



UPGRADING OF MATSAFENI KAAPSCHEHOOP BUS ROUTE – WARD 14

TENDER NUMBER: COM10/2023

TENDERER:	
------------------	--

CLOSING DATE: 14 March 2023 AT 11:00AM

CSD REG NUMBER: MAAA.....

CLIENT	ENGINEER
 City of Mbombela PO Box 45 Mbombela 1200 Tel: 013-759 2358 Fax: 013-753 4444	 Lihuzu Projects 12 Suikerriet Street Central Park, Unit 45.2 Nelspruit 1200 Tel : (013) 744 6070 Email: info@linuzu.co.za

UPGRADING OF MATSAFENI KAAPSCHEHOOP BUS ROUTE – WARD 14

SUMMARY FOR TENDER OPENING PURPOSES

NAME OF TENDERER : _____

ADDRESS : _____

TELEPHONE NUMBER : _____

FAX NUMBER : _____

E-MAIL ADDRESS : _____

CLOSING DATE : _____

TENDERED AMOUNT : _____

Signed by authorised representative of the TENDERER: _____

DATE: _____

* Should any discrepancy occur between this figure and that stated in the Form of Offer and Acceptance, the latter shall take precedence and shall apply.

IMPORTANT INFORMATION

PLEASE READ CAREFULLY BEFORE COMPLETING DOCUMENT.

1. Notice to all tenderers.
2. Standards applied in this document.

1. NOTICE TO ALL TENDERERS

This is an original document:

1. It may not be re-typed or altered in any way.
2. It must be completed in black ink (non-erasable) – in an eligible handwriting. Mistakes are to be corrected by drawing a line through it and writing the correct information above it. Tenderer to sign next to the correction. The use of erasing fluid or strips is not allowed.
3. It may not be taken apart.
4. It is not available in electronic format except PDF.
5. Bidders are required to attach returnable documents to the relative pages (where requested) and encouraged to use file fasteners and binding tape or any other similar method to ensure there are no loose pages. **Any other form of presentation (loose pages or separate documents) will not be accepted.**

2. STANDARDS APPLICABLE TO THIS DOCUMENT

Available from the S.A. Federation of Civil Engineering Contractors, the S.A. Institution of Civil Engineering and the S.A. Bureau of Standards, as applicable:

- | | | |
|----|------------------------------|--|
| 1. | CIDB | <i>CIDB Standard for uniformity in Construction Procurement, 10 July 2015, as amended.</i> |
| 2. | SANS 10845-1 | <i>Processes, methods and procedures.</i> |
| 3. | SANS 10845-2 | <i>Formatting and compilation of procurement documentation.</i> |
| 4. | SANS 10845-3 | <i>Standard conditions of tender.</i> |
| 5. | GCC | <i>General Conditions of Contract for Construction Works, Third Edition (2015) issued by the South African institution of Civil Engineering.</i> |
| 6. | COLTO | <i>Standard Specifications for Road and Bridge Works for State Road Authorities (1998)</i> |
| 7. | This Document, as presented. | |

CONTENTS

	<u>PAGE</u>
COVER PAGE	
Bid Summary for Tender Opening Purposes	i
Important Information	ii
Contents	iii

THE TENDER

<u>SECTION</u>	<u>DESCRIPTION</u>		<u>PAGE</u>
PART T1	TENDERING PROCEDURES		
T 1.1	Tender Notice and Invitation to Tender	(white)	T1.1-1 to T1.1-1
T 1.2	Tender Data	(pink)	T1.2-1 to T1.2-9
PART T2	RETURNABLE DOCUMENTS	(yellow)	T2.1-1 to T2.1-65
	(See List of Documents)		

