the Environmental Management Plan (EMP) for rehabilitation purposes. Earthworks must be in accordance with Engineers drawings.

Any topsoil temporarily stockpiled in the area of the site must not obstruct any constructed or natural drains since this will wash into the Sub-station yard or surrounding areas during heavy rains. The topsoil stockpiled for the use on the banks must be contained with boulders to prevent it from being spread or washed away.

The construction of the earthworks shall be carried out in accordance with the Engineers requirements. The requirements given in these guidelines conform to SANS1200 DM.

The following procedure for the construction of general fill or subgrade is given as follows:

- The terrace is to be established by the Implementing Agent, in accordance with the Site Level and Drainage Plan, the relevant sections of SABS 1200 and the schedule of 'Hold Points' included as an annexure to this project package.
- The upper 150mm of the insitu subgrade should be ripped, wet and re-compacted to minimum 90% MDD before fills are placed.
- Fill materials will be constructed from the cut material. Fills should be placed in layers not exceeding 200mm loose thickness and compacted to a minimum of 93% Modified AASHTO maximum dry density. Boulders larger than 60mm in maximum dimension should not be included in the fill material.
- Materials used to construct fills will generally consist of old fill materials. Some of these materials are expected to be moisture sensitive and should be compacted at moisture contents within 2% of the optimum. Where these materials become too wet for compaction during wet periods they should be dried out before compaction resumes.

"Hold Point No. 1" - Once it becomes evident that the completion of the terrace is imminent, the Project Engineer concerned must be given advance notice of at least a week, so that a visit to site can be arranged with the relevant people to assess terrace levels, compaction, soil resistivity, etc.

Compaction test results shall be submitted to the Clerk of Works. No further work shall continue in, or on the terrace, until the completed formation has been approved in its entirety.

3.5 Drainage

The terrace is designed with a 1% slope to facilitate surface run-off from the yard. The yard is enclosed by a 2.4m high precast wall which restricts run-off from the surrounding areas.

Run-off within the yard terrace shall drain into a sub-surface drain, constructed from 2x perforated 160mm diameter PVC pipes laid in a stone filled trench covered in non-woven Geotextile "Bidim" cloth. The sub soil drain is located at the low end of the yard. The flow is directed to a manhole and then into the storm water system.

Run-off from the control room roof and the area around the control room shall be directed from the down pipe at the control room as detailed on the Engineers Drawings.

The access road shall be constructed with no cross-sectional fall. To facilitate drainage the access road has been designed to have a natural south easterly fall that drains water away from the Sub-station yard terrace directed by kerbing into the existing road drainage system.

The existing oil drainage system shall be reused. Details of the oil-bund modifications are shown on the drawings.

3.6 Access Roads

The existing access road will be reused and extended to the new GIS switch room. The method and specific requirements when compacting are provided in SABS 1200-DM. It is an extension of the existing concrete road.

3.6.1 Access Road extension

- Strip 100mm topsoil.
- Scarify and compact the exposed 150mm base layer to 93% MOD AASHTO
- Cut to fill the demarcated road area using G7 quality site soils. The finished concrete road level shall match the existing road.
- Provide a 150mm of imported G4 material and compact to 95% MOD AASHTO.

3.7 Foundations

3.7.1 Foundations, Steelwork and Equipment

The following practices shall be adhered to during the construction of the foundations:

- Concrete cover blocks to be provided when placing the reinforcing.
- 50mm concrete cover over steel shall be maintained on all foundations.
- 45-degree chamfered edges to be provided on all foundations.
- **"Hold Point 1"** – Concrete cube and slump tests shall be carried out in accordance with SANS 5860, 586-1 to 3 and SANS 586-2. The test results shall be submitted to the Engineer within five days of pouring.

Existing building foundations will be extended for the new switch room.

The existing transformer foundations will be reused. The new oil bunds around each transformer must be modified to suit the new transformer. The oil bund must drain to the sump which, in turn, drains, via concrete piping, to the oil holding dam.

The existing plinths will be reused for the new NEC/R/AUX's in each transformer bay.

Existing foundations will be reused for the 132kV cable support structure.

New cable ducts will be installed for the required control cables.

The existing cable ducts will be modified to suit the new layout.

3.8 Earthing

3.8.1 Steelwork and Main Equipment

Connections to all new equipment and steelwork shall be achieved by means of 50 x 3mm flat copper earth tails. These tails are connected to the holding down bolts on the equipment foundations at one end and brazed to the main earth mat situated 1 metre below ground, at the other.

All equipment support steelwork shall have at least two copper earth leads connected to the support, and these installed at diametrically opposite points. The earth leads connected to each steel equipment support, should also be connected where practically possible, to the existing earth conductors that comprise the overall Sub-station earth grid, below ground.

The transformer shall be connected to the earth mat via four (4) earth leads. These tails shall be installed from the designated earth points on the transformer, secured flat to and bonded to the existing mat. The copper earth mat tails must be installed and extended beyond the oil containment bund around the transformer plinth.

Furthermore, all cable glands associated with the termination of LV cables installed in the Sub-station, must be connected to an appropriate earth stud via the earth ring supplied with each cable gland.

3.8.2 Ancillary equipment

Earthing of all ancillary equipment (NECRT, junction boxes, etc.) shall be achieved by connecting a short 50 x 3mm flat copper bar between the earth stud of the equipment and the equipment steelwork or another method approved by the Engineer.

3.8.3 GIS Switch Room and Control Room Building

A new copper earthing conductor shall be installed and shall be bonded to the main Sub-station earth mat at two points. The earth strap shall be clamped to the cable racking with splice clamps at 1m intervals. Each floor standing panel shall be bonded to this earth bar by means of a 70mm², green/yellow, insulated, stranded flexible copper conductor. These tails shall have one end securely lugged and bolted to the 50 x 3mm earth bar and the other end securely lugged and bolted to the panel earth bar, via an M12 brass set screw.

The distribution boards (AC and DC) shall be bonded to the main earth conductor installed in the control room, by means of a 50 x 3 flat copper bar.

3.8.4 Fence / Gates

50 X 3mm copper leads shall be bolted to steel fence or gate posts at the lug points provided, the principle being that these connections must not be visible above the final layer of yard stone. Reference must be made to drawing or details of the security fence.

3.9 Earth mat

The existing main Sub-station earth mat shall be reused. Wherever joints, crossings and connections to the earth mat conductors are necessary, these shall be undertaken in strict accordance with specifications (refer “earthing standards”), utilizing the silbralloy braze or exothermic weld methods so that an electrically sound and effective connection is achieved.

“Hold Point No. 1” - Once all jointing is complete and before the earth mat is buried, it is essential that the Project Engineer / Clerk of Works concerned is notified well in advance, so that an inspection of the earth mat and all associated connections to it, is undertaken. The earth mat resistance measurement can be completed at the same time to ensure its acceptability.

3.10 Steelwork

All new equipment supports, and sub-station steelwork must be galvanized to SABS ISO 1493 specification and delivered to site as complete bundle sections, in accordance with the appropriate drawings for the relevant item.

Where steelwork is installed directly onto the corresponding foundation, “malthoid” material shall be placed and trimmed under all affected supports.

3.11 Cable Trenches

All control and LV cables to be laid directly in the new cable duct in a neat orderly fashion.

Short 600 mm deep equipment trenches will be modified between the equipment and the control room. No special back-fill material is required to close the trenches once all cables have been installed, but any boulders, sharp objects, construction debris or other such obstacles likely to cause damage to the cables, should be removed from the trench and backfill material, before the trenches are closed. The backfill material shall be properly compacted before the 100mm granite stone layer is laid. Danger tape shall be laid in the trenches approximately 200mm below final ground level.

3.12 Cabling and Terminations

All low voltage armored cables shall be terminated by means of mechanical glands, fitted with earth rings and shrouds. These cables shall be identified at both ends by *approved* tags attached to the cable.

The cores shall be correctly identified with alphanumeric ferrules and terminated with the correct size of hook blade connectors, as indicated on the relevant electrical drawings. Only the CRIPMSTAR HP3 or the KEWTECHNIK CTR0323 crimping tool must be used for applying the hook-blade terminal connectors to the cable cores, unless otherwise approved by the Engineer prior to use.

3.13 Optic Fibre

Optic fibre cables shall be installed in ducts. This duct must be installed during the terrace establishment phase.

A specialist sub-Implementing Agent will be appointed for the entire fibre installation including the installation of the fibre in the duct.

3.14 Yard Stone and Concrete Kerbs

The yard shall be covered with a 100mm thick layer of 26mm grade granite, tillite or dolerite stone chips depending on the availability of the above stone types in the area concerned. The stone chips must be derived from the crushing of solid, unweathered quarried rock. The material must be free of dust and other deleterious substances. The material must comply with the SABS 1083 -1976 Table 7 -single sized stone for roads, specification.

3.15 Fencing and Gates

Any temporary fences that may need to be installed during the construction phase of the project, eg. for barricading sections of the yard, or for safe storage of materials, shall be supplied by the Implementing Agent. Any such fence shall also be bonded to the main Sub-station earth mat, where applicable. Refer also to section 5 of this Detailed Specification for additional information regarding the fence earths. The existing fence shall remain.

3.16 Yard lighting and Plug Boxes

Combined operational and security lighting, shall be provided by suitable approved LED floodlights strategically placed within the Sub-station yard and mounted on appropriate pole structure (columns and masts). The light circuit(s) shall be protected via a suitably rated MCB's and associated contactors, located in the yard changeover panel.

Certain lights, designated as security lights, will be switched on throughout the night to provide the combined operational / security functionality. These lights shall be switched by a contactor and controlled by a "Daylight" photocell. The balance of the lighting, designated operational lighting, shall be switched by a contactor and controlled by a wall mounted switch inside the control room or yard change-over panel.

Each yard lamp shall be isolated locally via a suitably rated LV single-pole MCB mounted in a lighting junction box at the base of the relevant column or mast.

NB. A form of compliance certificate must be issued by the Implementing Agent involved in the LV installation in the Sub-station yard, to ensure same complies with the requirements of SANS 10142 in every respect.

3.17 Labels

All Sub-station labels and their respective brackets shall be checked by resident engineer and any replacements or new labels shall be installed by the Implementing Agent, as directed by the resident engineer. Phase identification labels shall be fitted to all busbars, stringers, bus-couplers and feeder bays, where applicable. Reference must be made to the relevant project drawing to obtain the correct phase label convention to be complied with.

Equipment labels shall be fitted to all applicable operating equipment, junction boxes, control boxes, etc., in the Sub-station yard and to all applicable equipment installed in carrier, battery control and switch rooms. OHS Act notices (safety and warning) are to be fitted where appropriate. Reference must be made to the "Label Schedule", of the Project Package.

"Hold Point No. 2" – The onus shall be on the Implementing Agent to ensure that the labels received on site comply exactly with the equivalent information specified in the label schedule.

3.18 GIS Switchroom Building

3.18.1 Construction

The switchroom extension to the existing Sub-station building shall comprise 280mm thick cavity walls constructed on a concrete foundation, to strength of not < 25 MPa at 28 days. The external walls shall have a face brick finish and internal walls a plastered common brick finish. Reference must be made to the relevant project drawings to determine all detail required in the alteration of the switchroom. The switchroom building must be fitted with an appropriate crane with suitable tonnage capacity to move the 132kV GIS.

“Hold Point No. 5” -Once completion of the preparation work involved in the construction of the foundation is imminent, prior to the concrete being cast, the designated Clerk of Works or his delegated representative shall be given satisfactory advance notice of the need to inspect this stage of the building construction. It is essential that this stage be observed as a critical “hold point” by the Implementing Agent involved and no further work is to continue the construction of the building, until this stage has been inspected and approved.

3.18.2 Doors and Frames

Heavy duty galvanized steel doors, as specified in the materials list and relevant project drawings shall be used for access to all sections of the Sub-station building.

3.18.3 Painting

The internal walls of the switchroom, ceilings and floors shall be treated and/or painted in accordance with the engineer’s requirements.

3.18.4 Ventilation

The control room shall be air conditioned. The existing installation shall be checked and maintained/replaced as necessary to the engineer’s satisfaction.

3.18.5 Electrical Layout

The building electrical installation shall be checked and comply in strict accordance with the relevant project drawings, SABS 10142 ‘Code of Practice for the Wiring of Premises’, applicable electrical specifications and any other pertinent design requirement. Any faults must be repaired by the Implementing Agent

3.18.6 Cabling and Panel Arrangement

All electrical equipment in the Sub-station building shall be installed as indicated on the relevant project panel layout drawing.

All cables in the control room shall be arranged in a neat and orderly fashion. Untidy cabling will not be accepted. The flat copper earth bar shall be secured to the cable rack via suitable spline clamps, as specified by the cable rack supplier and/or manufacturer.

All armoured cables shall be terminated by means of mechanical glands, fitted complete with earth rings and shrouds. The cores shall be identified and terminated with approved spade and pin type connectors, as indicated on the relevant drawings. All cables shall be identified at both ends.

3.18.7 AC/DC Distribution Board

i) **AC Supply and Changeover panel**

The 400V AC supply to the control building shall be provided from the new Yard changeover panel. A new cable shall be laid from the changeover panel to the existing AC DB.

ii) **DC Supply**

Existing DC supply shall be checked for new load requirements and replaced if necessary.

iii) **Sub-station Security System**

The Sub-station security system will not be part of this scope of this contract.

3.19 GENERAL

3.19.1 Quality Control

The Implementing Agent shall implement his own quality check system throughout the duration of this project. The Implementing Agent shall provide regular feedback on all aspects of quality control on the site, which shall constitute a pre-requisite to the final hand-over / take-over stage of the project.

3.19.2 Equipment (Delivery & Installation)

3.19.3 Delivery

The Implementing Agent shall ensure that all equipment to the site is received by a competent person (Materials Receiving Clerk / Storeman) who will ensure that all material is in good condition when received. A complete detailed inventory of all material is to be kept and must be available for inspection at any time by the Project Manager. Equipment damaged in transit or during construction must be replaced / repaired at the Project Engineers / Clerk of Work's discretion and any costs incurred shall be for the Implementing Agent's account.

3.19.4 Installation

All equipment detailed in the design of this project is to be installed and connected by the Implementing Agent and shall be done so as specified by the manufacturers. All mechanical adjustments of the isolators, where applicable, and preliminary testing of cabling / wiring to prove the correct installation, shall be undertaken by the Implementing Agent.

Final testing and commissioning shall be performed by a professionally registered Test and Commissioning Engineer to be approved by the Engineer.

3.19.5 Network Configuration and Impact Assessment

To be checked prior to electrical isolation work starting.

3.19.6 Project Risk Analysis

In this regard, Tenderers are advised to seek clarity from the Project Manager.

3.20 **DUTIES OF KEY PERSONNEL ABOVE (NOT LIMITED TO THE BELOW MENTIONED)**

3.21.1 **Lead Electrical Engineer & Project Manager:**

The lead electrical engineer will be responsible for design and sign off electrical works, protection design, grading study and settings and any other relevant scope of work. He/She will be responsible for project management functions. He/She must also have the Project Management certificate.

The electrical engineer is responsible for all aspects of electrical engineering design and quality inspection. Without derogating from the generality thereof the electrical engineer will perform the following specific functions and duties in respect of the electrical engineering aspects of the works:

- i) Give opinion of aspects of the work which are not in accordance with the agreement
- ii) Supply the specified number of drawings
- iii) Issue instructions if bills of quantities are to be used as a specification
- iv) Receive and accept design documentation undertaken by sub-contractor.
- v) Issue instructions to the Implementing Agent regarding:
- vi) Alteration to design, quality or quantity of the works provided that such instructions shall not substantially change the scope of the works
- vii) Removal of any materials and goods from the site and the substitution of any materials and goods therefore
- viii) Removal or re-execution of any work
- ix) Opening up of work for inspection
- x) Testing of work and materials and goods
- xi) Protection of the works Making good physical loss and repairing damage to the works
- xii) Compliance with Acts of Parliament, regulations and bylaws
- xiii) Provide the Implementing Agent with the necessary information to set out the works
- xiv) Acceptance of design by sub-contractor.
- xv) Inspect the works from time to time and give the Implementing Agent interpretation and guidance on the standard and state of completion required for practical completion
- xvi) Inspect the works for practical completion
- xvii) Issue the list for practical completion and re-inspect upon request of the Implementing Agent
- xviii) Inspect the works at the end of the defect's liability period
- xix) Issue the list for final completion and re-inspect upon request of the Implementing Agent

An Electrical Engineer Project Manager oversees the end-to-end delivery of complex electrical projects, ensuring they are completed safely, on time, and within budget. They lead project teams, manage budgets and resources, and ensure compliance with technical specifications and regulatory standards

3.21.2 **Key Responsibilities**

- **Project Planning & Execution:** Define project scope, goals, deliverables, and resource requirements.
- **Technical Management:** Review electrical designs, drawings, and method statements for compliance.

- **Financial & Timeline Control:** Monitor project budgets, control costs, and maintain schedules.
- **Team Leadership:** Lead staff, manage Implementing Agents, and coordinate with Msunduzi municipality stakeholders and other external stakeholders.
- **Documentation & Safety:** Ensure compliance with safety standards, prepare O&M manuals, and manage project documentation.

3.21.3 Required Qualifications & Skills

- **Education:** Bachelor's degree in electrical engineering.
- **Certifications:** **Registration with ECSA (Engineering Council of South Africa) is mandatory. PMP (Project Management Professional) certification is highly valued.**
- **Technical Skills:** He or she must also show deep knowledge of electrical codes (IEC, SANS, NRS), AutoCAD Electrical, Retic Master, Microstation, DlgSILENT PowerFactory, any Sub-station design software and project management software.

3.21.4 Resident Electrical Engineer:

- I) **Site Supervision:** Oversees daily construction activities, monitoring progress and ensuring work aligns with approved drawings and specifications. Reviewing and approving construction materials and procedures.
- II) **Quality Assurance:** Makes sure completed work complies with quality standards and contract terms and conditions.
- III) **Co-ordination and Communication:** Acts as a liaison between the project owner, Implementing Agents, and regulatory bodies to ensure seamless communication and collaboration.
- iv) **Technical Expertise:** Applies engineering knowledge to assist with project implementation, review regulations, and develop efficient project plans. Providing technical advice on-site.
- v) **Contract Administration:** Administers the project contract effectively, verifying materials, labour, and quantities, and managing claims and disputes.
- vi) **Record Keeping:** Maintains detailed project records, including daily logs, progress reports, site diaries, and material test
- vii) **Problem-Solving:** Addresses technical challenges and issues that arise during construction to ensure project success.

3.21.5 Key Required Skills for Resident Electrical Engineers

- **Technical Proficiency:** In-depth knowledge of electrical systems, circuits, components, and design standards, including experience in design, installation, and commissioning.
- **On-Site Supervision & Management:** Ability to supervise day-to-day site activities, monitor construction, review Implementing Agent submittals, and approve payment applications.
- **Software Skills:** Competence in tools like AutoCAD Electrical, MATLAB, and MS Project for scheduling and design work.
- **Problem-Solving & Critical Thinking:** Analytical skills to troubleshoot, resolve on-site deviations, and manage technical issues efficiently.
- **Health & Safety Compliance:** Knowledge of safety standards and regulations (e.g., IEC, SANS, NRS, ISO) to ensure a safe, compliant work environment.
- **Communication & Leadership:** Ability to manage multidisciplinary teams, communicate effectively with stakeholders, and negotiate with Implementing Agents.
- **Project Control:** Experience with scheduling, budgeting, and resource management.

3.21.5 Education and Certification

- A Degree of BTech/ BSc. Degree/ N-Diploma certificate or any equivalent (Heavy Current/Power Engineering) is mandatory.
- An ECSA Professional Engineer (PE) license or equivalent professional registration is required.