THE CONTRACT

<u>SECTION</u>	<u>DESCRIPTION</u>		<u>PAGE</u>
PART C1	AGREEMENT and CONTRACT DATA		
C 1.1	Form of Offer	(pink)	C1.1-1 to C1.1-1
C 1.2	Form of Acceptance	(pink)	C1.2-1 to C1.2-1
C 1.3	Schedule of Deviations	(pink)	C1.3-1 to C1.3-1
C 1.4	Contract Data	(yellow)	C1.4-1 to C1.4-6
C 1.5	Performance Guarantee	(yellow)	C1.5-1 to C1.5-4
C 1.6	Agreement in Terms of the Occupational Health and Safety Act, 1993 (Act No 85 Of 1993)	(yellow)	C1.6-1 to C1.6-3
C 1.7	Certificate of Authority for Signatory to Agreement in Terms of Occupational Health and Safety Act, 1993 (Act No 85 Of 1993)	(yellow)	C1.7-1 to C1.7-2
PART C2	PRICING DATA		
C 2.1	Pricing Instructions	(yellow)	C2.1-1 to C2.1-3
C 2.2	Bill of Quantities	(yellow)	C2.2-2 to C2.2-

<u>SECTION</u>	<u>DESCRIPTION</u>		<u>PAGE</u>
PART C3	SCOPE of WORK		
C 3.1	Description of Works	(blue)	C3.1-1 to C3.1-2
C 3.2	Engineering	(blue)	C3.2-1 to C3.2-2
C 3.3	Procurement	(blue)	C3.3-1 to C3.3-1
C 3.4	Construction	(blue)	C3.4-1 to C3.4-36
C 3.5	Management	(blue)	C3.5-1 to C3.5-5
C 3.6	Health and Safety	(blue)	C3.6-1 to C6.6-2
PART C4	SITE INFORMATION		
C 4.1	Site Information	(green)	C4.1-1 to C4.1-4
ANNEXURES			
Appendix A	Occupational Health and Safety Regulations	(white)	A1 to A15
Appendix B	Drawings for Tender Purposes	(white)	

PART T1: TENDERING PROCEDURES

<u>SECTION</u>	<u>DESCRIPTION</u>	<u>PAGE</u>
T 1.1	Tender Notice and Invitation to Tender	9
T 1.2	Tender Data	10

PART T2: RETURNABLE DOCUMENTS

<u>SECTION</u>	<u>DESCRIPTION</u>	<u>PAGE</u>
T 2	Returnable Documents	15

PART T1 **TENDERING PROCEDURES**

T1.1	TENDER NOTICE AND INVITATION TO TENDER	T1.1-1
T1.2	TENDER DATA.....	T1.2-1

T1.1 TENDER NOTICE AND INVITATION FOR PROPOSALS

Bids are hereby invited from experienced services providers for UPGRADING OF MATSAFENI KAAPSCHEHOOP BUS ROUTE WARD 14.

Tender No	Description	CIDB Grading	Compulsory Meeting and Site Inspection Date	Closing Date
COM10/2023	UPGRADING OF MATSAFENI KAAPSCHEHOOP BUS ROUTE WARD 14	8 CE	N/A	14 MARCH 2023 AT 11:00

It is compulsory that service providers download a copy of the bid document that will **ONLY** be available as from 10 FEBRUARY 2023 on the municipal website: www.mbombela.gov.za on the tenders and notices folder and National e-Tender Portal: www.etenders.gov.za, free of charge.

Duly completed bid documents and supporting documents which are, COPY OF TAX COMPLIANCE STATUS, CERTIFIED COPY OF B-BBEE CERTIFICATE OR SWORN AFFIDAVIT FOR B-BBEE TO CLAIM B-BBEE POINTS, MUNICIPAL RATES AND TAXES CLEARANCE FOR BOTH THE COMPANY AND ITS DIRECTORS FROM RELEVANT LOCAL AUTHORITY OR PROOF OF RESIDENCE FROM A TRIBAL AUTHORITY OR LEASE AGREEMENT ACCOMPANIED WITH THE LESSOR'S MUNICIPAL RATES AND TAXES CERTIFICATE, CSD REGISTRATION FULL REPORT (Summary Report will not be considered) and a copy of the COMPANY REGISTRATION CERTIFICATE, together with the bid document must be sealed in an envelope clearly marked: "**BID NO.:COM10/2023, UPGRADING OF MATSAFENI KAAPSCHEHOOP BUS ROUTE WARD 14**" with the name of the bidder shall be placed in the bid box at MBOMBELA CIVIC CENTRE at 1 NEL STREET, MBOMBELA, before 11:00 on the closing date