In addition to the above, the successful bidder must have the following professionals amongst its staff to perform any activities related to the project:

3.21.6 Professional Architecture

The architect is responsible for the architectural design, functional design and quality inspection. Without derogating from the generality thereof the architect will perform the following specific functions and duties:

- i) Give opinion on aspects of the works which are not in accordance with the agreement
- ii) Supply the specified number of drawings
- iii) Issue instructions if bills of quantities is to be used as a specification
- iv) Be responsible for primary co-ordination of design elements
- v) Receive through the Implementing Agent and accept design documentation undertaken by sub-contractors

3.21.7 Issue instructions to the Implementing Agent regarding:

- i. Alteration to design, quality or quantity of the works provided that such instructions shall not substantially change the scope of the works.
- ii. Removal of any materials and goods from the site and the substitution of any materials and goods therefore
- iii. Removal or re-execution of any work
- iv. Opening up of work for inspection
- v. Testing of work and materials and goods
- vi. Protection of the works
- vii. Making good physical loss and repairing damage to the
- viii. Lists for practical completion and final completion
- ix. Compliance with Acts of Parliament, regulations and bylaws
- x. Witness the handing over to the Implementing Agent of pegs, beacons and datum levels
- xi. Define levels and provide the Implementing Agent with the necessary information to set out the works.

3.21.8 Professional Quantity Surveyor

The quantity surveyor is responsible for all measurements, valuations, financial assessments and all other quantity surveying and cost control functions. Without derogating from the generality thereof, the quantity surveyor will perform the following specific functions and duties:

- i) Consult with the Implementing Agent in correction of rates or errors and discrepancies
- ii) Complete the contract data
- iii) Supply the specified number of unpriced bills of quantities
- iv) Identify in the contract data any changes to the standard JBCC documentation and determine any loss and expense to the Implementing Agent caused by non-disclosure thereof
- v) Deal with amounts paid by the Implementing Agent to authorities having jurisdiction over the works

- vi) Measure and value the making good of physical loss or damage
- vii) Issue instructions to the Implementing Agent regarding:
 - a) Rectification of discrepancies and errors in description or omissions in contract documents.
 - b) Furnishing proof of payment to sub-contractors
 - c) Budgetary allowances and work executed by the Implementing Agent
 - d) Contingency and other monetary provisions included in the contract sum
- viii) Prepare nominated and/or selected subcontract tender documents
- ix) Receive proof from the Implementing Agent that the Implementing Agent's payment obligations have been met in respect of sub-contractors
- x) Act on employer's instructions to pay sub-contractors directly
- xi) Adjustment of the contract value in respect of a revision to the date of practical completion.
- xii) Calculate penalties for non-completion upon receipt of the relevant information from the principal agent.
- xiii) Valuation of payment claims for payment certificates
- xiv) Calculate default and compensatory interest (if any) due to the parties.
- xv) With each valuation for payment issue:
 - a) A statement to the Implementing Agent and each sub Implementing Agent showing the amount certified for the relevant sub Implementing Agent.
 - b) A statement to the employer and Implementing Agent showing the total amount certified
 - c) A recovery statement
- xvi) Determine the value of adjustments to the contract value
- xvii) Receive from the Implementing Agent details of expense and loss claims and assess such claims
- xviii) Prepare the final account and submit it to the Implementing Agent

3.21.9 Civil and structural engineer

Civil and structural engineers are responsible for all aspects of civil and structural engineering design and quality inspection. Without derogating from the generality thereof, the civil and structural engineer will perform the following specific functions and duties in respect of the civil and structural engineering aspects of the works:

- i) Give opinion on aspects of the works which are not in accordance with the agreement 5.21.5.2 Supply the specified number of drawings
- ii) Issue instructions if bills of quantities is to be used as a specification
- iii) Receive and accept design documentation undertaken by sub-contractors
- iv) Issue instructions to the Implementing Agent regarding:
 - a) Alteration to design, quality or quantity of the works provided that such instructions shall not substantially change the scope of the works
 - b) Removal of any materials and goods from the site and the substitution of any materials and goods therefore
 - c) Removal or re-execution of any work
 - d) Opening of work for Inspection
 - e) Testing of work and materials and goods

- f) Protection of the works
 - g) Making good physical loss and repairing damage to the work
 - h) Compliance with Acts of Parliament, regulations and bylaws
-
- v) Define levels and provide the Implementing Agent with the necessary information to set out the work.
 - vi) Acceptance of design by sub-contractors
 - vii) Inspect the work from time to time and give the Implementing Agent interpretation and guidance on the standard and state of completion required for practical completion.
 - viii) Inspect the works for practical completion
 - ix) Issue the list for practical completion and re-inspect upon request of the Implementing Agent.
 - x) Inspect the works at the end of the defects liability period
 - xi) Issue the list for final completion and re-inspect upon request of the Implementing Agent

3.21.10 Professional Geotechnical Engineer

The geotechnical engineer is responsible from the inception stage up to construction phase. He/She will play a critical role in the design and construction of the Pine primary Sub-station by doing soil analysis, rock analysis, groundwater conditions to ensure the stability and durability of the building and outdoor high voltage switchyard plinths. Geotechnical engineers are crucial in Sub-station construction, ensuring that the heavy equipment (transformers, switchgear) and structures are supported by stable, safe, and resilient ground. Their roles cover pre-construction, design, and construction phases, focusing on soil mechanics, rock mechanics, and subsurface investigations to prevent structural failure. His/Her primary functions include evaluating site suitability, designing appropriate foundations, providing guidance on earthworks and monitoring construction to prevent possible failures due to soil settlement or seismic activity.

Below are some of the key functions of the geotechnical engineer. Key functions of a geotechnical engineer in a Sub-station project include:

a) Site Investigation and Soil Testing:

- i. **Subsurface Investigation:** Drilling boreholes, conducting trial pits, and performing in-situ tests (e.g., Standard Penetration Tests, Cone Penetration Tests) to assess soil, rock, and groundwater conditions.
- ii. **Laboratory Analysis:** Testing soil samples to determine bearing capacity, shear strength, permeability, and consolidation characteristics.
- iii. **Geophysical Surveys:** Using non-destructive methods like electrical resistivity tomography (ERT) to understand the site's geology.

3.21.11 Foundation Design and Optimization:

- i. **Foundation Recommendation:** Determining the most suitable type of foundation (shallow spread footings or deep piles) based on soil characteristics and load requirements, such as those for heavy transformers.

- ii. **Settlement Analysis:** Predicting potential ground settlement and ensuring it remains within allowable limits for sensitive equipment.
- iii. **Foundation Design:** Designing foundations for specific equipment, retaining walls, fencing and embankments.

3.21.12 **Risk Assessment and Mitigation:**

- i. **Seismic Analysis:** Evaluating potential risks from natural hazards, such as earthquake-induced liquefaction, to ensure the Sub-station's resilience.
- ii. **Slope Stability Analysis:** Assessing slopes on the site for potential landslides and designing stabilizing measures (e.g., retaining walls, soil reinforcement).
- iii. **Groundwater Control:** Designing dewatering systems for safe excavation.

3.21.13 **Construction Support and Quality Control:**

- i. **Field Inspection:** Monitoring construction activities to ensure the design specs are followed.
- ii. **Pile Load Tests:** Conducting tests to verify the axial and lateral load-carrying capacity of piles.
- iii. **Ground Improvement:** Recommending methods like soil stabilization or compaction to improve the strength of weak soil.

3.21.14 **Environmental and Sustainability Considerations:**

- i. **Contamination Assessment:** Evaluating the site for contaminated soil.
- ii) **Material Reuse:** Assessing the suitability of on-site soil for backfill to improve cost-efficiency.

In summary, geotechnical engineers ensure the stability of the ground, which is essential for the long-term safety and functionality of the Sub-station infrastructure.

3.21.15 **Health and safety consultant**

The health and safety consultant is responsible for all aspects of health and safety. Without derogating from the generality thereof, the health and safety consultant will perform the following specific functions and duties in respect of the health and safety aspects of the works:

- a) Act as the client's (employer's) agent in terms of Construction Regulations issued in terms of the Occupational Health and Safety
- b) Prepare and update the health and safety specifications for the works
- c) Agree with the Implementing Agent the health and safety plan for the works
- d) Carry out regular audits to ensure adherence to the safety plan and compliance with the Act and Regulations.

3.21.16 Health and safety

Without limiting the generality of the provisions of clause 2.0, the Implementing Agent's attention is drawn to the provisions of Construction Regulations issued in terms of the Occupational Health and Safety Act, 1993. It is specifically stated that the employer shall prepare a documented health and safety specification for the works (refer to the annexures for a copy of the relevant specification) and that the employer shall ensure that the Implementing Agent has made provision for the cost of health and safety measures during the execution of the works. The Implementing Agent shall price this item for compliance with the act and the regulations and the provisions of the aforementioned health and safety specification.

The Implementing Agent shall:

- I) Comply with the health and safety specifications for the works
- II) Prepare and agree with the health and safety consultant the health and safety plan for the Works.
- III) Co-operate with the health and safety consultant in all respects
- IV) Manage the compliance of all sub-contractors with the regulations and with the health and safety plan and specification
- V) Conform to the conditions contained in the employer's safety specification

4.0 CONTRACT PERIOD

The contract period for Electrical Implementing Agent Services shall be eighteen (18) months commencing from the date of issuing of the site handover certificate.

5.0 PLACE OF DELIVERY AND DELIVERY PERIOD

The Msunduzi Municipality Electricity Supply Services' Pine Street Primary Sub-station.

6.0 COMPULSORY TENDER BRIEFING/SITE INSPECTION MEETING

6.1 A **compulsory Tender Briefing Meeting** will be held at **10h00 prompt on Friday, 21 August 2026**, in the Electricity Department's Boardroom, 111 Havelock Road, Pietermaritzburg, 3201, from where all will travel in convoy to the site of works. ***Tenderers are referred to Clause 20 of the Standard Conditions of Tender.***

6.2 Progress meetings will be held every month until completion and Progress reports are required.

6.3 The site has all the services, water and electricity.

7.0 INSURANCES

An amount of 5-million-rand Public Liability insurance is required for this contract. This insurance must remain in force for the duration of the contract. The Municipality reserves the right to request the Implementing Agent to produce proof of such insurance cover at any time during the contract period.

8.0 RETENTION AND SURETIES

N/A

9.0 PENALTIES

As per the GCC-2025.

10.0 COMPLIANCE WITH ANY LEGISLATION, BYLAWS, ETC.

All works to be undertaken under this Contract shall be compliant in accordance with and/or governed by: -

- The Engineering Council of South Africa (ECSA), (Act No. 46 of 2000)
- The Income Tax Act, (Act No. 58 of 1962)
- The Value Added Tax (VAT) Act, (Act No. 89 of 1991)
- The Municipal Finance Management Act, (MFMA) (Act No. 53 of 2003)
- The Municipal Supply Chain Management Regulations, 2005
- The Construction Industry Development Board (CIDB) Act, (Act No. 38 of 2000)
- The Occupational Health and Safety (OHS) Act, (Act No. 85 of 1993)
- The Labour Relations Act, (Act No. 66 of 1995)
- The Compensation for Occupational Injuries and Diseases (COID) Act, (Act No.130 of 1993).
- The basic conditions of employment act (act 3 of 1983) (bce act)
- The contract shall be carried out subject to and in conformity with any law, regulation or By-law which is of application thereto and shall be conditional upon any necessary consent required by law being obtained.
- National Building Regulations

11.0 GUARANTEE/WARRANTY/DEFECTS LIABILITY PERIOD

A 12-month guarantee/warranty/defects liability period from date of completion.

12.0 DRAWINGS

The drawings required for a Sub-station project must generally be in accordance with those as listed in ANNEXURE "G" – SUB-STATION DRAWING LIST. Sub-station Project Design Drawings include Single Line Diagrams (SLD's) General Arrangements (GA's) in plans and elevations, material lists, earthing, conduit, foundations and steelwork details, panel layouts, schematics, connection diagrams and cable schedules.

Single Line Diagrams illustrate the logical functioning of the primary plant and secondary protection, control, indications and communications. General arrangements describe the physical primary plant and electrical connections. Layouts, schematics, connection diagrams and schedules detail the secondary equipment, locations and terminations.

Prior to commencement of detailed design, the set of high-level drawings listed below must be submitted to the Project Owner for Verification as per process document and Verify Concept Design.

The required drawings are:

Single Line Diagram – Plant
 Single Line Diagram – Operating
 Single Line Diagram – Protection and Metering
 Single Line Diagram – Communications and SCADA
 Switchyard General Arrangement

These drawings will be based on the initial concept drawings provided for the project, subject to any minor modifications approved by the Project Owner.

Item	Description	Drawing No.
1	Pine Street Sub-station – Existing Site 33/11kV Layout	-MSU-008-01-00-00
2	Pine Street Sub-station – Proposed 33/11kV Temporary Layout	-MSU-008-01-01-00
3	Pine Street Sub-station – Proposed 132/11kV Sub-station Layout	-MSU-008-01-03-00
4	Pine Street Sub-station – Proposed 11kV Switchroom Modifications	-MSU-008-01-03-00
5	Pine Street 132/11kV Sub-station – Proposed 132kV Switchroom and Control room Layout	-MSU-008-01-04-00
6	Pine Street Sub-station – Oil Drainage Dam - Plan and Elevations	-MSU-008-02-01-00
7	Pine Street Sub-station – Elevation for 132kV Feeder and Transformer Bays	-MSU-008-02-02-00
8	Pine Street Sub-station – Elevation for Standard Perimeter Fence Details	-MSU-008-02-03-00
9	Pine Street Sub-station – Existing Single Line - Network Diagram	-MSU-008-03-00-00
10	Pine Street Sub-station – Phase 1: Single Line 33/11kV Temporary Network Diagram	-MSU-008-03-01-00
11	Pine Street Sub-station – Phase 2: 33/11kV Single Line Diagram	-MSU-008-03-02-00
12	Pine Street Sub-station – Phase 3: Final 132/11kV Single Line Diagram	-MSU-008-03-03-00

13.0 **DEVELOPMENT PHASE**

The lead electrical engineer must initiate the development phase of the project based on the brief and the available drawings:

For the development phase of a project, a project delivery summary would typically encompass: The Msunduzi municipality's ESS Sub-station Design Group produce client verification drawings for signoff. These drawings include all the Single Line Diagrams and a General Arrangement.

- 13.1 The lead electrical engineer provides Single Line Diagram Operating to ESS.
- 13.2 Coordination between the Sub-station and civil design groups for main earth grid and Earthing tails, conduits, underground services, and clearances.
- 13.3 Sub-station and Civil Designs produced to check stage. Bill of Materials compiled.
- 13.4 At design check stage (70% design complete), preliminary design drawings submitted to Protection, SCADA, and Communications Design Groups to progress these designs
- 13.5 Sub-station and Civil Designs completed and approved. Material requirements finalised and approved.

- 13.6 Approved Designs sent to Protection, SCADA, and Communications for completion and approval of these design groups individual designs.
- 13.7 Work Specification completed and approved

14.0 CAD STANDARDS – GENERAL

All Msunduzi ESS Electrical Design Drawings must be produced using Bentley MicroStation. Conversion from AutoCAD or other formats is **not** acceptable. Other drawings (e.g. Mechanical and Civil) may be produced in AutoCAD format.

All drawings must be clear and legible without imperfection of any sort in the printing or reproduction.

14.1 As-Built Drawings

A controlled process exists for the issue of Project Design Drawings and the return of the As-Built mark ups. This process must be used for all Msunduzi municipality projects, and it ensures drawing sets and mark-up procedures are standardised. A summary of the process is:

- a) Project Management receive the same drawings set's irrespective where the design is completed.
- b) At the development phase all design Implementing Agents produce the same range of drawings.
- c) The Controlled Drawings belong to the Implementing Agent carrying out the actual activities and the individual work groups.
- d) All Construction Implementing Agents transfer mark ups to master copy and sign master copy prior to completion of work.
- e) All Test Implementing Agents obtain mark ups from master copy prior to testing, transfer mark ups to master copy prior to completion and sign master copy.
- f) With the exceptions on the SLDO all work groups will get all revisions, so they are aware of changes on the project.

The original drawings will be supplied by the Msunduzi municipality. The final design and construction drawings must be developed by the Implementing Agent and approved by the Msunduzi municipality. The As-Built drawings shall be supplied by the Implementing Agent upon project completion.

The "as-built" drawings and associated information form a vital part of this project. Consequently, this project will not be considered complete until the "as-built" package complete with all the associated civil drawings have been submitted to the Electricity Supply Services business unit.

15.0 INSPECTION OF IMPLEMENTING AGENT'S PREMISES

Council reserves the right to inspect tenderers' premises and equipment at any given time before award and during the contract period.

16.0 MANDATORY REQUIREMENTS

Only Implementing Agents registered for the adjudication duration with the Construction Industry Development Board (CIDB) with a Grading of **7EP or higher**, will be considered for adjudication. ***A copy of the Company's CIDB Registration Certificate or CRS number should be attached to this Bid document which must be active throughout the adjudication process.***

Item No.	Description of Mandatory Requirement	Custodian/Principal of Mandatory Requirement	Documentary proof/Verification Method
1.	Engineering Council of South Africa (ECSA) Professional Registered Electrical Engineer/Technologist/Certificated Engineer who will be the Lead Electrical Engineer with more than 10 years' experience in electrical engineering designs and project management (Heavy Current/Power engineering) post registration.	Associated Person	ECSA Professional Registration Certificate and a detailed CV showing the relevant experience in 132kV GIS or above on Sub-station works design and project management.
2.	ECSA registered as a professional electrical engineer/Technologist/Certificated Engineer (Power/Heavy Current) with more than 10 years' experience in electrical engineering (Heavy Current/Power engineering) post registration. This will be the resident engineer.	Associated Person	ECSA Professional Registration Certificate and a detailed CV showing the relevant experience in 132kV GIS or above on Sub-station works in supervision.
3.	ECSA registered as a professional Civil/Structural engineer/Technologist. The engineer for the duration of the project with a minimum of five (5) years' experience post registration.	Associated Person	ECSA Registration Certificate and a detailed CV showing the relevant experience.
4.	A High Voltage (132kV and above) Cable Joining/Termination certificate and a valid working at heights certificate are mandatory either from the electrician or any other person in the team.	Associated Person	Copies of Certificates (132kV or above Cable joining/termination certificate & working at heights certificate)
	The bidder must submit proof that their company complies with ISO 9001 (Quality management), and ISO 14001 (Environmental management)	Bidder	Copies of Certificates (ISO 9001 and ISO 14001)
	ISO 45001 (Occupational Health & Safety company or personnel.	Bidder or associated person	Copy of Certificate (ISO 45001)

NOTE: Failure to submit any of the above will lead to disqualification. The Lead electrical engineer and the resident engineer must be two separate people, if only one person is given then the service provider will be disqualified.

17.0 EVALUATION CRITERIA

17.1 Stage 1 - Functionality Stage.

The Tenderer's experience and technical capacity applicable to the nature of works mentioned herein shall be scored against 80/20-point system, where the Tenderer with the most experience and technical capacity pertaining to the nature of works mentioned herein shall score a maximum of 100 points.

Tenderers shall be scored against the following criteria:

(a) The 100 Points for Functionality will be broken down as follows:

TABLE 1: FUNCTIONALITY

Key Aspect Of Criterion	Basis For Points Allocation	Score	Maximum Points	Verification Method
Previous Experience of the bidder:	Combined completed electrical 132kV or above Sub-station projects with a combined value of less than R30 million in the previous five years.	0	25	Award letter/Copies of purchase orders and completion certificates/refer-ence letters with traceable contactable references signed by the client to be attached.
	Combined completed electrical 132kV or above Sub-station projects with a combined value of more than R30 million but less than R 40million in the previous five years.	10 Points		
	Combined completed electrical 132kV or above Sub-station projects with a combined value of more than R 40million, but less than R80 million in the previous five years	15 Points		
	Combined completed electrical 132kV or above Sub-station projects with a combined value greater than R80 million and above in the previous five years	25		
Engineering Qualifications and Competency of Key Staff: Trade tested artisan	Maximum of two Electrical (Heavy Current) Trade Tested Artisan with certification, each having more than 5 years' experience	10 per electrician	55	A copy of electrical trade test certificate to be attached with curriculum vitae showing relevant experience in 132kV GIS or above on Sub-station works.
	Professional Registered Safety Officer with a minimum of two years' experience post qualification and qualification in Health and Safety (Safety Management Training Course (SAMTRAC) or Diploma)	10		A copy of safety training certificate or diploma to be attached with curriculum vitae showing relevant experience in 132kV or above on Sub-station works.
	Professional ECSA Registered Technician with more than 5 years' experience	10		A copy of the national electrical diploma (Heavy Current/Power) to be attached with curriculum vitae showing

				relevant experience in 132kV or above GIS on Sub-station works.
	Electrical (Heavy Current) Trade Tested Clerk of Works with certification having more than 10 years' experience	15		A copy of electrical trade test certificate to be attached with curriculum vitae showing relevant experience in 132kV GIS or above on Sub-station works.
Plant, Tools and Equipment of the bidder-	Minimum of 3 Bakkies; Minimum ½ Ton	5	20	Proof of Ownership in the name of the bidder or (logbook) or invoice in the name of the bidder or an original letter of intent to hire signed by both parties. For the crane truck tenderers must submit pictures of the truck.
	Plant:			
	TLB	5		
	Crane truck (Min. 10 tons)	5		
	Tipper Truck	3		
	Excavator	2		
Total Points			100	
Minimum threshold			80	

NOTES:

1. A minimum threshold of 80 points must be obtained to allow the bidder to go to the next stage of evaluation.
2. An Implementing Agent intending to change any competent key staff shall notify the Head of Electricity in writing. The replacements shall be of the same qualifications and experience as per the submission of the tender.
3. Failure to do so will render the tender's contract to be terminated. The resources must be of the same competency, qualifications, experience, and expertise as those of the original submissions.

17.2 Preference Point System

The 80/20 Preference Points will be allocated as follows:

Total Price	-	80 Points
Specific Goals	-	20 Points

Specific Goal (Target)	Points	Verification Method
100% Black African owned	20	Full CSD report

18.0 **PRESENTATION**

- 1) The successful Implementing Agent will be required to submit an implementation plan with periods in form of a project Gantt Chart.
- 2) Implementing Agents will be required to submit progress reports as per project champion requirements.

19.0 **ANY OTHER IMPORTANT INFORMATION**

- 19.1 The successful bidder will be expected to enter into a Service Level Agreement with Msunduzi Municipality after receiving the appointment letter.
- 19.2 Any amendments to the legal and procedural content of this bid shall be addressed in the SLA and entered into agreement with Msunduzi Municipality and successful bidder(s).
- 19.3 Two weeks after receiving the appointment letter the successful bidder(s) must submit the health and Safety file to the SHERQ manager.
- 19.4 The appointed Implementing Agents utilized by the successful bidder must complete a Standard Operating Procedures Course at Msunduzi Municipality training Centre, passing grade will be 80% for the relevant modules related to this project.
- 19.5 All the equipment delivered must be accompanied with protection wiring diagrams, layout drawings, factory test results, special Tools, operations manual and maintenance manual.

20.0 **PRICE SCHEDULE**

Refer to BOQ/Price Schedule herein.

NOTE: The municipality reserves the right to negotiate the rates.

21.0 **ESCALATION**

The rates will remain fixed for the first year of the contract and an increase based on SEIFSA indices: The relevant table will apply for the remaining months upon invoice submission. It is the responsibility of each appointed Implementing Agent to submit to the Supply Chain Management Unit a letter requesting an increase as per the SEIFSA calculations. The applicable rates of exchanges (ROE's) required for the supplies and deliveries shall be applicable where relevant. The base date will be the twelfth month after the twelve months have lapsed.

22.0 **MATERIALS**

Capital equipment (132kV GIS and power transformers) will be supplied by the Msunduzi municipality. The other sundry materials and any other materials will be supplied by the Implementing Agent and must comply to SABS or IEC or any relevant standard.

23.0 CONTRACT TO BE IN CONFORMITY WITH BY-LAWS AND ANY OTHER APPLICABLE LAWS

The contract shall be carried out subject to and in conformity with any law, regulation or By-law which is of application thereto and shall be conditional upon any necessary consent required by law being obtained.

24.0 COUNCIL'S LIABILITY AND INDEMNITY

24.1 The Service Providers hereby indemnifies the Council and its employees and agents against all losses and claims for injuries or damages to any person or property whatsoever which may arise out of the execution of this contract.

24.2 The Council shall not be held liable to the Service Providers for any direct or indirect damages or losses and the Council shall be indemnified and held free against claims arising out of:

24.2.1 any negligent or innocent misrepresentations made by the Council, its employees or agents in respect of any data, information and statistics supplied to the Service Providers prior to or during the contract; provided that this condition shall not deprive the Contractor of any payments lawfully due to the Service Providers in terms of the contract, and

24.2.2 a change in a legislative provision applicable to the contract.

25.0 ASSIGNMENT AND SUBLETTING

Neither the Service Providers nor the Council shall assign or cede the contract or any part thereof or any benefit or interest therein or thereunder without the written consent of the other. The Service Providers shall not sub-let the whole or any part of this contract without the written consent of the Engineer and such consent, if given, shall not relieve the Service Providers from any liability or obligation under the contract.

26.0 SECRECY OF INFORMATION

Subject to the provisions of the Promotion of Access to Information Act, the information revealed in this tender document is to be classified as confidential. Accordingly, the Engineer reserves the right to request references and generally examine bona fides and available facilities of any Company of Firm wanting to participate in this contract.

27.0 SEQUESTRATION OR SURRENDER OF SERVICE PROVIDER'S ESTATE

In the event of an order being made for sequestration of the Service Provider's estate, whether provisional or final, or in the event of an application being made for such order, or in the event of the Service Providers making application for the surrender of the Service Provider's estate, or if the Service Providers shall enter into, make or execute any deed of assignment or other composition or arrangement with, or assignment for the benefit of the Service Provider's creditors, or purport to do so, or if the Service Providers, being a Company, shall pass a resolution, or if the Court shall make an order for the liquidation of such company, the Council shall have the right, summarily and without recourse to law, to terminate the contract without payment of any compensation to the Service Providers, and without prejudice to the right of the Council to sue the Service Providers for any damages sustained by it in consequence of one or the other of the afore-mentioned events.

28.0 LAW TO APPLY

The contract shall in all respects be construed in accordance with the law of the Republic of South Africa, and any difference that may arise between the Council and the Service Providers in regard to the contract shall be settled in the Republic of South Africa.

29.0 PATENT RIGHTS

The Service Providers shall pay all royalties and expenses and be liable for all claims in respect of the use of patent rights, trade marks or other protected rights, and shall hold the Council indemnified and harmless against any claims for loss or damage to (including legal expenses) arising therefrom.

THE MSUNDUZI MUNICIPALITY

CONTRACT No. SCM 9 OF 26/27

CONSTRUCTION, UPGRADE AND COMMISSIONING OF PINE STREET PRIMARY SUB-STATION

BILL OF QUANTITIES

ELECTRICAL WORKS					
ITEM	DESCRIPTION	UNIT	QTY	Rate	TOTAL (excluding VAT)
1	PRELIMINARY AND GENERAL				
1.1	Construction of a temporary shelter and testing of 132kV switchgear at the Northdale primary substation: The Implementing Agent must construct a waterproof shelter at Northdale primary substation and perform all the necessary tests (insulation, continuity etc.) to ascertain the integrity of the switchgear as it has been stored for a prolonged period.	lot	1		
1.2	Switchgear Collection: Uncrate all the 132kV switchgear and accessories. Collect switchgear from the Northdale primary substation and transport it to the Pine primary substation.	lot	1		
1.3	Site establishment and de-establishment: Allow for complying with all the General and Special Conditions of Contract, labour requirements, site establishment and the provision of a site office for use of the Implementing Agent, client and engineer, water and sanitary facilities, first aid services, fire extinguishers, security lighting, barricading, warning signs, public safety.	lot	1		
1.4	Site crew accommodation: Allow for Implementing Agent personnel accommodation	per month	18		
1.5	Transportation: Allow for attendance to all site meeting and inspections, transport and time, related to such meetings and inspections	lot	1		
1.6	Storage, Insurance and Guarantee: Allow for the storage and safe keeping of all materials and equipment including the provisions of insurances as stipulated in the Conditions of Contract, for the duration of the contract.	per month	18		
1.7	Project Management and office overheads	per month	18		
1.8	Site security during construction: Provision of security services up until the site has been handed over back to the Msunduzi Municipality (1 x armed during the day and 2 x armed at night)	per month	18		

1.9	Occupational Health and Safety requirements: Allow for compliance with the requirements of the Occupational Health and Safety Act and any other related regulations	lot	1		
1.10	Drawings: Allow for marking-up a full set of drawings to show the exact locations/positions of cables, cable joints, road crossings etc. These "As-built" must be handed to the engineer/project champion at commissioning of the equipment. Also all maintenance manuals, including all technical literature, test certificates and wiring diagrams as per specification. Two of hard copies and a soft copy must be provided. Reviewing of the existing drawings.	lot	1		
1.11	Testing and Commissioning: Allow to test and commission the complete installation in the presence of Msunduzi Municipality's representatives and hand over for commercial usage. Testing and commissioning of the high and medium voltage installation by a certified Engineer as per SANS 10142-2. Testing shall include VLF (Very Low Frequency) tests by a certified/qualified specialist. Testing shall be witnessed by Msunduzi Municipality. This will also include the testing of high and medium voltage switchgear by a specialist commissioning engineer.	lot	1		
1.12	Professional Registered Civil/Structural Engineer: Civil design includes but is not limited to Earthworks, Stormwater Drainage, Structures, Footings, Buildings, Bunds, Hydraulics, Roadworks, Oil/Water Separation and Fences. All civil design must comply with the latest editions (including amendments)	lot	1		
1.13	Professional Architecture: Will be responsible for the building designs review, produce the final design for construction and monitor construction activities and making sure that the building complies with National Building Regulations.	lot	1		
1.14	Professional Registered Geotech: All civil design must be based off a thorough geotechnical investigation specific to the site by a registered Geotechnical Engineer. A check of the suitability of existing geotechnical information should be carried out prior to conducting a new investigation. As geotechnical work within substations can be restrictive and costly a full geotechnical investigation is usually carried out to assist in the design of future works. Full geotechnical assessment and report must be produced	lot	1		

1.15	Professional Registered Quantity Surveyor: All civil design levels and set out must be based off a survey by a Registered Surveyor. For existing substations with yard stone the contour survey of existing yard must be of Ground Level not Stone Level to determine surface drainage.	lot	1		
1.16	Professional Registered Lead Electrical Engineer: Allow for design and sign off electrical works, protection design, grading study and settings and any other relevant scope of work	lot	1		
1.17	Resident Engineer: Key Responsibilities Site Supervision: Oversees daily construction activities, monitoring progress and ensuring work aligns with approved drawings and specifications. Quality Assurance: Makes sure completed work complies with quality standards and contract terms. Coordination and Communication: Acts as a liaison between the project owner, Implementing Agents, and regulatory bodies to ensure seamless communication and collaboration. Technical Expertise: Applies engineering knowledge to assist with project design, review regulations, and develop efficient project plans. Contract Administration: Administers the project contract effectively, verifying materials, labor, and quantities, and managing claims and disputes. Record Keeping: Maintains detailed project records, including daily logs, progress reports, site diaries, and material test results. Problem-Solving: Addresses technical challenges and issues that arise during construction to ensure project success.	per month	18		
1.18	Environmental: Comply with environmental requirements	lot	1		
1.19	Permits and Notices: Allow for obtaining all necessary permits for transport of equipment and/or giving of notices to any other authority or institute involved, as well as co-operation agreements with other traders/Implementing Agents involved in the project, including the issuing of shutdown notices to the communities affected.	lot	1		
1.20	Clerk of Works: The clerk of works must be senior authorised with an operating licence (Operating Regulations on High Voltage Systems- ORHVS) on high voltage (132kV or above) and it must be noted that the substation is live.	per Month	18		

	PROVISIONAL AMOUNTS				
1.21	Payment of 10 x Local General Assistants	per Month	18	R34,28 per hour (as per NBCEI under Region C Tier 1)	R1 140163,20 (R63 342,40 per month)
1.22	Payment of 1 x Community Liaison Officer (CLO)[Electrical Assistant]	per Month	18	R48,02 per hour (as per NBCEI under Region C Tier 1)	R152 127,36 (R8 451,52 per month)
Sub Total Carried To Summary Page					

2.	Collection from Northdale primary substation, Erection and commissioning of 132kV GIS, 40MVA 132/11kV Transformer and NECRT's	Quantity	Unit Price	Total
2.1	132kV 1600A Bus-Section Bay	1		
2.2	132kV 1600A Cable Feeder Bay	6		
2.3	11KV 300Amp NECRT's	2		
2.4	11kV bushings quadrature Size 3 3150 Amp-Type B and HV Separable Tyco Bushing	3		
2.5	Transformer Testing & Commissioning	2		
2.6	Transformer Plinth and Bund wall foundation	2		
Sub-Total Excl Vat Carried to Summary Page				

3. Protection and Metering

ITEM	DESCRIPTION	UNIT	QTY	UNIT INSTALL	UNIT SUPPLY	Total (Excl. VAT)
3.1	NEW BUS-ZONE SCHEME –132kV					
3.1.1	Supply and install IEC61850 132kV Bus section control scheme and 7 Bay HV Low Impedance Buszone Scheme (Ethernet SCADA)	each	1			
3.1.2	Swing frame panel of dimensions: 2400mm high x 800mm wide x 600mm deep suitable for top or bottom entry of cables. Includes :- - installation of schemes into panel - all blanking plates to close-up front panel aperture - packaging for transport	each	1			
3.2	NEW TRANSFORMER PROTECTION AND CONTROL SCHEMES					
3.2.1	Supply and install IEC61850 132/11kV 40MVA Transformer Bay Control and Protection Scheme and Tap-change control Scheme- (Ethernet SCADA)	each	2			
3.2.2	Swing frame panel of dimensions: 2400mm high x 800mm wide x 600mm deep suitable for top or bottom entry of cables. Includes:- - installation of schemes into panel - all blanking plates to close-up front panel aperture	each	2			
3.3	132kV CURRENT DIFFERENTIAL FEEDER SCHEMES					
3.3.1	SEL411L Differential, non-directional overcurrent and earth fault protection, over 1300nm Fibre optic communication (Ethernet SCADA)	each	6			
3.3.2	Swing frame panel of dimensions: 2400mm high x 800mm wide x 600mm deep suitable for top or bottom entry of cables. Includes: - - installation of schemes into panel - all blanking plates to close-up front panel aperture	each	6			
3.4	QUALITY OF SUPPLY METERING PANEL					
3.4.1	Quality meter	each	PS			650,000.00
3.5	CURRENT TRANSFORMERS					
3.5.1	Outdoor Cable slip-on current transformer with three protection class multi tap windings 800/400/1. (7.5VA) 130mm internal diameter	each	6			
Total for Protection and Metering Carried To Summary Page						

4. LV Cabling, Control Cabling, AC Change over

ITEM	DESCRIPTION	UNIT	QTY	UNIT INSTALL	UNIT SUPPLY	Total (Excl. VAT)
4.1	AC DISTIBUTION BOARDS					
4.1.1	Yard Change-over panel as per detailed drawings	each	1			
4.2	CONTROL and LV CABLES					
4.2.1	CABLES, LV - CONTROL - 2.5mm ² x 19Core PVC	m	3500			
4.2.3	CABLES, LV - CONTROL - 2.5mm ² x 12Core PVC	m	2500			
4.2.4	CABLES, LV - CONTROL - 2.5mm ² x 2Core PVC	m	3000			
4.2.5	CABLES, LV - CONTROL - 2.5mm ² x 4Core PVC	m	2500			
4.2.6	CABLES, LV - CONTROL - 4mm ² x 4Core PVC	m	1500			
4.2.7	CABLES, LV - 16mm ² x 4Core PVC	m	300			
4.2.8	CABLES, LV - 35mm ² x 4Core PVC	m	150			
4.3	CABLE GLANDS					
4.3.1	CABLE GLANDS, Size 0, max. 12.6mm + earth tag	each	150			
4.3.2	CABLE GLANDS, Size 1, max. 15.7mm + earth tag	each	150			
4.3.3	CABLE GLANDS, Size 2, max. 20.4mm + earth tag	each	130			
4.3.4	CABLE GLANDS, Size 3, max 26.3mm + earth tag	each	130			
4.3.5	CABLE GLANDS, Size 4, max 34mm + earth tag	each	10			
4.4	CABLE TERMINATION PER END - Includes hook-lug and numbering (average of four Letters or Numbers or both)					
4.4.1	CABLE TERMINATION - 2.5mm ² x 19Core	each	130			
4.4.2	CABLE TERMINATION - 2.5mm ² x 12Core	each	130			
4.4.3	CABLE TERMINATION - 2.5mm ² x 4Core	each	150			
4.4.4	CABLE TERMINATION - 2.5mm ² x 2Core	each	150			
4.4.5	CABLE TERMINATION - 16mm ² x 4Core	each	10			
4.4.6	CABLE TERMINATION - 50mm ² x 4Core	each	10			

4.5	Installation of 50mm Fibre cable duct from basement to Control Room.	m	150			
Total for Control Cabling and DC Carried To Summary Page						

5. 132kV Cable and Fibre Cable

ITEM	DESCRIPTION	Unit	Est. Qty	FOB Price Supply (SA Currency)	Unit Shipping and Delivery charge (SA Currency)	Unit Price of Mark-up and Installation (SA Currency)	Total Prices at Destination (SA Currency)	
							Total Unit Price (B + D + E)	Total Price supply and Install (F x A)
			A	B	D	E	F	G
5.1	Supply and Installation of Cable Accessories and Transport and Handling of Cable							
5.1.1	145kV SF6 Tyco PHVS sealing End for terminating 1200mm ² cable (GIS end)	each	6					
5.1.2	145kV Tyco PHVS Type sealing End for terminating 400mm ² cable (GIS and TRFR end)	each	18					
5.1.3	Outdoor Cable sealing end support structure (Optional)	each	6					
5.1.4	Basement Cable support structure per bay	each	6					
5.1.5	Basement trefoil circuit floor supports and cable cleats	each	20					
5.1.6	Pick up 600m drum and transport 1200mm ² single core 132kV CSA cables from Northdale Substation and off-load at drum station	Lot	1	free issue				
5.1.7	Pick up 1000m drum and transport 400mm ² single core 132kV CSA cables from Northdale Substation and off-load at drum station	Lot	1	free issue				
5.1.8	145kV Straight through Joint suitable for 1200mm ² cable	each	3					
5.1.9	145kV Sheath Break Joint suitable for 1200mm ² cable	each	3					
5.1.10	11kV Single Core CWS 630mm ² Cu cable 35mm ² CWS water blocked HDPE sheath.	M	1500					
CARRIED FORWARD								

ITEM	DESCRIPTION	Unit	Estimate d Qty	FOB Price Supply (SA Currency)	Unit Shipping and Delivery charge (SA Currency)	Unit Price of Mark-up and Installation (SA Currency)	Total Prices at Destination (SA Currency)	
							Total Unit Price (B + D + E)	Total Price supply and Install (F x A)
			A	B	D	E	F	G
BROUGHT FORWARD								
5.1.11	Size 3 Separable connector for 11kV 630mm² cable. 35mm² CWS. 3 phase set.	Each	24					
5.1.12	Tyco Blind Plug for Dry Compact Switchgear and Transformer terminations. Suitable for use where the switchgear needs to be tested or is under operation without a cable connection	Each	6					
5.1.13	1-Way earth Structure mounted Link box Sheath Voltage Limiters	Each	18					
5.1.14	6-Way Stainless steel kiosk mounted Cross-Bonding earth link box with Sheath Voltage Limiters	Each	0					
5.1.15	3-Way Structure mounted earth Link box with Sheath Voltage Limiters	Each	2					
5.1.16	6-Way CDU type Cross-Bonding earth link box with Sheath Voltage Limiters	Each	2					
5.1.17	10kV Bonding lead cable 300mm² Cu or equivalent	M	300					
5.1.18	10kV Bonding lead cable 120mm² Cu or equivalent	M	300					
5.1.19	Sheath Voltage Limiter (SVL)	Each	9					
5.1.20	3-Way Structure mounted earth Link box	Each	0					