Bidders are advised not to commit fraudulent activities or forge documents. All abusers of the SCM system, including forging or faking of returnable documents, may be reported to SAPS and restricted from doing business with any Public Institutions for a period NOT exceeding 10 years which is in line with section 28 and 29 of the Prevention and Combating of Corrupt Activities Act 12 of 2004.

A preferential point system shall apply whereby this contract will be allocated to a bidder in accordance with the **Preferential Procurement Policy Framework Act, No 5 of 2000** and as defined in the conditions of bid in the bid document, read in conjunction with the Preferential Procurement Regulations, 2022, where 80 points will be allocated in respect of price and 20 points in respect of **Targeted Goals**.

Procurement Enquiries	:	Christopher Nkambule	(013) 759 2358
Technical Enquires	:	Rudolph Mashego	(013) 759 2190
Employer	:	City Manager,	Mr. Wiseman Khumalo
		City of Mbombela	
		P. O. Box 45	
		1200	
		Mbombela	

VISIT OUR WEBSITE –

www.mbombela.gov.za

NB: the results of this bid will be published on council's website as prescribed on section 75(1)(g) of the MFMA and section 23(c) of the SCM Regulations.

T1.2 TENDER DATA

The conditions of tender are the standard conditions of tender as contained in SANS 10845-3 Construction procurement, Part 3: Standard conditions of tender that apply specifically to this tender.

The Tender Data shall be read with the Standard Conditions of Tender in order to expand on the Tenderer's obligations and the Employer's undertakings in administering the tender process in respect of the project under construction.

The Tender Data hereafter shall have precedence in the interpretation of any ambiguity or inconsistency between it and the Standard Conditions of Tender.

Each item of data given below is cross-referenced to the clause in the standard conditions of tender to which it mainly applies.

Clause Number	Data
	<p>The conditions of tender are those contained in the latest edition of SANS 10845-3, Construction Procurement – Part 3: Standard conditions of tender.</p> <p>SANS 10845-3 makes several references to the Tender Data for details that apply specifically to this tender. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the provisions of SANS 10845-3.</p> <p>Each item of data given below is cross-referenced to the clause in SANS 10845-3 to which it mainly applies.</p>
3.1	<p>The Employer is: City of Mbombela, 1 Nel Street, Mbombela, 1200</p>
	<p>The tender documents issued by the Employer comprise:</p> <p>THE TENDER</p> <p>Part T1 Tendering Procedures</p> <p>Part T1.1 Tender Notice and Invitation to Tender (white)</p> <p>Part T1.2 Tender Data (pink)</p> <p>Part T1.3 Preferential Procurement Policy of City of Mbombela (pink)</p> <p>Part T2 Returnable Documents</p> <p>Part T2.1 List of Returnable Documents (yellow)</p> <p>Part T2.2 Returnable Schedules to be completed by the Contractor (yellow)</p> <p>Part T2.3 Returnable Schedules II (yellow)</p> <p>THE CONTRACT</p> <p>Part C1 Agreement and Contract Data</p> <p>C1.1 Form of Offer and Acceptance (pink)</p> <p>C1.2 Contract Data (yellow)</p> <p>C1.3 Form of Guarantee (white)</p> <p>C1.4 Agreement in terms of Occupational Health and Safety Act, 1993 (white)</p> <p>C1.5 Authority for Signatory in Terms of OH&S Act, 1993 (white)</p> <p>Part C2 Pricing Data</p> <p>C2.1 Pricing Assumptions (yellow)</p> <p>C2.2 Bill of Quantities and Information Sheets (yellow)</p>