5.1.21	1-Way Structure mounted earth Link box	Each	6					
5.1.22	Concrete Link box Manhole including delivery	Each	2					
5.1.23	Concrete Manhole Lid including delivery	Each	2					
5.1.24	Lifting, Transportation and Installation of Manholes from construction site to joint bay	Each	2					
5.1.25	48 core Single mode Optical Fibre heavy duty duct cable	M	2000					
5.1.26	96 core Single mode Optical Fibre heavy duty duct cable	M	1500					
5.1.27	48 core Fibre Dome Joint	M	2					
5.1.28	96 core Optical Fibre cable joint	Each	2					
CARRIED FORWARD								

ITEM	DESCRIPTION		Unit	Estimated Qty	Unit Price (Excl. VAT)	Total Price (Excl. VAT)	VAT Applicable to Column E
				A	D	E	F
BROUGHT FORWARD							
5.2	Excavation, Cable Hauling/ Laying, Backfilling, Installation of Joints and Terminations						
5.2.1	EXCAVATION AND BACKFILLING						
	a)	Sand and soft soil	m³	100			
	b)	Hand pickable soil	m³	100			
	c)	Excavation requiring compressor	m³	200			
	d)	Excavator (any type of ground)	m³	3			
	e)	Saw cutting of hardened surfaces (Both sides) per linear meter					
		i) 100-150 mm depth	M	10			
		ii) 150-200 mm depth	M	10			
		iii) 200-250 mm depth	M	300			
	f)	Rock blasting	m³				
	g)	Double handling in removal of above items from trench (excluding clearing of inspection paths adjacent to trench) any type of soil and returning to trench including transport to and from storage area	m³	200			
	h)	Pipe jacking 200mm galvanised steel pipe (6m spans)	M	24			
	i)	Pipe jacking (3mx400mmx8mm steel pipe)	M	24			
	j)	Removal of premix	m³	1			
	k)	Backfilling and compacting including bedding material	m³	400			
5.2.2	SUPPLY AND LAYING OF PIPES IN GROUND						
	a)	Supply and install 32mm dis. HDPE pipes in ground no concrete (for optic fibre cable)	M	300			
	b)	Supply and install 50mm dia. HDPE pipes in concrete including Concrete (for optic fibre cable duct above)	M	100			
CARRIED FORWARD							

ITEM	DESCRIPTION		Unit	Estimated Qty	Unit Price (Excl. VAT)	Total Price (Excl. VAT)	VAT Applicable to Column E
				A	D	E	F
BROUGHT FORWARD							
	c)	6x160mm dia. HDPE pipes in concrete incl. concrete	M	40			
	d)	3x110mm dia. HDPE pipes in concrete incl. concrete	M				
5.2.3	CABLE LAYING / HAULING						
	a)	132 000 volt single core 1200mm ² Al XLPE cable	M	600			
	b)	132 000 volt single core 400mm ² Al XLPE cable	M	1000			
	c)	Hauling of 96 core heavy duty optic fibre duct cable in duct	M	500			
	d)	Manholes for optic fibre cable hauling	each	6			
	e)	Brackets and cleats (supply and install)	each	20			
	f)	Hauling of 48 core heavy duty optic fibre duct cable in duct	m	1000			
5.2.4	SUPPLY AND INSTALL BENTONITE FILLING FOR DUCT WITH POWER CABLES						
	a)	Single core power cable in 160mm ducts	m ³	12			
5.2.5	CLOSE TIMBER SHORING						
	a)	Per metre run of trench - i.e. 2 sides	m	300			
	b)	Close shoring left in	m	10			
5.2.6	GUNITING OF TRENCH WALL (20mm thickness assumed)		m ²	200			
5.2.7	SUPPLY AND TRANSPORT OF SOIL TO SITE (Including surplus to tip)						
	a)	Fine clean soil for bedding of cable	m ³	100			
	b)	Trench filling	m ³	100			
CARRIED FORWARD							

ITEM	DESCRIPTION	Unit	Estimated Qty	Unit Price (Excl. VAT)	Total Price (Excl. VAT)	VAT Applicable to Column E
				D	E	F
BROUGHT FORWARD						
5.2.8	SPECIAL BACKFILLING (supply of all materials and including surplus to tip)					
	a) Weak mix concrete (30:1 Umgeni sand and cement)	m³	20			
	b) Mixing cement with existing soil before backfilling at 30:1	m³	20			
	c) Bidem	m²	60			
5.2.9	SCREENING OF BACKFILL THROUGH 6mm SCREEN	m³	200			
5.2.10	SUPPLY, TRANSPORTING AND LAYING OF CONCRETE COVER SLABS (approximate weight of cover slabs 11kg, approximate size of cover slabs -600 x 380 x 38mm)	each	600			
5.2.11	SAND BAGS (approx-300x600x150mm)					
	a) filled with fine clean soil	bag	100			
	b) filled with 30:1 - Soil: cement mix	bag	100			
5.2.12	ERECTION OF OUTDOOR SEALING END SUPPORT STRUCTURES	each	6			
5.2.13	JOINT BAY EXCAVATION AND REINSTATEMENT FOR JOINTING	each	2			
5.2.14	JOINTING / TERMINATING					
	a) 145kV Straight jointing of single core XLPE cable	each	3			
	b) 145kV Sheath break jointing of single core cable	each	3			
	c) Install cross bonding / single point bonding box at sheath break joint bay / sealing ends	each	6			
CARRIED FORWARD						

ITEM	DESCRIPTION		Unit	Estimated Qty	Unit Price (Excl. VAT)	Total Price (Excl. VAT)	VAT Applicable to Column E
					D	E	F
BROUGHT FORWARD							
	d)	Terminate single core 145kV XLPE cable outdoor type, structure mounted sealing ends including fitting of all accessories, link boxes and earth links / SVLs	each	6			
	e)	Dome Joint 48 core fibre optic cable	each	2			
	f)	Splice 48 core fibre optic cable to pig-tails at control rooms at substations	each	2			
	g)	Splice Joint 96 core fibre optic cable to cable at joint bay	each	2			
	h)	Splice 96 core fibre optic cable at control rooms at substations in 24 Port patch panel including cable separation into 4 x 24 Core break out kits to each patch panel	each	2			
5.2.15	TOP SURFACE REPAIRS						
	a)	Black top road repairs (50mm tar, 100mm Crusher material)	m²	600			
5.2.16	LABOUR RATES						
	a)	Cable jointer (qualified artisan)	hr	16			
	b)	Foreman (experienced artisan)	hr	16			
	c)	Cable laying supervisor	hr	16			
	d)	Jointer's labourers (semi-skilled)	hr	16			
	e)	Supervisors (semi-skilled)	hr	16			
	f)	Labourers	hr	16			
	g)	Traffic controller with two way radio	hr	16			

5.2.17	TESTING						
	a)	10kV Sheath integrity test	each	12			
	b)	AC Voltage test of main insulation per phase	each	6			
CARRIED FORWARD							
ITEM	DESCRIPTION		Unit	Estimated Qty	Unit Price (Excl. VAT)	Total Price (Excl. VAT)	VAT Applicable to Column E
					D	E	F
BROUGHT FORWARD							
5.2.18	INSTALLATION OF TREFOIL CABLE CLEATS AND SUPPORT		each	30			
5.2.19	SUPPLY AND INSTALL RDSS- Rayflate Duct Sealing System						
	<i>Extensive testing with various duct sizes at room temperature and under load cycling conditions has shown that the sealing system is watertight and airtight at specific temperatures, even when cables were subjected to bending or vibration. Resistance to common chemicals has been proven by immersion tests.</i>						
	a)	Inflation tool complete with an ON/OFF switch and an automatic pressure monitoring system.	each	3			
	b)	16gr CO2 gas cylinders. Each gas cylinder inflates approx. 5 pcs of RDSS-100 duct seals. Each box contains 10 gas cylinders.	each	3			
	c)	Inflation tool using a pressure bottle, an air-compressor or a main air pressure line with pressure input between 4 bar and 10 bar. Features automatic shutoff, a VG8 valve connection and two alternative connections for plastic or rubber hoses.	each	1			
	d)	Seal for duct size 110mm internal diameter and can accommodate cable size from 0-90mm diameter	each	3			
	e)	Seal for duct size 160mm internal diameter with cable size from 60-139mm diameter	each	3			

	f)	Prefabricated adapter for sealing large diameter ducts. The one-piece, single sized adapter is designed to work with RDSS-125 and RDSS-150 Rayplate duct sealing products for sealing ducts up to 210 mm in diameter and has an unlimited shelf life. RDSS-AD-210 is boxed in batches of 4 and supplied with 1 lubricant dispenser and installation instructions.	each	10			
	g)	RDSS-Clips for use in multiple cables in a single duct applications are packed in boxes of 5 pieces. RDSS-Clips must be ordered as a separate item.	each	3			
	h)	RDSS-Clips for use in multiple cables in a single duct applications are packed in boxes of 5 pieces. RDSS-Clips must be ordered as a separate item.	each	3			
TOTAL for 132kV and 33kV Cable Carried To Summary Page							

6. SCADA Panel and Fibre Accessories

Item	Part Number	Description	unit	Estimated Qty	UNIT SUPPLY	Total (excluding VAT)
6.1.0	SMP Panel					
6.1.1	SMP SG4250 00AECAAA000000	SG-4250 Substation gateway with 10/100/1000 Base TX, 3 by 8 x RS232/485, 125-250Vdc	Ea	1		
6.1.2	Advanced Option Package	Support of Soft PLC Engine, Pass through, Operational HMI and SOE recorder. Available for SMP SG-4250 and SMP 16 with Pentium processor, with version 7.1 or higher	Ea	1		
6.1.3	Embedded SMP Web Server.	Provides access to SMP real-time and maintenance data using a standard web browser.	Ea	1		
6.1.4	Automation function package.	Comprehensive set of logic and group operations for the SMP Gateway. Now included free of charge.	Ea	1		
6.1.5	Basic Protocol Package	Supports 5 class 1 master protocols and 2 class 1 slave protocol. Available for all SMP Gateway platforms.	Ea	1		
6.1.6	IEC61850 Master	Supports IEC61850 TCP/IP per SMP	ea	1		
6.2.0	Auxiliary IO -					
6.2.1	SEL2505	Remote I/O Modules- eight digital inputs, eight digital outputs, and a fibre-optic communications port	ea	1		
6.3.0	IRIG B CLOCK					
6.3.1	24070000B	SEL-2407 Satellite-Synchronized Clock, 19"rack mount	ea	1		
6.3.2	SEL-9524A	GPS GNSS Antenna	ea	1		
6.3.3	915900139	SEL surge protector kit	ea	1		
6.3.4		50 ohm cable, 50m long with connectors	ea	1		
6.3.5		50 ohm coaxial cable to SMP gateway plus connectors	lot	1		
CARRIED FORWARD						

Item	Part Number	Description	unit	Estimated Qty	UNIT SUPPLY	Total (excluding VAT)
BROUGHT FORWARD						
6.4.0	Data Switches					
6.4.1	PT-7828	Layer 3 routing interconnects multiple LAN segments IEC 61850-3, IEEE 1613 (power substations) compliant. Turbo Ring and RSTP/STP for Ethernet redundancy. Isolated redundant power inputs with universal 110/220 VDC/VAC power supply range. Modular design. -40 to 85°C operating temperature range. Two single mode fibre (ST) and 16 copper ports or equivalent approved.	ea	1		
6.4.2	PT-7728	IEC 61850-3, IEEE 1613 (power substations), compliant. Turbo Ring and RSTP/STP for Ethernet Redundancy. Isolated redundant power inputs with universal 110/220 VDC/VAC power supply range. Built-in MMS server based on IEC 61850-90-4 switch data modelling for power SCADA. Modular design. -40 to 85°C operating temperature range. Moxa PT-7728 16 copper + Two single mode fibre (ST) ports or equivalent approved.	ea	2		
6.4.3	PT-508-MM-ST-HV	Moxa IEC 61850-3 managed DIN-Rail Ethernet switch, with 6 10/100BaseT(X) ports, and 2 100BaseFX multi-mode ports with ST connectors, 1 isolated power supply (88-300 VDC), -40 to 85°C operating temperature	ea	4		
6.5.0	Miscellaneous					
6.5.1		48U 19" lockable rack mount panel, steel door front and rear	ea	1		
6.5.2		10A double pole circuit breaker (for SMP, SMP IO supply, IO, Managed switches, Satellite clock, AC and DC supply)	ea	7		
6.5.3		Auxiliary contact for above circuit breaker (IO CB off, Unmanaged switch off, satellite clock off) to be wired to SMP IO	ea	3		
6.5.4		220V ac lamp with door switches front and rear	ea	1		
6.5.5		4mm ² terminals for AC and DC supplies	ea	4		
6.5.6		4mm ² terminals for SMP IO	ea	64		
CARRIED FORWARD						

Item	Part Number	Description	unit	Estimated Qty	UNIT SUPPLY	Total (excluding VAT)
BROUGHT FORWARD						
6.5.7		Wiring of AC, DC supplies and IO terminals	lot	1		
6.5.8		ST-ST multi-mode ruggedized fibre optic patch leads 30m	ea	4		
6.5.9		cat5e cable 1m each with connectors	ea	10		
6.5.10		serial cable for SMP IO connection	ea	1		
6.5.11		Panel drawings and manufacturing	lot	1		
6.5.12		Supply and install 110V D.C, 20A, 30Ah, batteries and 2 x battery chargers	each	2		
6.6.0	Single mode patch leads					
6.6.1		Single ST to ST 1m	each	10		
6.6.2		Single ST to ST 15m	each	6		
6.6.3		Duplex ST to ST 20m	each	6		
6.7.0	Multi-mode patch leads					
6.7.1		Single ST to ST 5m	each	10		
6.7.2		Single ST to ST 15m	each	10		
6.7.3		Duplex ST to ST 20m	each	10		
6.8.0	Fibre Accessories					
6.8.1		1U 24 Port Rack mounted and draw style 19" patch panel including rack and 24 single mode ST type pig tail terminations and splice tray	each	8		
CARRIED FORWARD						

Item	Part Number	Description	unit	Estimate d Qty	UNIT SUPPLY	Total (excluding VAT)
BROUGHT FORWARD						
6.9.0	SCADA requirements & gateway configuration					
		Define a standard for Msunduzi SCADA configuration for interface between SCADA at control and the Gateway	PS			800,000.00
		SCADA upgrade at Control Centre, define requirements to cater for future reporting, review how to move existing substation configurations into new SCADA package, determine future tag count, required communications protocols, server and storage requirement, communication equipment requirements at control and remote sites if not existing	PS			800,000.00
		Software configuration and testing to Pine street Substation	PS			1 400,000.00
Total for SCADA Panel Carried To Summary Page						

7. Control Building, Transformer Bays and Yard Civils

ITEM NO	DESCRIPTION			AMOUNT
	SUMMARY			
1	Earthworks	Bill	7.1	
2	Concrete, Formwork & Reinforcement	Bill	7.2	
3	Masonry	Bill	7.3	
4	Waterproofing	Bill	7.4	
5	Structural Steelwork	Bill	7.5	
6	Metalwork	Bill	7.6	
7	Plastering	Bill	7.7	
8	Plumbing & Drainage	Bill	7.8	
9	Paintwork	Bill	7.9	
10	External Works	Bill	7.10	
11	Provisional Sums, etc	Bill	7.11	
12	Preliminary and Generals			
15	Allow the Amount of R600 000,00 (Six Hundred Thousand Rand) for Contingencies to be used as directed by the principal agent in terms of Clause 17 of the Principal Building Agreement	Item		600 000,00
16	TOTAL (EXCLUDING VAT):			

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
BILL NO. 7.1					
	EARTHWORKS				
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades and to the Supplementary Preambles which are incorporated at the front of these Bills of Quantities				
	PREAMBLE NOTE				
	Tenderers are reminded that all excavation is in and around an existing live, high-voltage electricity sub-station. There are underground cables (known and unknown) on the site and excavation is to be carried out appropriately and priced accordingly				
	BULK EXCAVATION				
	Excavation in earth for basement:				
1	Not exceeding 2m deep	m ³	297		
2	Exceeding 2m and not exceeding 4m	m ³	297		
3	Exceeding 4m and not exceeding 6m deep	m ³	89		
	Extra over bulk excavation in earth for breaking up and removing:				
4	Brickwork	m ³	2		
5	Reinforced concrete	m ³	2		
	Back excavation of vertical sides of bulk excavation in earth for working space including backfilling compacted to 98% Mod. AASHTO maximum density:				
6	Exceeding 1,5m and not exceeding 3m deep for erection and removal of formwork to walls, etc., and for the application of a Derbigum waterproofing membrane, where the face of the measured excavation is 700mm away from the concrete surface	m ²	118		
	Risk of collapse of bulk excavations:				
7	Sides of basement excavations exceeding 1,5m deep	m ²	192		

	EXCAVATION OTHER THAN BULK				
	Excavation in earth not exceeding 2m deep below basement level:				
8	Trenches	m ³	23		
9	Holes	m ³	3		
	Risk of collapse of excavations other than bulk below basement level:				
Total Carried Forward					

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
Total brought Forward					
10	Sides of trench and hole excavations not exceeding 1,5m deep	m ²	32		
	CARTING AWAY				
	Extra over all excavations for loading, carting and dumping surplus excavated material and/or stockpiles (no allowance made for increase in bulk):				
11	Off site to a dumping site to be found by the Implementing Agent	m ³	579		
	EARTH FILLING, ETC.				
	Filling with selected material from the excavations compacted to a density of at least 98% Mod. AASHTO maximum density:				
12	Backfilling to trenches, holes, etc.	m ³	130		
	Filling with dump rock combined with G7 material (in accordance with TRH14:1985) supplied and carted on to site by the Implementing Agent and compacted in appropriately sized layers to a density of at least 93% Mod. AASHTO maximum density:				
13	Under basement raft foundation.	m ³	126		
	Filling with G7 material (in accordance with TRH14:1985) supplied and carted on to site by the Implementing Agent and compacted in 150mm thick layers to a density of at least 98% Mod. AASHTO maximum density:				
14	Under basement raft foundation	m ³	24		
	Filling with G2 material (in accordance with TRH14:1985) supplied and carted on to site by the Implementing Agent and compacted in 150mm thick layers to a density of at least 98% Mod. AASHTO maximum density:				
15	Under basement raft foundation	m ³	22		
16	Incremental backfilling behind basement retaining walls	m ³	97		
	Surface Preparation:				
17	Trim and level off surface of ground (excavated or filled under this contract) to receive concrete raft slab and thickenings for foundation beams, including excavating or filling, ripping and scarifying 150mm deep, stabilising with 4% lime and compacting the whole area for a depth of 150mm to a density of at least 98% Mod. AASHTO maximum density	m ³	167		
		68			

	KEEPING EXCAVATIONS FREE OF WATER				
18	Allow for keeping excavations free of water by hand or machinery	lot	1		
19	Allow for keeping excavations free of seepage water and water from other subterranean sources using appropriate dewatering methods	lot	1		
Total Carried Forward					

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
Total brought Forward					
	SOIL POISONING				
	Approved brand of anti-termite soil poison applied by a Registered Pest Control company and guaranteed against termite infestation for ten years:				
20	Under floors, etc., including forming and poisoning shallow furrows against foundation walls, etc., filling in furrows and ramming	m ²	167		
TOTAL BILL NO. 7.1					