3.2	<p>Part C3 Scope of Works</p> <p>C3.1 Scope of Works (blue)</p> <p>C3.2 Engineering (blue)</p> <p>C3.3 Procurement (blue)</p> <p>C3.4 Construction (blue)</p> <p>C3.5 Management (blue)</p> <p>C3.6 Health and Safety (blue)</p> <p>Part C4 Site Information</p> <p>C4 Site Information (green)</p> <p>Appendices</p> <p>Annexure A Health and Safety Specification (white)</p> <p>Annexure B Drawings for Tender Purposes (white)</p>										
3.4	<p>The Employer's Agent is:</p> <p>Name: Lihuzu Projects (Pty) Ltd</p> <p>Address: PO Box 654 SHONGWE MISSION, 1331</p> <p>Tel: 013 744 6070</p> <p>E-mail: info@lihuzu.co.za</p>										
3.5	The language for communications is English.										
3.6	The competitive negotiation procedure shall not be applied.										
4.1	<p>Only those tenderers who satisfy the following eligibility criteria and who provide the required evidence in their tender submissions are eligible to submit tenders and have their tenders evaluated:</p> <p>a) CIDB registration</p> <p>Only those tenderers who are registered with the CIDB, or are capable of being registered prior to the evaluation of submissions, in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25 (7A) of the Construction Industry Development Regulations, for a 7CE or higher of construction work, are eligible to have their tenders evaluated.</p> <p>Tenderers registered as potentially emerging enterprises but with a CIDB contractor grading designation lower than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25(1B) or 25(7A) of the Construction Industry Development Regulations, are not eligible to have their tenders evaluated.</p> <p>For the sake of clarity and subject to satisfactory proof of a tenderer's ability to perform the work specified at the tendered value, the Employer lists in the table below the margins it considers reasonable. However, in the event that the sum tendered exceeds the margins shown then such tender shall be deemed non-responsive.</p> <table border="1"> <thead> <tr> <th>Category of tender</th><th>Upper limits per CIDB Table 8 Regulation 17</th></tr> </thead> <tbody> <tr> <td>CE 5</td><td>R10m</td></tr> <tr> <td>CE 6</td><td>R20m</td></tr> <tr> <td>CE 7</td><td>R60m</td></tr> <tr> <td>CE 8</td><td>R200m</td></tr> </tbody> </table> <p>Joint Ventures are eligible to submit bids provided that:</p> <ol style="list-style-type: none"> (1) every member of the joint venture is registered with the CIDB; (2) the combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a 8 CE or Higher class of construction work or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations. 	Category of tender	Upper limits per CIDB Table 8 Regulation 17	CE 5	R10m	CE 6	R20m	CE 7	R60m	CE 8	R200m
Category of tender	Upper limits per CIDB Table 8 Regulation 17										
CE 5	R10m										
CE 6	R20m										
CE 7	R60m										
CE 8	R200m										

	<p>b) Key Personnel</p> <p>In order to be considered for an appointment in terms of this tender, the tenderer must have in its permanent employment key personnel who will be the single point accountability and responsibility for the management of the construction works. Alternatively, a signed undertaking from an organization having the required personnel, stating that they will undertake the necessary work on behalf of the tenderer in terms of a sub-contractor agreement, will be acceptable. Such undertaking must be attached to Forms T of the Returnable Schedules.</p> <p>Individuals must be identified for each of the key personnel listed under Forms T. Where the key personnel are no longer available to undertake the necessary work after the award of the tender, the contractor shall within a period of 14 working days replace the key personnel listed in Forms T with personnel with equivalent competencies and subject to approval by the Employer. Such approval shall not be unreasonably withheld.</p> <p>The key person shall be a suitably qualified and experienced contracts manager who will be the single point accountability and responsibility for the management of the construction works, and who is registered with SACPCMP as Pr.CM or ECSA as Pr.Eng or Pr.Tech.Eng shall be required as a minimum.</p> <p>Where the Contracts Manager will not be employed on the Works full time, his powers will be delegated to the approved construction manager.</p> <p>Failure to comply with the requirements or to complete Form T may render the tender non- responsive.</p>
4.6	<p>Bidders are encouraged to revisit the City's website regularly prior the closing date particularly on this project folder to ensure that all addenda/ erratum that may be issued are adhered to.</p> <p>Failure to apply instructions contained in addenda may render a tenderer's offer non-responsive in terms of Condition of Tender 5.8.</p>
4.7	<p>The arrangements for the compulsory clarification meeting are as stated in the tender notice and invitation to tender.</p> <p>The onus rests with the tenderer to ensure that the person attending the clarification meeting on its behalf is appropriately qualified to understand all directives and clarifications given at that meeting.</p> <p>The clarification meeting shall start strictly at the time advertised. Only then will the Employer's Representative circulate the attendance register for completion by those present. During this time latecomers may complete the register. On completion by all present the Employer's Representative will:</p> <p>(a) read out from the collected lists calling for confirmation that all have signed;</p> <p>The signature on the attendance register and duly completed and signed Form A shall be considered proof that the tenderer attended the whole meeting and was available to hear all directives and clarifications given at the meeting.</p> <p>Tenderers must sign the attendance list in the name of the tendering entity. Addenda will be issued to and tenders will be received only from those tendering entities appearing on the attendance list. The City will not take responsibility for incorrect information provided by the bidder on the attendance register.</p>
4.8	Request clarifications at least 7 working days before the closing time.
4.10	Tenderers are required to state the rates and currencies in Rand.
	<p>An alternative tender offer will only be considered if a main tender offer, strictly in accordance with all the requirements of the tender documented is also submitted.</p> <p>If the tenderer wishes to submit an alternative tender offer, the only criteria permitted for such alternative tender offer is that it demonstrate the Employer's standards and requirements, the details of which may be obtained from the Employer's Agent.</p>

13 Part T1.2 Tender Data

5.1	The employer shall respond to clarifications received up to 7 working days before tender closing time.
5.2	The employer shall issue an addenda until 7 working days before tender closing time.
5.4	All bid responses must be submitted before the Bid Closing date and time as stipulated on the tender invitation.
5.7	In the event of disqualification, the Employer may, at its sole discretion, impose a specified period during which tender offers will not be accepted from the offending tenderer and report same to CIDB and National Treasury.
5.9	<p>Arithmetical errors, omissions, discrepancies and imbalanced unit rates</p> <p>Check responsive tenders for discrepancies between amounts in words and amounts in figures. Where there is a discrepancy between the amounts in figures and the amount in words, the amount appearing in the summary to the Pricing Schedule shall govern.</p> <p>Check responsive tender offers for:</p> <ul style="list-style-type: none"> a) the gross misplacement of the decimal point in any unit rate; b) omissions made in completing the pricing schedule or bills of quantities; or c) arithmetic errors in: <ul style="list-style-type: none"> i) line item totals resulting from the product of a unit rate and a quantity in bills of quantities or schedules of prices; or ii) The summation of the prices. d) Imbalanced unit rates. <p>Notify shortlisted tenderers of all errors, omissions or imbalanced rates that are identified in their tender offers.</p> <p>Where the tenderer elects to confirm the errors, omissions or re-balancing of imbalanced rates the tender offer shall be corrected as follows:</p> <ul style="list-style-type: none"> a) If bills of quantities or pricing schedules apply and there is an error in the line item total resulting from the product of the unit rate and the quantity, the unit rate shall govern, and the line item total shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line item total as quoted and the unit rate shall be corrected. b) Where there is an error in the total of the prices either as a result of other corrections required by this checking process or in the tenderer's addition of prices, the total of the prices shall be corrected. c) Where the unit rates are imbalanced adjust such rates by increasing or decreasing them and selected others while retaining the total of the prices derived after any other corrections made under (a) and (b) above. <p>Where there is an omission of a line item, no correction is possible, and the offer may be declared non-responsive.</p> <p>Declare as non-responsive and reject any offer from a tenderer who elects not to accept the corrections proposed and subject the tenderer to the sanction under 4.16.2.</p> <p>The tenderer is required to submit balanced unit rates for rate only items in the pricing schedule. The rates submitted for these items will be taken into account in the evaluation of tenders.</p>