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
BILL NO. 7.2					
	CONCRETE, FORMWORK & REINFORCEMENT				
	UNREINFORCED CONCRETE				
	<i>Concrete 20MPa/19mm stone in:</i>				
1	Internal plinths, machine bases, etc.	m ³	0		
2	External garden steps	m ³	2		
	UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
	<i>Concrete 10MPa/19mm stone in:</i>				
3	Blinding layer under footings, bases, etc	m ³	8		
4	Mass filling in foundations	m ³	2		
5	Internal plinths, machine bases, etc.	m ³	0		
	REINFORCED CONCRETE				
	<i>Concrete 25MPa/19mm stone in:</i>				
6	Slabs including beams and inverted beams	m ³	68		
7	Slabs including beams and inverted beams	m ³	6		
8	Walls	m ³	6		
9	Basement walls with and including Penetron waterproofing admixture	m ³	32		
	<i>Concrete 30MPa/19mm stone in:</i>				
10	Raft slab and thickening ground beams with and including Penetron waterproofing admixture	m ³	51		
11	'Bildon BRT1' natural anodised aluminium roof trim fixed to concrete	m	46		
12	Take delivery and fix only steel anchor/earthing assembly size overall approximately 510 x 510 x 500mm consisting of four 24mm diameter threaded steel anchor bolts caged together with 50 x 3mm copper flat section and with two 50 x 3mm copper flat section earthing lugs protruding from the plinth. (Supply only elsewhere measured)	No	10		
13	Take delivery and fix only louvred steel ventilation panel size 900 x 900mm into concrete wall. (Supplied by employer).	No	2		

14	Take delivery, set out and embed set of four holding down bolts approximately 450mm long in top of concrete in exact position including forming relieving pocket around each bolt (for crane rail elsewhere measured)	No	8		
15	Leave or form 200mm diameter hole through 255mm thick suspended slab	No	18		
16	Leave or form 200mm diameter hole through 230mm thick basement wall including holing formwork both sides	No	10		
16	60mm diameter heavy duty Class 34 UPVC sleeve 500mm long cast horizontally through 230mm concrete basement wall including holing formwork both sides	No	21		
17	160mm diameter heavy duty Class 34 UPVC sleeve 1600mm long cast horizontally through 230mm concrete basement wall including holing formwork both sides	No	9		
18	300 x 300 x 300mm Sump in basement raft floor including necessary thickening all round	No	1		
	FINISH TOP OF CONCRETE				
	Finishing top surfaces of concrete smooth with a wood float:				
19	Plinths, machine bases, etc.	m ²	1		
	Finishing top surfaces of concrete smooth with a steel trowel:				
20	Blinding layer under raft slab and thickenings for foundation beams all to receive Derbigum waterproofing membrane (elsewhere measured)	m ²	167		
	Finishing top surfaces of concrete smooth with a power float:				
21	Surface beds, slabs, etc., (Degree of Accuracy 1)	m ²	82		
	GROUTING				
	30MPa "Sika Grout 212" expanding cementitious grout:				

22	Bedding approximately 25mm thick under 210 x 300mm base plate including chamfered edges all round and filling four relieving pockets (elsewhere measured) around holding down bolts (for crane rail elsewhere measured)	No	8		
	CONCRETE TESTING				
23	Allow for making set of three concrete test cubes, sending to an approved testing authority for testing and paying all charges in connection therewith. (Provisional)	sets	20		
	ROUGH FORMWORK				
	Rough formwork to:				
24	Soffits of slabs	m ²	73		
25	Sides of rectangular columns	m ²	5		
26	Sides of rectangular column projections on basement walls	m ²	12		
27	Sides and soffits of beams	m ²	45		
28	Sides of inverted beams	m ²	12		
29	Sides of walls	m ²	41		
30	Sides of basement retaining walls	m ²	262		
31	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	119		
	Box in or out rough formwork to form:				
32	Horizontal or vertical chamfer 30 x 30mm in external or internal corner	m	101		
33	900 x 900mm Opening through 300mm thick wall				
	SMOOTH FORMWORK (DEGREE OF ACCURACY II)				
	Smooth formwork to:				
34	Soffits of slabs exceeding 250mm and not exceeding 500mm thick and propping exceeding 6,5m and not exceeding 8m high	m ²	73		
35	Soffits of slabs exceeding 250mm and not exceeding 500mm thick and propping exceeding 9,5m and not exceeding 11m high	m ²	30		
36	Sides and soffits of beams and projecting edges of slabs and propping exceeding 6,5m and not exceeding 8m high	m ²	55		

37	Sides of rectangular columns with total height exceeding 6,5m and not exceeding 8m above bearing level	m ²	64		
	Box in or out smooth formwork to form:				
38	Horizontal or vertical chamfer 30 x 30mm in external or internal corner	m	306		
39	Haunch 300mm wide on face of column, flush with two sides of column, the haunch 300mm projection and splayed on soffit from 550mm high at back to 250mm high at front edge and with 30 x 30mm chamfers on all exposed edges	No	8		
	REINFORCEMENT				
	Mild steel reinforcement to structural concrete work:				
40	Bars of various diameters	t	1.8		
	High tensile steel reinforcement to structural concrete work:				
41	Bars of various diameters	t	17.5		
TOTAL BILL NO. 7.2					

	BILL NO. 7.3				
	MASONRY				
	The Tenderer is referred to the relevant Clauses in: the separate document Model Preambles for trades, the Notes on the accompanying drawings, the Supplementary Preambles which are incorporated at the front of these Bills of Quantities				
	BRICKWORK				
	BRICKWORK IN SUPERSTRUCTURE				
	Brickwork of "Corobrik NFP" bricks in Class II mortar:				
1	Half brick walls in linings to concrete	m ²	25		
2	One brick walls	m ²	237		
	BRICKWORK SUNDRIES				
3	50 x 50mm Cement mortar triangular fillet to receive waterproof membrane (elsewhere measured)	m ²	92		
	Chip off projections, fill up crevices and cement wash with 1:6 cement and sand slurry:				
4	On concrete walls	m ²	133		
5	On concrete walls to receive Derbigum (elsewhere measured)	m ²	177		
6	On concrete ceilings and beams	m ²	112		
	Chip off projections, fill up crevices, cement wash with 1:6 cement and sand slurry and apply two coats "Brixal" bitumen emulsion waterproofing coating:				
7	On outer face of inner skin of brick walls including any additional labour required in raising wall in two separate skins and working around wire ties and/or reinforcing fabric	m ²	237		
8	On concrete surfaces behind brick linings	m ²	25		
	Brickwork reinforcement to NHBRC quality:				
9	155mm Wide reinforcement built in horizontally	m	743		
Total Carried Forward					

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
Total brought Forward					
	Movement joints comprising two layers of three-ply malthoid on smooth mortar bed at top of brickwork under slabs and beams:				
10	Joints not exceeding 300mm high or wide	m	92		
	Pre-stressed concrete fabricated lintels:				
11	110 x 75 Lintels in length not exceeding 3m	m	27		
	Turning pieces:				
12	230mm Wide turning piece to lintels, etc	m	2		
	Galvanised hoop iron cramps, ties, etc:				
13	30 x 1,6mm Wall tie 500mm long with one end shot pinned to brickwork, concrete or steelwork and other end built into brickwork	No	144		
	FACE BRICKWORK				
	Corobrik Firelight Satin FBX face bricks pointed with square recessed horizontal and vertical joints:				
14	Extra over NFP brickwork for facing	m ²	262		
15	Extra for building one course of faced brickwork with open drainage perpends at DPC (elsewhere measured)	m	58		
TOTAL BILL No.7.3					

	BILL NO. 7.4				
	WATERPROOFING				
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades and to the Supplementary Preambles which are incorporated at the front of these Bills of Quantities				
	DAMP-PROOFING OF WALLS AND FLOORS				
	One layer 375 micrometre "Gunplas Brikgrip" embossed polyethylene damp proof course:				
1	In walls	m ²	20		
	WATERPROOFING TO ROOFS, BASEMENTS, ETC.				
	4mm "Derbigum SP" fully bonded waterproofing and tanking including necessary preparation of surfaces to receive same:				
2	On flat and sloping smooth floated concrete blinding under basement floors	m ²	167		
3	On off-shutter concrete basement walls, plinths, etc.	m ²	177		
4	Collar and additional membrane around pipe penetration exceeding 100mm and not exceeding 200mm diameter at basement wall	No	30		
5	Collar and additional membrane around pipe penetration exceeding 200mm and not exceeding 300mm diameter at basement wall or cable ducts	m ²	10		
6	On screeded concrete flat roofs including turn-ups, turn-downs, etc	m	131		
7	Additional membrane 300mm girth at internal and external angles	No	87		

	WATERSTOPS				
	Expandite dumbbell type PVC waterstops with one edge cast into concrete and other edge epoxy grouted 75mm deep in and including groove in face of existing concrete:				
8	150mm Wide at construction joints including angles, intersections, etc., and any cutting and fitting formwork	m ²	87		
	PROTECTIVE ROOFING PAINT				
	Two coats "Nu-Roof" paint:				
9	On waterproofing to flat roofs	m ²	131		
	ROOF INSULATION				
	Isoboard high density 32-36kg/m ³ rigid extruded polystyrene 100% closed cell insulation board in 600mm widths with shiplap joints all round laid tightly butted on concrete slab strictly in accordance with the manufacturer's instructions:				
10	50mm Insulation boards	m ²	106		
	DRAINAGE AND PROTECTION TO WATERPROOFING				
11	Delta MS8 dimpled drainage layer as vertical protection to waterproofing (elsewhere measured) during backfilling of basement excavation	m ²	135		
12	Cartonal N1100 vertical protection layer 2,2mm thick to waterproofing (elsewhere measured) during backfilling of basement excavation	m ²	135		
	JOINT SEALANTS, ETC				
	Pro-Struct 649 polyurethane joint sealant including backing cord, "Pro-Struct 626" primer, etc.:				
13	13 x 15mm In horizontal joints between top of brickwork and underside of concrete including raking out mortar joint as necessary	m	46		

	Polymastic non-hardening waterproofing compound in pointing all round frames at junction with brickwork, concrete or steelwork and leave perfectly watertight:				
14	Metal door or window frames	m	56		
TOTAL BILL No.7.4					

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	BILL NO. 7.5				
	STRUCTURAL STEELWORK				
	The Tenderer is referred to the relevant Clauses in: the separate document Model Preambles for Trades, the Notes on the accompanying Drawings, the Supplementary Preambles which are incorporated at the front of these Bills of Quantities				
	STRUCTURAL STEELWORK				
	Fabricate, supply, deliver and erect including galvanising or painting as described Corrosion protection shall comply with the requirements of SABS 1200HC Galvanising shall comply with the requirements of SABS 763 (heavy duty)				
	CONTROL ROOM FLOOR (GALVANISED)				
1	Beam formed of IPE180 section with flat and angle section connections and cleats	t	1.2		
2	Post formed of IPEaa160 section with flat and angle section connections and cleats	t	0.6		
3	Perimeter support formed of 60 x 60 x 5mm angle section holed at 300mm centres and bolted to concrete (bolts elsewhere measured)	t	0.2		
4	12mm "Hilti" chemical anchor to concrete	No	32		
5	16mm "Hilti" chemical anchor to concrete	No	44		
6	Rectagrid type RS40/52kg/m ² flooring in panels varying in size around 900 x 700mm, with 50 x 4,5mm bearer bars in one direction and with banded edges, the panels cleated and bolted to steel bearers (elsewhere measured)	m ²	27		

7	Extra for cut-out in corner of panel to accommodate 190 x 190mm concrete column	No	2		
8	Extra for cut-out in side of panel to accommodate 190 x 300mm concrete column	No	2		
	CONTROL ROOM STAIR (GALVANISED)				
9	Stringers formed of 12 x 200mm plate with flat and angle section connections and cleats	t	0.04		
10	Treads formed of 6 x 250mm checker plate	t	0.33		
11	16mm "Hilti" chemical anchor to concrete	No	4		
	CRANE RAILS (GALVANISED)				
12	Crane rail formed of 203 x 203mm x 46,1kg/m universal column with 50 x 50mm plate welded on to form guide	t	1.9		
13	Set of four 20mm diameter Grade 4.8 L-shaped holding down bolts each 450mm girth with 75mm long thread and two nuts and two washers, all held in box shape with R8 bars welded at centre and near bottom. (Casting in elsewhere measured)	No	8		
Total Bill 7.5					

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	BILL NO. 7.6				
	METALWORK				
	The Tenderer is referred to the relevant clauses in the separate document Model Preambles for Trades and to the Supplementary Preambles which are incorporated at the front of these Bills of Quantities				
	Galvanised steel louvered meter room / switch room door units per eThekwini specification and as manufactured by Xpanda or other approved:				
1	Single door and frame suitable for one brick wall and fitted with and including hinges, three-point locking mechanism, hold-open cabin hook with eye and earthing strap, size overall 1060 x 2780mm high. (No louvered portion required). Frame to be positioned so as door opens outward through 180 degrees	No	2		
	GALVANISED MILD STEEL BALUSTRADES				
	Rebrail or other approved purpose-made hot dip galvanised balustrade system bolted to rectagrid floor decking:				
2	1075mm High horizontal balustrade comprising level top mount RT 90 degree two sphere stanchions at 900mm centres with 33,5mm diameter hand and foot rail tubes including bolts and bolting to top of steel decking	m	4		
3	Extra for 500mm straight closure	No	2		
4	Extra for 90 degree bend of hand and foot rails				
	Rebrail or other approved purpose-made hot dip galvanised balustrade system side bolted to stringer beam of steel staircase:				

5	1075mm High raking balustrade (special angle) comprising side mount SPL two sphere stanchions at 1400mm centres with 33,5mm diameter hand and foot rail tubes including bolts and side bolting stanchions to steel stringer beam of staircase	m	4		
6	Extra for 500mm angled closure	No	2		
7	Extra for angle bend of hand and foot rails	No	2		
	GALVANISED ROLLER SHUTTER DOORS				
	Roller shutters fixed to brickwork, concrete or steelwork:				
8	Chain operated individually slatted roller shutter for 2530 x 3650mm high opening, complete with box, guides and locking mechanism	No	2		
	POWDER COATED ALUMINIUM LOUVRE PANELS				
	Robertson Ventilation Industries (Pty) Ltd ventilation type E Series ESC aluminium weather-louvered panels with standard colour Classicoat finish complete with framing, nylon vermin proofing, etc., screwed into preformed opening in brick walls				
9	Louvre panel size 400 x 400mm high set in a U-shaped frame all round	No	4		
10	Louvre panel size 1800 x 400mm high set in a U-shaped frame all round and with one mullion forming two equal louvered openings	No	3		
	SUNDRY ALUMINIUM WORK				
11	30 x 30 x 3mm Aluminium angle section drip, plugged	m	46		
Total for Bill 7.6					

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	BILL NO. 7.7				
	PLASTERING				
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades and to the Supplementary Preambles which are incorporated at the front of these Bills of Quantities				
	SCREEDS				
	Screeds (1:3) as described on concrete:				
1	Average 75mm thick on roofs with upper surface to falls and crossfalls to receive waterproofing (elsewhere measured)	m ²	111		
2	50 x 50mm Triangular fillets against walls, kerbs, etc	m	52		
	CEMENT RENDER				
	Cement render (1:3) as described on concrete:				
3	Average 50mm thick (Degree of Accuracy 1) on floors and landings to receive epoxy finish (elsewhere measured)	m ²	102		
4	30mm Thick on treads and risers of stairs including reedings in treads	m ²	3		
5	20mm Thick on vertical wall surfaces	m ²	2		
	INTERNAL PLASTER				
	One coat cement plaster (1:5) as described on brickwork (part concrete) on:				
6	Walls	m ²	256		
7	Narrow widths	m ²	6		
	EXTERNAL PLASTER				
	One coat cement plaster (1:4) as described on brickwork (part concrete) on:				
8	Walls	m ²	52		
9	Narrow widths	m ²	61		
10	Narrow widths average 50mm thick to cills	m ²	1		

11	Bands 180mm wide around door/window openings in face brick walls including fair edge against facings one side	m	55		
12	Horizontal drip moulding 30 x 10mm projection on soffits over openings	m	46		
Total for Bill 7.7					

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	BILL NO. 7.8				
	PLUMBING AND DRAINAGE				
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades and to the Supplementary Preambles which are incorporated at the front of these Bills of Quantities				
	UNDER-GROUND ELECTRICAL DUCTS				
	Heavy duty Class 34 underground UPVC pipes				
1	160mm Pipe laid in ground including excavation not exceeding 1m deep	m	240		
2	Set of five 160mm pipes laid (in one layer of five pipes) in ground including excavation not exceeding 1m deep	m	20		
3	Set of six 160mm pipes laid (in one layer of six pipes) in ground including excavation not exceeding 1m deep	m	20		
4	Set of eight 160mm pipes laid (in two layers of four pipes) in ground including excavation not exceeding 1m deep	m	10		
5	Set of nine 160mm pipes laid (in one layer of nine pipes) in ground including excavation not exceeding 1m deep	m	10		
6	200mm Pipe laid in ground including excavation not exceeding 1m deep (concrete encasement elsewhere measured)	m	300		
	Extra on UPVC piping for the following fittings:				
7	160mm 90 degree long radius bend	No	47		
	Cable manhole, etc.:				
8	Excavate for and build cable manhole with one brick sides and fitted with 900 x 900mm x 171kg cast iron medium duty square manhole cover and frame. Size internally 800 x 800 x 1000mm deep	No	8		

9	Hole through existing one brick foundation wall for sleeve pipe not exceeding 200mm diameter (elsewhere measured) and later grout up solid around pipe	No	20		
	Sundries:				
10	Concrete 25MPa/19mm casing of a minimum thickness of 150mm all round 200mm horizontal UPVC pipe in ground including necessary additional excavation	m	300		
	RAINWATER DISPOSAL				
	"Watertite" seamless aluminium rainwater goods with G4 Colourtech finish:				
11	0,9mm Thick standard 125 x 150mm OG industrial eaves gutter fixed to brickwork or concrete	m	15		
12	Extra for stopped end	No	2		
13	Extra for outlet for and joint to 110mm diameter uPVC pipe	No	2		
	Soil and vent pipe grade rigid uPVC rainwater pipes:				
14	110mm Pipe fixed with brackets to brickwork	m	16		
	Extra on piping for the following fittings:				
15	110mm Bend	No	6		
	FIRE APPLIANCES, ETC				
	Chubb:				
16	9kg Ozone friendly dry chemical fire extinguisher	No	4		
Total for Bill 7.8					

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	BILL NO. 7.9				
	PAINTWORK				
	The Tenderer is referred to the relevant Clauses in: the separate document Model Preambles for trades, the Notes on the accompanying drawings, the Supplementary Preambles which are incorporated at the front of these Bills of Quantities				
	PAINT ON PLASTER, ETC.				
	One coat "Plascon" primer for new plaster and two finishing coats "Polvin Walls & Ceilings" emulsion paint on:				
1	Bagged and/or smooth off shutter concrete ceilings and beams	m ²	221		
2	Bagged and/or smooth off shutter concrete walls internally	m ²	174		
3	Plastered walls internally	m ²	263		
4	Plastered walls externally	m ²	113		
Total for Bill 7.9					

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	BILL NO. 7.10				
	EXTERNAL WORKS (ALL TRADES)				
	GENERAL SITEWORKS, EARTHWORKS, ETC.				
	Demolitions, etc.				
	Break up and remove reinforced concrete plinths including backfilling hole with G7 material supplied and carted onto site by the Implementing Agent, and compacting in 150mm thick layers to a density of at least 93% Mod. AASHTO maximum density:				
1	Plinth 600 x 600 x 1000mm deep with the top 150mm above ground	No	4		
2	Plinth 800 x 800 x 1200mm deep with the top 150mm above ground	No	11		
3	Plinth 900 x 1700 x 1450mm deep with the top 150mm above ground	No	8		
4	Plinth 1000 x 2100 x 1450mm deep with the top 150mm above ground	No	5		
	Break up and remove cable duct comprising 100mm thick unreinforced concrete floor slab, 230mm brick side walls and 75mm thick precast concrete cover slabs in 600mm long panels, including backfilling hole with G7 material supplied and carted onto site by the Implementing Agent, and compacting in 150mm thick layers to a density of at least 93% Mod. AASHTO maximum density:				
5	Trench cable duct 800 x 700mm overall cross-sectional size with PCC cover slabs flush with ground	m	51		
	Making good:				
6	Brick up in one brick wall and make good open end of existing duct where portion demolished	No	5		
	Break up and remove:				
7	Existing 150mm thick reinforced concrete surface paving at bunded area around existing transformer plinth	m ²	56		