5.10	<p>List of disqualifying factors of this tender are as follows:</p> <p>A bid not complying with the requirements stated hereunder will be regarded as “Non Responsive”, and as such will be rejected/disqualified for further evaluation</p> <ul style="list-style-type: none"> • Submit company registration certificate • Submit Tax Compliance Status issued by SARS • Full CSD report NOT older than 30 days from the closing date , Summary report will NOT be considered • Submit Joint venture agreement in case of JV. • Authority for Signatory, duly signed and dated original or certified copy on the Company(s) Letterhead. This condition will not apply to companies owned by one director / member / sole • Submit copies of relevant Annual Financial Statements (last 3 Financial Years). For JV, relevant Annual Financial Statements from all parties are required. Failure to provide for all the service Providers will results in disqualification. • Submit copy of an active CIDB contractor grading designation of 8 CE or higher. For JV, a combined CIDB grading is required. • Tenderer must provide valid copy of municipal rates and taxes for both the company and for the active directors including JV/Consortium partners, Copies of latest municipal rates and taxes certificates from relevant local authority / proof of residential from tribal authority (if the business is operating or the directors are residing in rural areas) / lease agreement with the lessor’s up-to-date municipal rates and taxes for both the business and all business directors. Prospective bidders should ensure that the physical address details of the company and directors reflected on the CSD is similar to the one reflected on the company registration certificate. The municipality reserves the right to verify both the municipal rates and taxes of the company details reflected on the CSD and company registration certificates. The municipality further reserves the right to use ID numbers of the directors to verify if any municipal rates and taxes are not owned by each director. It is prudent and remains the responsibilities of the prospective bidders to ensure that each director, lessor and company rates are cleared with regards to the municipal rates and taxes. A bid will be rejected if any municipal rates and taxes owed by the bidder or any of its directors to the municipality, or to any other municipality or municipal entity, are in arrears for more than three months. • Fully completed and signed where applicable in the Returnable Schedules. • Failure to apply instructions contained in addenda that may be issued. • Submissions from bidders who did not attend a compulsory briefing session will not be acceptable. • Prospective service providers may not make any alterations or additions to the Bid document, except to comply with instructions issued by the employer. The tender document must be furnished with non-erasable black ink and all corrections made by the service provider should be dated and signed by the authorised signatory. Erasures and the use of masking fluid, tippex, pencil or erasable ink are prohibited and failure to adhere to this condition will render your submission non responsive.
5.11	<p>The procedure for the evaluation of responsive tenders is Method 4: Financial offer, quality and preferences.</p> <p>Method 4 Financial offer, quality and preferences is scored as follows:</p> <ol style="list-style-type: none"> a) Score each tender in respect of the financial offer made and preferences claimed, if any. b) Calculate the total number of tender evaluation points (TEV) in accordance with the following formula: $TEV = N_{FO} + N_P + N_Q$