8	Existing bund wall and unreinforced concrete strip footing made up of: 230mm thick common brick wall 1000mm high overall above foundation, and 600 x 200mm strip footing including backfilling hole with G7 material supplied and carted onto site by the Implementing Agent, and compacting in 150mm thick layers to a density of at least 93% Mod. AASHTO maximum density	m	53		
9	Existing retaining wall and unreinforced concrete strip footing made up of: 230mm thick common brick wall 1300mm high overall above foundation, and 750 x 250mm strip footing including backfilling hole with G7 material supplied and carted onto site by the Implementing Agent, and compacting in 150mm thick layers to a density of at least 93% Mod. AASHTO maximum density	m	30		
10	Set of common brick garden steps 1000mm wide and four steps high	No	1		
11	Set of common brick garden steps 1300mm wide and four steps high	No	1		
	Site Clearance, etc				
12	Allow for clearing the area of the site to be built upon of all grass, weeds, shrubs, trees with trunks not exceeding 200mm girth, debris, etc., including grubbing up all roots, scoffling up as required and cart away all vegetation and debris	m ²	1,629		
	Existing stone surfacing:				
13	Scrape aside and stockpile for later carting away (elsewhere measured) 100mm thick crushed stone site surfacing	m ²	1,629		
14	Extra over all excavations for loading, carting and dumping stockpiled material (no allowance made for increase in bulk) off site to a dumping site to be found by the Implementing Agent	m ³	163		

	BUNDED ENCLOSURES				
	Excavation in earth not exceeding 2m deep:				
15	Excavate not exceeding 2m deep to reduce levels under floors	m ³	57		
16	Trenches	m ³	38		
	Risk of collapse of excavations:				
17	Sides of trench and hole excavations not exceeding 1,5m deep	m ²	95		
	Extra over all excavations for loading, carting and dumping surplus excavated material and/or stockpiles (no allowance made for increase in bulk):				
18	Off site to a dumping site to be found by the Implementing Agent	m ³	78		
	Filling with selected material from the excavations compacted to a density of at least 98% Mod. AASHTO maximum density:				
19	Backfilling to trenches, holes, etc.	m ³	17		
	Filling with G5 material (in accordance with TRH14:1985) supplied and carted on to site by the Implementing Agent, and compacted in 150mm thick layers to a density of at least 98% Mod. AASHTO maximum density:				
20	Filling under surface beds, slabs, etc.	m ³	13		
	Filling with dump rock combined with G7 material (in accordance with TRH14:1985) supplied and carted on to site by the Implementing Agent, and compacted in 150mm thick layers to a density of at least 93% Mod. AASHTO maximum density:				
21	Filling under surface beds, slabs, etc.	m ³	26		
	Preparation:				
22	Rip, scarify as necessary and compact excavated surfaces to a density of at least 95% Mod. AASHTO maximum density for a depth of 150mm under surface beds, slabs, etc.	m ²	87		

23	Treat surface below surface beds, slabs, etc., with approved weed killer	m ²	87		
	Unreinforced concrete 10MPa/19mm stone in:				
24	Blinding layer under strip footings	m ³	2		
	Reinforced concrete 25MPa/19mm stone in:				
25	Strip footings	m ³	14		
	Reinforced concrete 30MPa/19mm stone in:				
26	Surface beds (minimise shrinkage 0,04%)	m ³	17		
	Fabric reinforcement:				
27	Type 193 fabric reinforcement in concrete surface beds, slabs, etc.	m ²	87		
	Mild and high tensile steel reinforcement to structural concrete work:				
28	Bars of various diameters	t	1.70		
	Masonry				
29	One brick wall in NFX bricks in Class I mortar in English bond	m ²	71		
30	Galvanised brick reinforcement 155mm wide built in horizontally	m	178		
31	Hole through one brick wall for 160mm sleeve pipe (elsewhere measured) and later grout up solid around pipe	No	8		
	Corobrik Firelight Satin FBS face bricks pointed with square recessed horizontal and vertical joints:				
32	Extra over NFX brickwork in English bond for facing	m ²	42		
33	Labour and material in brick-on-edge header course coping 230mm wide and 110mm high and point on top and both edges	m	59		
	Waterproofing:				
34	One layer 250 micrometre "Gunplas USB Green" waterproof sheeting	m ²	87		
	Joints:				
35	10mm "Masonite" bitumen impregnated insulation board between concrete and brick walls not exceeding 300mm high	m	86		

36	Saw cut 3mm wide x 60mm deep in top of concrete paving with the top 20mm reamed out to 6mm wide	m	16		
37	Pro-Struct 649 polyurethane joint sealant including backing cord, "Pro-Struct 626" primer, etc., in 6 x 20mm saw cut joints in concrete paving	m	16		
38	Pro-Struct 649 polyurethane joint sealant including backing cord, "Pro-Struct 626" primer, etc., in 10 x 30mm joints in concrete paving including raking out filler board	m	86		
	Plastering				
39	Average 50mm thick cement render (Degree of Accuracy 1) on floors	m ²	87		
40	One coat cement plaster (1:4) on brickwork (part concrete) walls sealed with Sikagard 720 EpoCem	m ²	42		
	Sleeves:				
41	160mm Heavy duty Class 34 UPVC pipe laid in ground including excavation not exceeding 1m deep	m	64		
42	Extra for 160mm heavy duty Class 34 90 degree long radius bend	No	24		
	ROADWORKS, APRONS AND SITE SURFACING				
	Crushed stone site surfacing:				
43	Rip, scarify as necessary and compact surface of site to 95% Mod AASHTO maximum density for a depth of 150mm	m ²	1,248		
44	Filling with G7 material (in accordance with TRH14:1985) supplied and carted on to site by the Implementing Agent and compacted to a density of at least 95% Mod. AASHTO maximum density	m ³	125		
45	Treat surface with approved weed killer	m ²	1,248		
46	Bidim Grade U24 geofabric filter blanket placed horizontally below crushed stone site surfacing (elsewhere measured) including 250mm laps	m ²	1,248		

47	Overlay site with 100mm thick layer of 37/56mm crushed stone supplied and carted onto site by the Implementing Agent	m ²	1,248		
	Earthworks:				
48	Excavate not exceeding 2m deep for sub-base box	m ³	235		
49	Excavate not exceeding 2m deep for trenches	m ³	20		
50	Extra over excavations for loading, carting and dumping surplus excavated material and/or stockpiles (no allowance made for increase in bulk) off site to a dumping site to be found by the Implementing Agent	m ³	241		
51	Backfilling behind kerbs with selected material from the excavations compacted to a density of at least 98% Mod. AASHTO maximum density	m ³	14		
52	Backfilling with dump rock combined with G7 material (in accordance with TRH14:1985) supplied and carted on to site by the Implementing Agent and compacted to a density of at least 93% Mod. AASHTO maximum density	m ³	10		
53	Filling with G7 material (in accordance with TRH14:1985) supplied and carted on to site by the Implementing Agent and compacted to a density of at least 93% Mod. AASHTO maximum density under roadworks, etc.	m ³	35		
54	Filling with G5 material (in accordance with TRH14:1985) supplied and carted on to site by the Implementing Agent and compacted to a density of at least 95% Mod. AASHTO maximum density under roadworks, etc.	m ³	47		
55	Filling with G2 material (in accordance with TRH14:1985) supplied and carted on to site by the Implementing Agent and compacted to a density of at least 98% Mod. AASHTO maximum density under roadworks, etc.	m ³	47		

56	Rip, scarify as necessary and compact excavated surfaces to a density of at least 93% Mod. AASHTO maximum density for a depth of 150mm under roadworks, etc.	m ²	310		
57	Risk of collapse of sides of road box and trench excavations not exceeding 1,5m deep	m ²	137		
58	Treat surface below roadworks with approved weed killer	m ²	310		
	Concrete:				
59	Reinforced concrete 30MPa/19mm stone in road bed with upper surface to falls (minimise shrinkage 0,04%)	m ³	46		
60	Reinforced concrete 30MPa/19mm stone in ramped road bed at door thresholds (minimise shrinkage 0,04%)	m ³	3		
61	Reinforced concrete 30MPa/19mm stone in sleeper slab under construction joint (minimise shrinkage 0,04%)	m ³	16		
62	Reinforced concrete 30MPa/19mm stone in apron paving and thickenings with upper surface to falls (minimise shrinkage 0,04%)	m ³	19		
63	Finishing top surfaces of concrete road paving smooth with a wood float to falls including finishing with a wood float or broom to form a mildly roughened surface	m ²	234		
64	Finishing sloping top surfaces of concrete apron paving smooth with a wood float	m ²	76		
	Formwork:				
65	Rough formwork to outer edges of road beds and thickenings	m ²	20		
66	Rough formwork to edges, risers, ends and reveals not exceeding 300mm high or wide	m	71		
67	Permanent rough formwork (left in) to soffit of ramp over stormwater channel not exceeding 300mm wide	m	9		
	Reinforcement:				
68	Type 193 fabric reinforcement in concrete road beds, etc	m ²	681		

69	Y12 steel dowel bar 400mm long with one end epoxied 200mm deep into and including mortice in side of existing reinforced concrete and other end cast into new concrete	No	39		
	Precast concrete:				
70	125 x 250mm Kerb as SABS Specification 927 Fig. 2, in approximately 1000mm lengths, bedded, jointed and pointed in 1:3 cement mortar, including 20MPa unreinforced concrete footing size 300 x 200mm thick under and 100 x 175mm 20MPa unreinforced concrete haunching behind, including excavation, etc	m	56		
71	125 x 250mm Kerb as SABS Specification 927 Fig. 2, circular to large radius in approximately 1000mm lengths, bedded, jointed and pointed in 1:3 cement mortar, including 20MPa unreinforced concrete footing size 300 x 200mm thick under and 100 x 175mm 20MPa unreinforced concrete haunching behind, including excavation, etc	m	16		
72	Expansion joint through precast concrete kerbing formed of 12mm thick bituminised boarding pointed all round with "Sikaflex-PRO 2HF" joint sealant, including backing cord, bond breaker, primer, etc.	No	15		
	Waterproofing:				
73	One layer 250 micrometre "Gunplas USB Green" waterproof sheeting	m ²	310		
	Joints:				
74	10mm "Masonite" bitumen impregnated insulation board between concrete floor and brick walls not exceeding 300mm high	m	125		
75	Vertical construction joints 200mm high through concrete including two coats "Brixal" bitumen emulsion to one face as bond breaker	m	31		

76	Saw cut 3mm wide x 70mm deep in top of concrete paving with the top 40mm reamed out to 8mm wide	m	142		
77	Pro-Struct 649 polyurethane joint sealant including backing cord, "Pro-Struct 626" primer, etc., in 8 x 40mm saw cut joints in concrete paving	m	142		
78	Pro-Struct 649 polyurethane joint sealant including backing cord, "Pro-Struct 626" primer, etc., in 10 x 30mm joint in concrete paving including raking out filler board as necessary	m	125		
	Agricultural drain:				
79	Agricultural drain laid in and including trench not exceeding 1m deep, comprising: 110mm UPVC slotted pipe in 350 x 350mm clean granular fill surround and all wrapped in "Kaytech Bidim" Grade A3 blanket lapped 300mm at edges	m	38		
	STORMWATER DRAINAGE				
	Rocla Class 100D concrete pipes with spigot and socket joints with rubber rings:				
80	300mm Pipe laid in and including trenches not exceeding 1m deep	m	37		
81	300mm Pipe laid in and including trenches exceeding 1m and not exceeding 2m deep	m	10		
	Sumps, manholes, etc.:				
82	Excavate for and build catchpit with one brick sides and fitted with 550 x 550mm x 127kg cast iron medium duty square dished grating and frame. Size internally 600 x 600 x 1000mm deep	No	3		
83	Excavate for and build catchpit with one brick sides and fitted with 450 x 450mm x 71kg cast iron medium duty square dished grating and frame. Size internally 450 x 450 x average 1200mm deep	No	2		

84	Excavate for and build kerb inlet manhole (Type S1 per Msunduzi municipality Engineer's Standard Detail) with one brick sides and fitted with heavy duty precast concrete slab and access cover. Invert 1000mm deep	No	1		
85	Break through 250mm thick reinforced concrete wall of existing oil dam for new 300mm concrete drain pipe (elsewhere measured) and make good	No	1		
	Sewer drainage:				
86	Excavate not exceeding 1m deep to expose existing 110mm UPVC sewer pipe in ground including excavating to clear 200mm depth below pipe (temporarily support pipe as necessary), fill below, around and above pipe with 350 x 350mm 20MPa concrete to encase pipe in its present position, backfill and compact trench to 98% Mod AASHTO density and cart away surplus material	m	25		
	Testing:				
87	Allow for testing the whole of the Stormwater and Sewer Drainage to the satisfaction of the principal agent and Local Authorities. All defective work is to be taken out and replaced at the Implementing Agent's expense and the whole re-tested until found satisfactory	Item	1		
	TRENCH CABLE DUCTS				
	Earthworks:				
88	Excavate not exceeding 2m deep for trenches	m ³	21		
89	Extra over excavations for loading, carting and dumping surplus excavated material and/or stockpiles (no allowance made for increase in bulk) off site to a dumping site to be found by the Implementing Agent	m ³	16		

90	Back excavation of vertical sides of trench excavation in earth for working space including backfilling compacted to 98% Mod. AASHTO maximum density, exceeding 500mm and not exceeding 1,5m deep for the construction of a concrete wall, where the face of the measured excavation is 185mm away from the concrete wall face	m ²	17		
91	Risk of collapse to sides of trench excavations not exceeding 1,5m deep	m ²	22		
92	Rip, scarify as necessary and compact bottoms of trenches to a density of at least 93% Mod. AASHTO maximum density for a depth of 200mm	m ²	20		
93	Backfilling to trenches, holes, etc., with selected material from the excavations compacted to a density of at least 98% Mod. AASHTO maximum density	m ³	5		
	Concrete				
94	Unreinforced concrete 10MPa/19mm in blinding under wall footings	m ³	1		
95	Reinforced concrete 25MPa/19mm in wall footings cast against excavated surface	m ³	3		
96	Reinforced concrete 25MPa/19mm in walls	m ³	5		
	Formwork				
97	Rough formwork to walls	m ²	41		
98	Rough formwork to edges, risers, ends and reveals not exceeding 300mm high or wide	m	22		
99	Boxing into rough formwork to form 120 x 85mm horizontal rebate in top edge of wall with external angles chamfered	m	22		
	Reinforcement				
100	Mild and high yield stress bars of various diameters	t	0.90		

	FENCING & GATES				
	Tenderers are referred to architect's drawing No 1703/WD/226 for details				
	Galvanised steel palisade security fencing				
102	Steel palisade fencing panel 1560 x 2400mm high comprising nine pales. (Type FA)	No	2		
103	Steel palisade fencing panel 2000 x 2400mm high comprising twelve pales. (Type FB)	No	2		
104	Steel palisade fencing panel 3000 x 2400mm high comprising nineteen pales. (Type FC)	No	3		
	Galvanised steel posts:				
105	Fence post	No	7		
106	Single gate post	No	4		
	Galvanised steel gates:				
107	Single gate size overall 1000 x 2400mm high comprising six fencing pales fixed to 50 x 50 x 3mm hollow section frame size 830 x 1900mm high mitred and welded at angles with a 50 x 50 x 6mm once holed plate welded to one internal bottom corner of frame, the top and bottom members of the frame each twice holed in underside as galvanising vents, complete with two heavy duty purpose made hinges bolted to one gate post and one 500mm long 10mm GR300 LL chain welded to other gate post after galvanising and treated with suitable cold-galv compound. (Padlock elsewhere measured)	No	2		
	DRY STACK RETAINING WALLS				
	Earthworks				
108	Excavate not exceeding 2m deep for trenches	m ³	6		
109	Extra over excavations for loading, carting and dumping surplus excavated material and/or stockpiles (no allowance made for increase in bulk) off site to a dumping site to be found by the Implementing Agent	m ³	6		
110	Risk of collapse of sides of trench or hole excavations not exceeding 1,5m deep	m ²	16		

111	Backfilling behind retaining walls with material from the excavations compacted to a density of at least 95% of Mod. AASHTO maximum density	m ³	12		
112	Bidim geofabric grade U14 filter blanket vertically behind blocks including 150mm laps	m ²	23		
	Concrete				
113	Unreinforced concrete 25MPa/19mm in wall footings cast against excavated surface	m ³	4		
	Formwork				
114	Rough formwork to edges, risers, ends and reveals not exceeding 300mm high or wide	m	20		
	Precast Concrete				
115	Retaining walls with battered face and curves as required, formed of "Corobrik Terraforce L18" smooth faced precast concrete interlocking planter units laid with horizontal bed joints, including backfilling and compacting behind with earth obtained from the excavations and filling the units with garden soil lightly tamped as the work proceeds	m ²	23		
	KEEPING ALL EXCAVATIONS FREE OF WATER				
116	Allow for keeping all excavations free of water (other than subterranean water) by hand or machinery	Item	1		
Total for BILL No.7.10					

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	BILL No.7.11				
	PROVISIONAL SUMS, ETC				
	The Tenderer is referred to the relevant Clauses in: the separate document Model Preambles for Trades, the Notes on the accompanying Drawings, the Supplementary Preambles which are incorporated at the front of these Bills of Quantities				
	SELECTED SUB-CONTRACT AMOUNTS				
	Contiguous Piling:				
1	Allow the Amount of R500 000,00 (Five Hundred Thousand Rand) for contiguous piling (30 50 No) and insitu concrete capping beam (12 20m)	Item	1	500,000.00	500,000.00
2	Profit on above item	Item	1		
3	Attendance on ditto	Item	1		
	Electrical Installation:				
4	Allow the Amount of R250 000,00 (Two Hundred and Fifty Thousand Rand) for Electrical Installation	Item	1	250,000.00	
5	Profit on above item	Item	1		
6	Attendance on ditto	Item	1		
	Ventilation:				
7	Allow the Amount of R100 000,00 (One hundred thousand Rand) for Ventilation	Item	1	100,000.00	
8	Profit on above item	Item	1		
9	Attendance on ditto	Item	1		
	Crane:				
10	Allow the Amount of R750 000,00 (Seven Hundred and Fifty Thousand Rand) for Demag Single Girder Overhead Travelling Crane	Item	1	750,000.00	
11	Profit on above item	Item	1		
12	Attendance on ditto	Item	1		
	Catladder:				
13	Allow the Amount of R40 000,00 (Forty Thousand Rand) for Galvanised Steel Catladder	Item	1	40,000.00	
14	Profit on above item	Item	1		
15	Attendance on ditto	Item	1		

	Epoxy floor finish:				
16	Allow the Amount of R90 000,00 (Ninety Thousand Rand) for Epoxy Floor Finishes	Item	1	90,000.00	
17	Profit on above item	Item	1		
18	Attendance on ditto	Item	1		
	BUDGETARY ALLOWANCES				
	Roofed Link:				
19	Allow the Amount of R50 000,00 (Fifty Thousand Rand) for 2 x 10m roofed link between new and existing buildings	Item	1	50,000.00	
20	Allow the Amount of R5 000,00 (Five Thousand Rand) for crane lifting lugs and casting of same into concrete roof slab	Item	1	5,000.00	
	Anchorage / earthing assemblies:				
21	Allow the Amount of R25 000,00 (Twenty-Five Thousand Rand) for mast anchorages /earthing assemblies	Item	1	25,000.00	
	Additional external drainage:				
22	Allow the Amount of R40 000,00 (Forty Thousand Rand) for additional external drainage	Item	1	40,000.00	
	Attenuation tank:				
23	Allow the Amount of R150 000,00 (One Hundred and Fifty Thousand Rand) for Stormwater Attenuation Tank	Item	1	150,000.00	
Total Carried Forward					

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
Total brought Forward					
	Existing roads:				
24	Allow the Amount of R100 000,00 (One Hundred Thousand Rand) for remedial work to existing roads	Item	1	100,000.00	
	Relocation of Existing Underground Services:				
25	Allow the Amount of R200 000,00 (Two Hundred Thousand Rand) for the relocation of existing underground services	Item	1	200,000.00	
	Floor Plates:				
20	Allow the Amount of R5 000,00 (Five Thousand Rand) for crane lifting lugs and casting of same into concrete roof slab	Item	1	5,000.00	
21	Allow the Amount of R25 000,00 (Twenty-Five Thousand Rand) for mast anchorages /earthing assemblies	Item	1	25,000.00	
	Additional external drainage:				
22	Allow the Amount of R40 000,00 (Forty Thousand Rand) for additional external drainage	Item	1	40,000.00	
	Attenuation tank:				
23	Allow the Amount of R150 000,00 (One Hundred and Fifty Thousand Rand) for Stormwater Attenuation Tank	Item	1	150,000.00	
	Existing roads:				
24	Allow the Amount of R100 000,00 (One Hundred Thousand Rand) for remedial work to existing roads	Item	1	100,000.00	
	Relocation of Existing Underground Services:				
25	Allow the Amount of R200 000,00 (Two Hundred Thousand Rand) for the relocation of existing underground services	Item	1	200,000.00	
	Floor Plates:				
26	Allow the Amount of R75 000,00 (Seventy-Five Thousand Rand) for galvanised steel plates to be cast into new concrete floors including grouting up solid under	Item	1	75,000.00	

	Alterations:				
27	Allow the Amount of R50 000,00 (Fifty Thousand Rand) for internal alterations to existing building	Item	1	50,000.00	
	Rock excavation:				
28	Allow the Amount of R55 000,00 (Fifty Five Thousand Rand) for rock excavation	Item	1	55,000.00	
	Internal fencing:				
29	Allow the Amount of R390 000,00 (Three Hundred and Ninety Thousand Rand) for internal fencing	Item	1	390,000.00	
	Builder's Work In Connection With Macro Electrical installation:				
30	Allow the Amount of R100 000,00 (One Hundred Thousand Rand) for builder's work in connection with macro electrical installation	Item	1	100,000.00	
	Barrier / Screen:			390,000.00	
31	Allow the Amount of R100 000,00 (One Hundred Thousand Rand) for 10m high barrier / screen against existing live yard	Item	1	100,000.00	
Total for BILL No.7.11					

Bill 7.12	Miscellaneous	Quantity	Unit Price	Total
7.12.1	Modelling and Simulation: High Power Mobile workstation, HP Zbook Fury 17 G8 Notebook PC (62T18EA)-11 th Generation Intel Core i9-11900H Processor, 32GB DDR4 3200MHz RAM (1 X 32GB, 4 Soolts,128GB Max),1TB M.2 PCIe NVMe Solid State Drive, 17.3 inch Full HD LED 300 nits Anti-Glare Display (1920 x 1080), No Optical Drive, NVIDIA T1200 4GB Graphics HD Webcam, Microphone. Connectivity: Left Side: 1 x RJ-45m, 1 x headphone/microphone combo, 1 x Superspeed USB Type-A 5 Gbps signaling rate (charging), 2 x superspeed, 1 x nano security lock slot, 1 x nano SIM card slot. Right Side: 1 x power connector, 1 x Mini Display Port™ 1.4, 1 x HDMI 2.0b, 2 x thunder bolt™ 4 with USB4™ Type-C® 40 Gbps signaling rate (USB power delivery, Display Port™ 1.4, HP Sleep and Charge), Windows 11 Pro 64-Bit	4		
7.12.2	Disconnect, removal, transportation, off-loading and storing of 2 x 30MVA 33/11kV Transformers & NER's from Pine Primary to Northdale Primary	2		
7.12.3	Supply and delivery of drones with batteries, landing pads, training on drone operation with certification from the Implementing Agent	4		
Total Bill No. 7.12				

THE MSUNDUZI MUNICIPALITY

CONTRACT No. SCM 9 OF 26/27

CONSTRUCTION, UPGRADE AND COMMISSIONING OF PINE STREET PRIMARY SUB-STATION

SUMMARY PAGE

ITEM	DESCRIPTION	QTY	Total (excl. VAT)
1	Preliminary and Generals	1	
2	Collection of 132kV GIS and 2 X 40MVA 132/11kV power transformers from Northdale and Installation & Commissioning of 132kV GIS, 2 x Power Transformers and 2 x NECRT's	1	
3	Protection and Metering	1	
4	LV Cabling, Control Cabling, AC Change-over	1	
5	132kV Cable and Fibre Cable	1	
6	SCADA Panel and Fibre Accessories	1	
7	Control Building, Transformer Bays and Yard Civils	1	
8	Bill of quantities for P& G's	1	
9	Miscellaneous	1	
10	SUB-TOTAL		
11	CONTINGENCY SUM	10%	
12	TOTAL EXCL. VAT		
13	ADD: VAT @ 15%		
14	TOTAL INCLUSIVE OF VAT CARRIED TO TENDER FORM		

NB: When submitting this tender, bidders are advised that regardless of the VAT status of being a VAT or non-VAT vendor the price must include VAT

Further to the above the price shall be deemed to be VAT inclusive regardless of whether the bidder is the VAT vendor or not.

Name of Implementing Agent: _____

Signature: _____ Date: _____

THE MSUNDUZI MUNICIPALITY

CONTRACT No. SCM 9 OF 26/27

CONSTRUCTION, UPGRADE AND COMMISSIONING OF PINE STREET PRIMARY SUB-STATION

DATA SHEET 1: INVITATION TO BID DOCUMENT

PART A

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE MSUNDUZI MUNICIPALITY					
BID NUMBER:	SCM 9 OF 26/27	CLOSING DATE:	09 SEPTEMBER 2026	CLOSING TIME:	12H00
DESCRIPTION	<u>CONSTRUCTION, UPGRADE AND COMMISSIONING OF PINE STREET PRIMARY SUB-STATION</u>				
THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM					
TENDER DOCUMENTS MUST BE SUBMITTED IN THE TENDER BOX SITUATED AT:					
THE MSUNDUZI MUNICIPALITY'S CENTRAL STORES					
2 ABATTOIR ROAD (OFF KERSHAW STREET)					
PIETERMARITZBURG					
3201					
SUPPLIER INFORMATION					
NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE		NUMBER		
CELLPHONE NUMBER					
FACSIMILE NUMBER	CODE		NUMBER		
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
TAX COMPLIANCE STATUS	TCS PIN:				
CSD REGISTRATION No:	MAAA				

ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	☐ Yes ☐ No [IF YES ENCLOSE PROOF]	ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?	☐ Yes ☐ No [IF YES, ANSWER PART B:3]
TOTAL NUMBER OF ITEMS OFFERED		TOTAL BID PRICE	
SIGNATURE OF BIDDER		DATE	
CAPACITY UNDER WHICH THIS BID IS SIGNED			
BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO:		TECHNICAL INFORMATION MAY BE DIRECTED TO:	
DEPARTMENT	SCM UNIT	DEPARTMENT	ELECTRICITY SUPPLY SERVICES
CONTACT PERSON	VINESH GOVENDER	CONTACT PERSON	LUNGISANI NTULI
TELEPHONE NUMBER	033 – 392 2027	TELEPHONE NUMBER	033 – 392 5790
CELLPHONE NUMBER		CELLPHONE NUMBER	082 724 3636
vinesh.govender@msunduzi.gov.za		E-MAIL ADDRESS: lungisani.ntuli@msunduzi.gov.za	

PART B

1. BID SUBMISSION:										
1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION. 1.2. ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED – (NOT TO BE RE-TYPED). 1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2022, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.										
2. TAX COMPLIANCE REQUIREMENTS										
2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS. 2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VIEW THE TAXPAYER'S PROFILE AND TAX STATUS. 2.3 APPLICATION FOR THE TAX COMPLIANCE STATUS (TCS) CERTIFICATE OR PIN MAY ALSO BE MADE VIA E-FILING. IN ORDER TO USE THIS PROVISION, TAXPAYERS WILL NEED TO REGISTER WITH SARS AS E-FILERS THROUGH THE WEBSITE WWW.SARS.GOV.ZA. 2.4 FOREIGN SUPPLIERS MUST COMPLETE THE PRE-AWARD QUESTIONNAIRE IN PART B:3. 2.5 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID. 2.6 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER. 2.7 WHERE NO TCS IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.										
3. QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS										
<table style="width: 100%; border: none;"> <tr> <td style="width: 70%;">3.1. IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?</td> <td style="width: 30%; text-align: right;">☐ YES ☐ NO</td> </tr> <tr> <td>3.2. DOES THE ENTITY HAVE A BRANCH IN THE RSA?</td> <td style="text-align: right;">☐ YES ☐ NO</td> </tr> <tr> <td>3.3. DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?</td> <td style="text-align: right;">☐ YES ☐ NO</td> </tr> <tr> <td>3.4. DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?</td> <td style="text-align: right;">☐ YES ☐ NO</td> </tr> <tr> <td>3.5. IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?</td> <td style="text-align: right;">☐ YES ☐ NO</td> </tr> </table> IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 ABOVE.	3.1. IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?	☐ YES ☐ NO	3.2. DOES THE ENTITY HAVE A BRANCH IN THE RSA?	☐ YES ☐ NO	3.3. DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?	☐ YES ☐ NO	3.4. DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?	☐ YES ☐ NO	3.5. IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?	☐ YES ☐ NO
3.1. IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?	☐ YES ☐ NO									
3.2. DOES THE ENTITY HAVE A BRANCH IN THE RSA?	☐ YES ☐ NO									
3.3. DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?	☐ YES ☐ NO									
3.4. DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?	☐ YES ☐ NO									
3.5. IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?	☐ YES ☐ NO									

NB: FAILURE TO PROVIDE ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID. NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE.

SIGNATURE OF BIDDER:

CAPACITY UNDER WHICH THIS BID IS SIGNED:

DATE:

THE MSUNDUZI MUNICIPALITY

CONTRACT No. SCM 9 OF 26/27

CONSTRUCTION, UPGRADE AND COMMISSIONING OF PINE STREET PRIMARY SUB-STATION

DATA SHEET 2: AUTHORITY TO SIGN DOCUMENT

I/We*, the undersigned, am/are* duly authorised to sign the tender document on behalf of

.....

by virtue of the Articles of Association/Resolution of the Board of Directors*, of which a certified copy is attached, or

Full Name of Signatory:

Capacity of Signatory:

Signature:

Date:

Witnesses:

(1) Full Name:

Signature:Date.....

(2) Full Name:

Signature:Date.....

* ***Delete whichever is inapplicable or complete as indicated if none are applicable.***

THE MSUNDUZI MUNICIPALITY

CONTRACT No. SCM 9 OF 26/27

CONSTRUCTION, UPGRADE AND COMMISSIONING OF PINE STREET PRIMARY SUB-STATION

DATA SHEET 3: DECLARATION OF MUNICIPAL FEES

I/We do hereby declare that the Municipal Fees of ***(Full Name of Tenderer):***

Is/are, as at the date of the tender closing, fully paid up, or arrangements have been concluded with the Municipality to pay the said Fees:

DESCRIPTION

ACCOUNT No.

Electricity _____

Water _____

Rates _____

NB: Attach a copy of the current Utility Bill.

I/We acknowledge that should it be found that the Municipal Fees are not up to date, the Council may take such remedial action as it required, including termination of contract, and any income due to the Contractor shall be utilised to offset any monies due to the Council.

NB: If the Service Provider is leasing the premises, a copy of the Lease Agreement must be submitted for adjudication purposes.

Full Name of Signatory.....

Capacity of Signatory.....

I.D. Number.....

Duly authorised to sign on behalf of.....

.....

Physical Address.....

.....

.....

Signature Date

THE MSUNDUZI MUNICIPALITY

CONTRACT No. SCM 9 OF 26/27

CONSTRUCTION, UPGRADE AND COMMISSIONING OF PINE STREET PRIMARY SUB-STATION

DATA SHEET 4: DECLARATION OF INTEREST

1. No bid will be accepted from persons in the service of the state¹.
2. Any person, having a kinship with persons in the service of the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid. In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to persons in service of the state, it is required that the bidder or their authorised representative declare their position in relation to the evaluating/adjudicating authority.
3. **In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.**

3.1 Full Name of bidder or his or her representative:

.....

3.2 Identity Number:

3.3 Position occupied in the Company (director, trustee shareholder²):

.....

3.4 Company Registration Number:

3.5 Tax Reference Number:

3.6 VAT Registration Number:

3.7 The names of all directors / trustees / shareholders members, their individual identity numbers and state employee numbers must be indicated in paragraph 4 below.

3.8 Are you presently in the service of the state? **YES / NO**

3.8.1 If yes, furnish particulars.

.....

¹MSCM Regulations: "in the service of the state" means to be –

(a) a member of –

- (i) any municipal council;
- (ii) any provincial legislature; or
- (iii) the national Assembly or the national Council of provinces;

(b) a member of the board of directors of any municipal entity;

- (c) an official of any municipality or municipal entity;
- (d) an employee of any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No.1 of 1999);
- (e) a member of the accounting authority of any national or provincial public entity; or
- (f) an employee of Parliament or a provincial legislature.

"Shareholder" means a person who owns shares in the company and is actively involved in the management of the company or business and exercises control over the company.

3.9 Have you been in the service of the state for the past twelve months? **YES / NO**

3.9.1 If yes, furnish particulars

.....

3.10 Do you have any relationship (family, friend, other) with persons in the service of the state and who may be involved with the evaluation and or adjudication of this bid?

YES / NO

3.10.1 If yes, furnish particulars

.....

3.11 Are you, aware of any relationship (family, friend, other) between any other bidder and any persons in the service of the state who may be involved with the evaluation and/or adjudication of this bid?

YES / NO

3.11.1 If yes, furnish particulars

.....

3.12 Are any of the company's directors, trustees, managers, principle shareholders, or stakeholders in service of the state?

YES / NO

3.12.1 If yes, furnish particulars

.....

3.13 Are any spouse, child or parent of the company's directors trustees, managers, principle shareholders or stakeholders in service of the state?

YES / NO

3.13.1 If yes, furnish particulars

.....

3.14 Do you or any of the directors, trustees, managers, principle shareholders, or stakeholders of this company have any interest in any other related companies or business whether or not they are bidding for this contract?

YES / NO

3.14.1 If yes, furnish particulars

.....

4. Full details of Directors / Trustees / Members / Shareholders.

Full Name	Identity Number	State Employee Number

CERTIFICATION

I, THE UNDERSIGNED, (NAME)

CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM IS CORRECT.

I ACCEPT THAT THE STATE MAY ACT AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

THE MSUNDUZI MUNICIPALITY

CONTRACT No. SCM 9 OF 26/27

CONSTRUCTION, UPGRADE AND COMMISSIONING OF PINE STREET PRIMARY SUB-STATION

**DATA SHEET 5: DECLARATION OF BIDDER'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.
- 3 The bid of any bidder may be rejected if that bidder, or any of its directors have:
 - a. abused the municipality's / municipal entity's supply chain management system or committed any improper conduct in relation to such system;
 - b. been convicted for fraud or corruption during the past five years;
 - c. willfully 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 (No 12 of 2004).
- 4 ***In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.***

Item	Question	Yes	No
4.1	Is the bidder or any of its directors listed on the National Treasury's Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector? (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 <i>audi alteram partem</i> 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.	Yes ☐	No ☐
4.1.1	If so, furnish particulars:		

4.2	Is the bidder 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 (No 12 of 2004)? The Register for Tender Defaulters can be accessed on the National Treasury's website (www.treasury.gov.za) by clicking on its link at the bottom of the home page.	Yes ☐	No ☐
4.2.1	If so, furnish particulars:		
4.3	Was the bidder or any of its directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years?	Yes ☐	No ☐
4.3.1	If so, furnish particulars:		
4.4	Does the bidder 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?	Yes ☐	No ☐
4.4.1	If so, furnish particulars:		
4.5	Was any contract between the bidder 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 ☐	No ☐
4.7.1	If so, furnish particulars:		

CERTIFICATION

I, THE UNDERSIGNED, (NAME)

CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM IS CORRECT.

I ACCEPT THAT THE STATE MAY ACT AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

THE MSUNDUZI MUNICIPALITY

CONTRACT No. SCM 9 OF 26/27

CONSTRUCTION, UPGRADE AND COMMISSIONING OF PINE STREET PRIMARY SUB-STATION

DATA SHEET 6: CERTIFICATE OF INDEPENDENT BID DETERMINATION

1. This Municipal Bidding Document (MBD) 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).² Collusive bidding is a *per se* prohibited 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 MBD 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.
5. In order to give effect to the above, the attached Certificate of Bid Determination (MBD 9) must be completed and submitted with the bid:

¹ Includes price quotations, advertised competitive bids, limited bids and proposals.

² 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.

CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:

(Bid Number and Description)

in response to the invitation for the bid made by:

(Name of Municipality / Municipal Entity)

do hereby make the following statements that I certify to be true and complete in every respect:

I 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 or consortium³ 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.
9. 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.

³ 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.

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.

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

THE MSUNDUZI MUNICIPALITY

CONTRACT No. SCM 9 OF 26/27

CONSTRUCTION, UPGRADE AND COMMISSIONING OF PINE STREET PRIMARY SUB-STATION

DATA SHEET 7: DECLARATION FOR PROCUREMENT ABOVE R10 MILLION
(ALL APPLICABLE TAXES INCLUDED)

For all procurement expected to exceed R10 million (all applicable taxes included), bidders must complete the following questionnaire:

* Delete if not applicable

1. Are you by law required to prepare annual financial statements for auditing?

***YES / NO**

- 1.1 If yes, submit audited annual financial statements for the past three years or since the date of establishment if established during the past three years.

.....
.....

2. Do you have any outstanding undisputed commitments for municipal services towards any municipality for more than three months or any other Service Provider in respect of which payment is overdue for more than 30 days?

***YES / NO**

- 2.1 If no, this serves to certify that the bidder has no undisputed commitments for municipal services towards any municipality for more than three months or other Service Provider in respect of which payment is overdue for more than 30 days.

- 2.2 If yes, provide particulars.

.....
.....

3. Has any contract been awarded to you by an organ of state during the past five years, including particulars of any material non-compliance or dispute concerning the execution of such contract?

***YES / NO**

- 3.1 If yes, furnish particulars

.....
.....

4. Will any portion of goods or services be sourced from outside the Republic, and, if so, what portion and whether any portion of payment from the municipality / municipal entity is expected to be transferred out of the Republic?

***YES / NO**

- 4.1 If yes, furnish particulars

.....
.....

CERTIFICATION

I, THE UNDERSIGNED, (NAME)

CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM IS CORRECT.

I ACCEPT THAT THE STATE MAY ACT AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

THE MSUNDUZI MUNICIPALITY

CONTRACT No. SCM 9 OF 26/27

CONSTRUCTION, UPGRADE AND COMMISSIONING OF PINE STREET PRIMARY SUB-STATION

DATA SHEET 8: TENDER BRIEFING AND SITE INSPECTION CERTIFICATE

As required in terms of this document, I/we attended the compulsory Tender Briefing and Site Inspection on the date specified below.

I/We carefully examined the contract document and have made myself/ourselves fully conversant with all the circumstances likely to influence this contract.

I/We further certify that I am/we are satisfied with the description of the Works and the explanation given by the Project Champion or his/her representative at the Tender Briefing and Site Inspection, and that I/we perfectly understand the work to be done, as specified and implied, in the execution of the contract.

NAME OF SERVICE PROVIDER : _____

NAME OF SIGNATORY : _____

ADDRESS : _____

TENDER BRIEFING AND SITE INSPECTION CERTIFICATE

This certifies that _____ (Name)

Representing _____ (Firm)

Attended the Tender Briefing and Site Inspection for this contract on

_____ (Date)

SIGNED: _____
Project Champion

THE MSUNDUZI MUNICIPALITY

CONTRACT No. SCM 9 OF 26/27

CONSTRUCTION, UPGRADE AND COMMISSIONING OF PINE STREET PRIMARY SUB-STATION

TENDER FORM

The Municipal Manager
City Hall
PIETERMARITZBURG
3201

Dear Sir,

Having examined the Conditions of Tender, Specifications, Tender and Legislation of the above contract, I/we offer to supply and deliver the whole of the said Works in conformity with the Conditions of Tender, Specifications, Tender and Legislation, save as amended by any modifications as set out in Annexure "A" herein, for the prices as indicated on the Pricing Schedule herein, the **Total Price (including VAT)** being as follows:

R _____ In Words _____

In the event of there being any errors of extension or addition to the prices in the Pricing Schedule, I/we agree to their being corrected, the unit prices being taken as correct.

I/We are registered VAT vendors. I/We agree to undertake the works within the time frames as stated in this contract document.

I/We certify that I/we have satisfied myself/ourselves that the particulars inserted on all required Affidavits (if applicable) are complete and correct.

I/We confirm that I am/we are fully acquainted with the current South African laws and regulations applicable to this contract including inter alia those laws to which my/our attention has been drawn in the Legislation section of this document.

I/We are registered VAT vendors and my/our VAT vendor registration number is:

I/We are formally associated by written agreement with the following firms, corporations or companies:

(Enter Nil if no affiliations)

I/We are fully paid-up members in good standing of the following organisation(s):

(Enter Nil if no affiliations)

I/We bank at the _____

Branch of _____

Where I/we have a _____ account.

My/Our Tender Deposit receipt number as issued by the Council is _____
(Include a copy of the Tender Deposit Receipt when purchased at the Msunduzi Municipality)

It is agreed and understood that should there be any changes on the banking details provided for the entity, a duly signed resolution by all its directors and minutes whereby a resolution for changing the banking details was passed will be submitted to Council including the original letter from the bank confirming the details.

It is agreed and understood that this tender is valid for four (4) months from the date hereof and that it, together with your final letter of acceptance, shall constitute a binding Contract between us.

I/We understand that the Council is not bound to accept the highest or any tender and acknowledge that the Head: Supply Chain Management may, in her absolute discretion if good and sufficient grounds are brought to her attention in writing within five (5) working days from the date of closing of tenders, decline to consider my/our offer.

I/We the undersigned, warrants that I am/we are duly authorised to do so on behalf of the enterprise, certifies that the enterprise complies with all statutory and municipal requirements and that the information supplied in terms of this documents with additional information is correct and accurate and acknowledges that if the information supplied is found to be incorrect then the Msunduzi Municipality in addition to any remedies, it may have: may

- i Recover from the Enterprise all costs, losses or damages incurred or sustained by the Municipality as result of the award of the contract, and /or
- ii Cancel the contract and claim any damages which the Municipality may suffer by having to make less favourable arrangements after such cancellations, and/or
- iii Impose a penalty on the Enterprise as provided in the Tender Document, and/or
- iv Take any other action as may be deemed necessary.

I/we further undertake to submit documentary proof regarding any tendering issue to the Council when so required.

Full Name of Signatory.....

Capacity of Signatory.....

Identity Number.....

Duly authorised to sign on behalf of.....

Physical Address.....

SIGNATURE..... DATE.....

THE MSUNDUZI MUNICIPALITY

CONTRACT No. SCM 9 OF 26/27

CONSTRUCTION, UPGRADE AND COMMISSIONING OF PINE STREET PRIMARY SUB-STATION

ALTERATIONS BY SERVICE PROVIDER

Should the Tenderer desire to make any departures from or modifications to the Standard Conditions of Contract or Specification, or to qualify his/her tender in any way, he/she shall set out his/her proposals clearly hereunder or, alternatively, state them in a covering letter attached to his/her tender and referred to hereunder, failing which the tender will be deemed to be unqualified.

If no departures or modifications are desired, the Schedule hereunder is to be marked NIL and signed by the Tenderer.

PAGE	SECTION OR ITEM	PROPOSED DEPARTURE/MODIFICATION

SIGNATURE..... DATE.....

THE MSUNDUZI MUNICIPALITY**CONTRACT No. SCM 9 OF 26/27****CONSTRUCTION, UPGRADE AND COMMISSIONING OF PINE STREET PRIMARY SUB-STATION****PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022**

This preference form must form part of all bids invited. It contains general information and serves as a claim form for preference points for specific goals.

NB: BEFORE COMPLETING THIS FORM, BIDDERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF THE TENDER AND PREFERENTIAL PROCUREMENT REGULATIONS, 2022.

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 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.
- 1.3 Points for this bid shall be awarded for:
- (a) Price; and
 - (b) Specific Goals.

The maximum points for this bid are allocated as follows:

	POINTS
PRICE	80
SPECIFIC GOALS	20
TOTAL POINTS FOR PRICE AND SPECIFIC GOALS MUST NOT EXCEED	100

- 1.4 Failure on the part of a bidder to submit proof or documentation required in terms of this tender to claim points for specific goals, if the bidder did not submit proof or documentation required to claim for specific goals will be interpreted to mean that preference points for specific goals are not claimed.
- 1.5 The organ of state reserves the right to require of a Service Provider, 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 organ of state.

2. DEFINITIONS

- (a) “**Broad-Based Black Economic Empowerment Act**” means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- (b) “**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;
- (c) “**Functionality**” means the ability of a Service Provider to provide goods or services in accordance with specifications as set out in the tender documents.
- (d) “**highest acceptable tender**” means a tender that complies with all specifications and conditions of tender and that has the highest price compared to other tenders;
- (e) “**lowest acceptable tender**” means a tender that complies with all specifications and conditions of tender and that has lowest price compared to other tenders;
- (f) “**price**” means amount of money tendered for good or services, and includes all applicable taxes less all unconditional discounts;
- (g) “**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;
- (h) “**Rand Value**” means the total estimated value of a contract in Rand, calculated at the time of bid invitation;
- (i) “**specific goals**” means specific goals as contemplated in section 2(1)(d) of the Act which may include contracting with persons, or categories of persons, historically disadvantaged by unfair discrimination on the basis of race, gender and disability including the implementation of programmes of the Reconstruction and Development Programme as published in Government Gazette No. 16085 dated 23 November 1994;
- (j) “**tender**” means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;
- (k) “**tender for income-generating contracts**” means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions;

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1 POINTS AWARDED FOR PRICE

3.1.1 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
$P_s = 80 \left(1 - \frac{P_t - P_{\min}}{P_{\min}} \right)$	or	$P_s = 90 \left(1 - \frac{P_t - P_{\min}}{P_{\min}} \right)$

Where: -

- Ps = Points scored for price of bid under consideration
- Pt = Price of bid under consideration
- Pmin = Price of lowest acceptable bid

3.2 FORMULAE FOR DISPOSAL OR LEASING OF STATE ASSETS AND INCOME GENERATING PROCUREMENT

3.2.1 POINTS AWARDED FOR PRICE

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

80/20	or	90/10
$P_s = 80 \left(1 + \frac{P_t - P_{\max}}{P_{\max}} \right)$	or	$P_s = 90 \left(1 + \frac{P_t - P_{\max}}{P_{\max}} \right)$

Where: -

- Ps = Points scored for price of bid under consideration
- Pt = Price of bid under consideration
- Pmax = Price of highest acceptable tender

4. POINTS AWARDED FOR SPECIFIC GOALS

- 4.1 In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender.
- 4.2 For the purpose of this tender points will be allocated in accordance with the specific goals as outlined in the Tender Document specification contained herein and must be supported by proof /documentation as stated therein.
- 4.3 In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—
 - (a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or

(b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system, then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

5. SUB-CONTRACTING

5.1 Will any portion of the contract be sub-contracted?

(Tick applicable

YES		NO	
-----	--	----	--

box)

5.1.1 If yes, indicate:

i) What percentage of the contract will be subcontracted.....%?

ii) The name of the sub-contractor.....

iii) Whether the sub-contractor is an EME or QSE

(Tick applicable

YES		NO	
-----	--	----	--

box)

iv) Specify, by ticking the appropriate box, if subcontracting with an enterprise in terms of Preferential Procurement Regulations, 2022:

Designated Group: An EME or QSE which is at least 51% owned by:	EME √	QSE √
Black people		
Black people who are youth		
Black people who are women		
Black people with disabilities		
Black people living in rural or underdeveloped areas or townships		
Co-operative owned by black people		
Black people who are military veterans		
OR		
Msunduzi EME		
Msunduzi Manufacturing Enterprise		
Location of a Business Enterprise		

6. DECLARATION WITH REGARD TO COMPANY/FIRM

6.1 Name of company/firm.....

6.2 VAT registration number.....

6.3 Company registration number.....

6.4 TYPE OF COMPANY/ FIRM

- ☐ Partnership/Joint Venture / Consortium
- ☐ One-person business/sole propriety
- ☐ Close corporation
- ☐ Company
- ☐ (Pty) Limited
- ☐ Non-Profit Company

[TICK APPLICABLE BOX]

6.5 DESCRIBE PRINCIPAL BUSINESS ACTIVITIES

.....
.....
.....

6.6 COMPANY CLASSIFICATION

[TICK APPLICABLE BOX]

- ☐ Manufacturer
- ☐ Supplier
- ☐ Professional Service Provider
- ☐ Other Service Providers, e.g. transporter, etc.

6.7 MUNICIPAL INFORMATION

Municipality where business is situated.....

Registered Account Number:

Stand Number:

6.8 Total number of years the company/firm has been in business.....

6.9 I/we, the undersigned, who is / are duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I / we acknowledge that:

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 5.2, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
- iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –
 - (a) disqualify the person from the bidding process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;

- (d)
- (e) 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
- (f) forward the matter for criminal prosecution.

SIGNATURE(S) OF BIDDER(S).....

DATE:

ADDRESS:

.....

WITNESSES: 1.....

 2.....

THE MSUNDUZI MUNICIPALITY

CONTRACT No. SCM 9 OF 26/27

CONSTRUCTION, UPGRADE AND COMMISSIONING OF PINE STREET PRIMARY SUB-STATION

TAX COMPLIANCE STATUS VERIFICATION PIN

Please attach hereto the Tax Compliance Status
Verification Pin.

THE MSUNDUZI MUNICIPALITY

CONTRACT No. SCM 9 OF 26/27

CONSTRUCTION, UPGRADE AND COMMISSIONING OF PINE STREET PRIMARY SUB-STATION

CIPC REGISTRATION CERTIFICATE

Please attach hereto the CIPC Registration Certificate.

THE MSUNDUZI MUNICIPALITY

CONTRACT No. SCM 9 OF 26/27

CONSTRUCTION, UPGRADE AND COMMISSIONING OF PINE STREET PRIMARY SUB-STATION

CENTRAL SUPPLIER DATABASE (CSD) REGISTRATION REPORT

Please attach hereto a Full CSD Report. A Full Report may be required for adjudication purposes.

THE MSUNDUZI MUNICIPALITY

CONTRACT No. SCM 9 OF 26/27

CONSTRUCTION, UPGRADE AND COMMISSIONING OF PINE STREET PRIMARY SUB-STATION

COMPACT DISC (CD) OR USB-FLASH DRIVE

The Compact Disc (CD) or USB-Flash Drive should be submitted in a sealed envelope and attached hereto.

The CD or USB-Flash Drive may assist both the Municipality and the Bidder in the case of any dispute with regards to the contents of the bid submitted. The scanned copy may serve as the secondary verification method.

SIGNED ON BEHALF OF THE SERVICE PROVIDER:

Name of Service Provider

.....

Name of Signatory:

Capacity of Signatory:

.....

Signature Date

All literature and attachments submitted must be securely attached to the tender. The Council shall not be held liable for any loss or damages sustained due to the Service Provider's failure to comply with this condition.

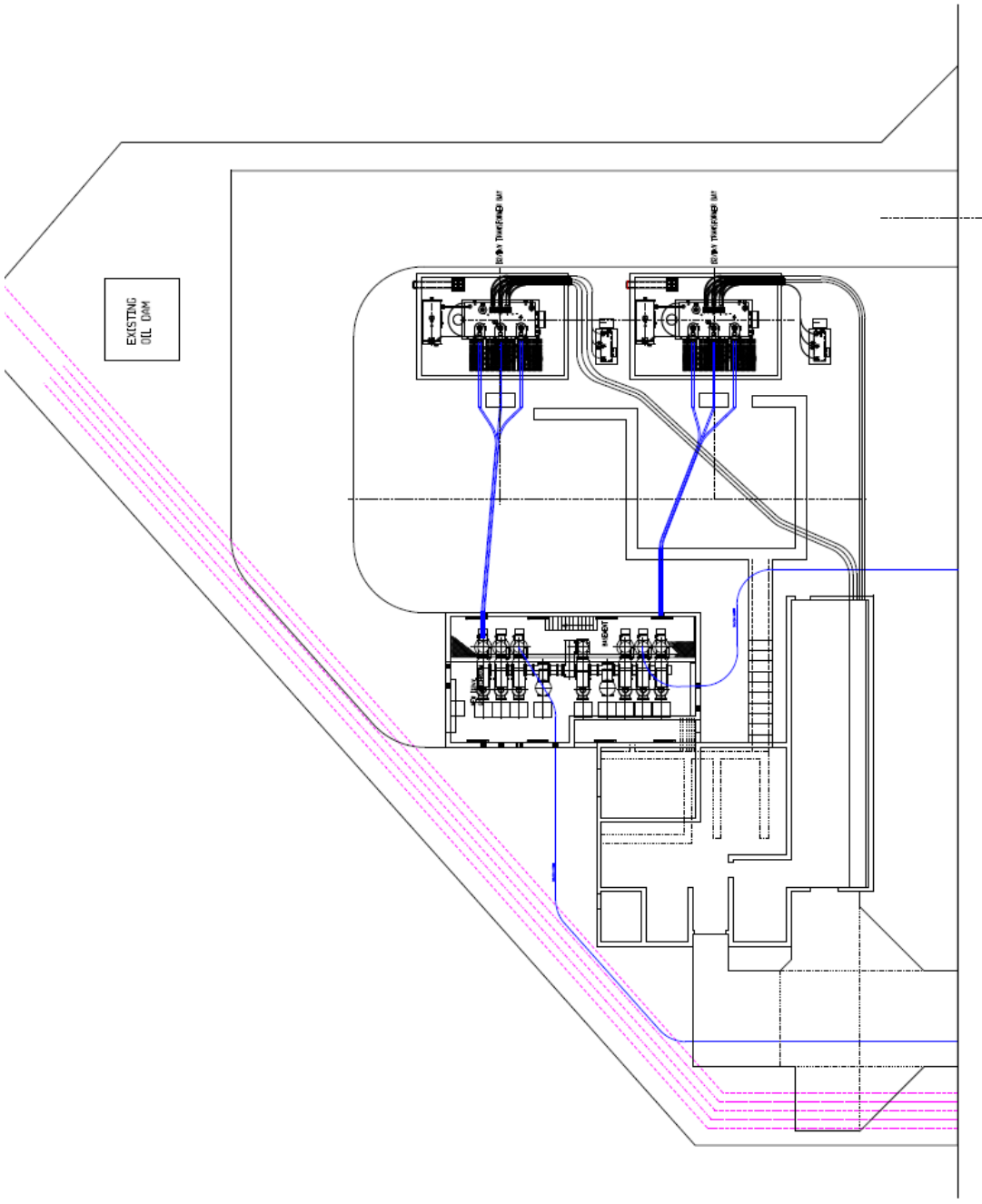
THE MSUNDUZI MUNICIPALITY

CONTRACT No. SCM 9 OF 26/27

CONSTRUCTION, UPGRADE AND COMMISSIONING OF PINE STREET PRIMARY SUB-
STATION

DRAWINGS





Pietermaritzburg
M S U N D U Z I

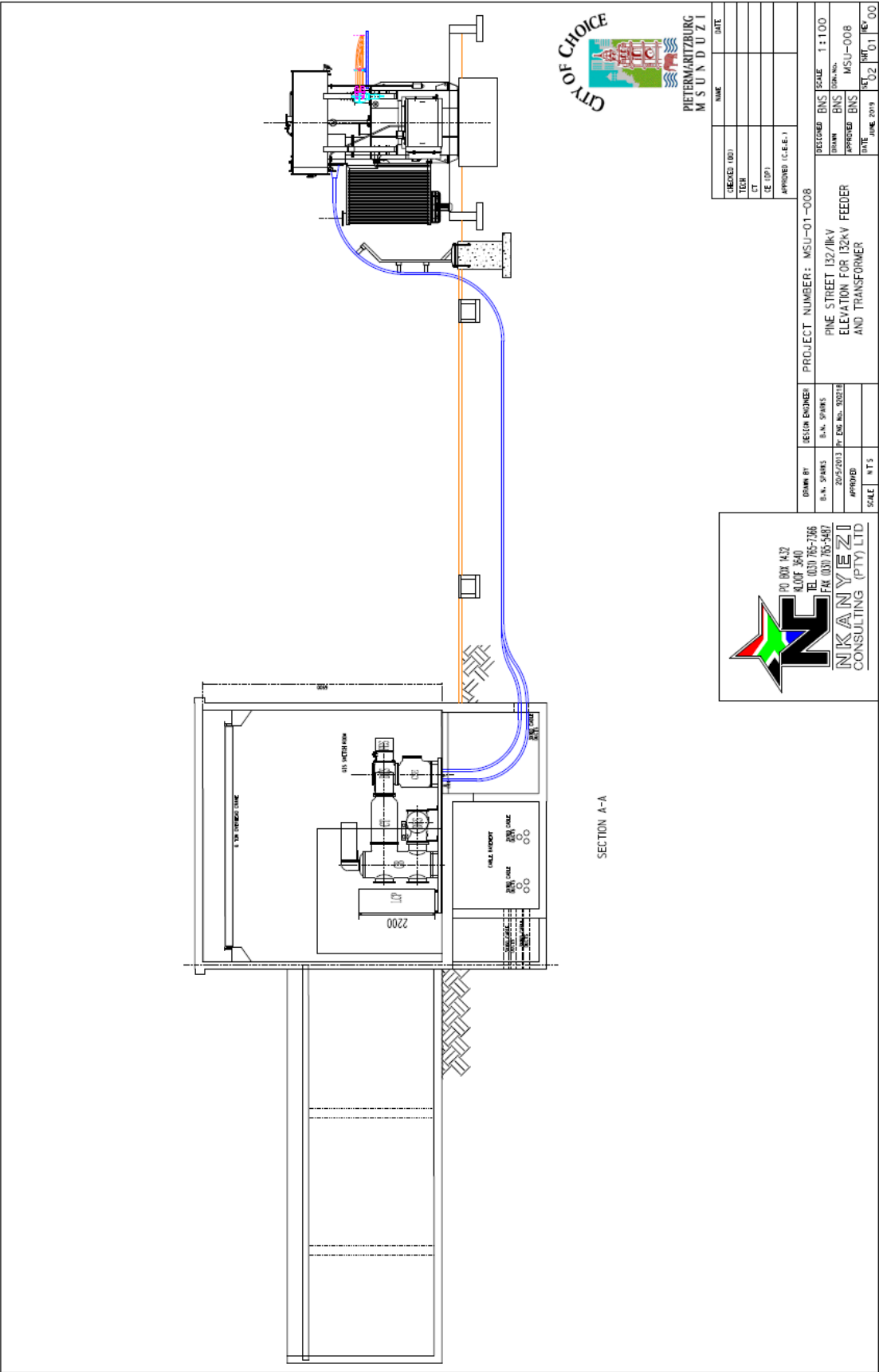
DESIGNED (DSD)	DATE
TECH	
BY (DFT)	
APPROVED (I.C.E.E.)	

Rotate the
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Drawn by	Rev'd	Project Number	MSU-01-008	Sheet No.	11200
S.A. Spares	S.A. Spares	Pine Street		Drawn	BHS
Inte. 2024/2025	Inte. 2024/2025	12/11kV Substation		Reviewed	BHS
Approved	Approved	Layout-Phase 3		Date	June 2019
Scale	N.T.S.			By	01
				Page	00



NKANYEZI
CONSULTING (PTY) LTD



PIETERMARITZBURG
MSUNDUZI

DESIGNED (D)	NAME	DATE
TECH		
CE (OP)		
APPROVED (C.E.E.)		

PO BOX 142
ALOF 360
TEL (033) 765-7366
FAX (033) 765-9497

NKANINI
CONSULTING (PTY) LTD

PROJECT NUMBER: MSU-01-008	DESIGNED: BNS	SCALE: 1:100
PINE STREET 132/11kV	TECH: BNS	
ELEVATION FOR 132kV FEEDER	APPROVED: BNS	MSU-008
AND TRANSFORMER	DATE: JUNE 2019	SE: 02
		INT: 01
		ES: 00