5.11.5	<p>where: N_{FO} is the number of tender evaluation points awarded for the financial offer made in accordance with F.3.11.7;</p> <p>N_P is the number of tender evaluation points awarded for preferences claimed in accordance with F.3.11.8.</p> <p>N_Q is the number of tender evaluation points awarded for quality claimed in accordance with F.3.11.9.</p> <p>c) Rank tender offers from the highest number of tender evaluation points to the lowest.</p> <p>d) Recommend the tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.</p> <p>e) Rescore and re-rank all tenderers should there be compelling and justifiable reasons not to recommend the tenderer with the highest number of tender evaluation points, and recommend the tenderer with the highest number of tender evaluation points, unless there are compelling and justifiable reasons not to do so and the process set out in this sub-clause is repeated.</p> <p>f) Compelling and justifiable reasons not to recommend a tenderer are inter alia tenderers who:</p> <ul style="list-style-type: none">do not meet the minimum requirements listed in Part T2.1, List of Returnable Documents and/orFailed to complete the tender document comprehensively with all the required information.												
5.11.7	<p>The financial offer will be scored using the following formula: $N_{FO} = W_1 \times A$</p> <p>Where:</p> <p>N_{FO} = the number of evaluation points awarded for the financial offer W_1</p> <p>= the maximum possible number of bid evaluation points awarded for the financial offer and will be:</p> <p>(i) 90 where the financial value inclusive of VAT of all responsive tenders received have a value in excess of R 50,000,000; or</p> <p>(ii) 80 where the financial value inclusive of VAT of one or more responsive tender offers equals or is less than R 50,000,000.</p> <p>A = the number calculated using Formula 2 (Option 1) Table</p> <p>1: Formulae for calculating the value of A_a</p> <table><tr><th>Formula</th><th>Comparison aimed at achieving</th><th>Option 1^a</th><th>Option 2^a</th></tr><tr><td>1</td><td>Highest price or discount</td><td>$A = (1 + \frac{(P - P_m)}{P_m})$</td><td>$A = P / P_m$</td></tr><tr><td>2</td><td>Lowest price or percentage commission /fee '</td><td>$A = (1 - \frac{(P - P_m)}{P_m})$</td><td>$A = P_m / P$</td></tr></table> <p>^a P_m is the comparative offer of the most favorable comparative offer. P is the comparative offer of the tender offer under consideration.</p>	Formula	Comparison aimed at achieving	Option 1 ^a	Option 2 ^a	1	Highest price or discount	$A = (1 + \frac{(P - P_m)}{P_m})$	$A = P / P_m$	2	Lowest price or percentage commission /fee '	$A = (1 - \frac{(P - P_m)}{P_m})$	$A = P_m / P$
Formula	Comparison aimed at achieving	Option 1 ^a	Option 2 ^a										
1	Highest price or discount	$A = (1 + \frac{(P - P_m)}{P_m})$	$A = P / P_m$										
2	Lowest price or percentage commission /fee '	$A = (1 - \frac{(P - P_m)}{P_m})$	$A = P_m / P$										

Scoring preferences.

Up to 100 minus W₁ tender evaluation points will be awarded to tenderers who submit Responsive tenders and who are found to be eligible for the preference claimed. Points are based on a tenderer's scorecard measured in terms of the Broad-Based Black Economic Empowerment Act (B-BBEE, Act 53 of 2003) and the Regulations (2017) to the Preferential Procurement Policy Framework Act (PPPFA, Act 5 of 2000).

5.13	<p>In addition to the requirements of the Condition of Tender, offers will only be accepted if:</p> <ul style="list-style-type: none"> the tenderer is registered on the Central Supplier Database (CSD) for the South African government (see https://secure.csd.gov.za/). CSD is compulsory for any company to bid. The full report should be submitted, not the summary. the tenderer is in good standing with SARS according to the Central Supplier Database. the tenderer submits an Original letter of intent from an approved insurer undertaking to provide the Performance Bond to the format included in Form S of this procurement document. the tenderer is registered with the Construction Industry Development Board in an appropriate contractor grading designation. the tenderer or any of its directors/shareholders is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector; the tenderer has not: <ul style="list-style-type: none"> i) abused the Employer's Supply Chain Management System; or ii) failed to perform on any previous contract and has been given a written notice to this effect; the tenderer has completed the Compulsory Declaration and there are no conflicts of interest which may impact on the tenderer's ability to perform the contract in the best interests of the employer or potentially compromise the tender process; the tenderer is registered and in good standing with the compensation fund or with a licensed compensation insurer; the tenderer is registered and in good standing with the compensation fund or with a licensed compensation insurer, on relevant field of work as per the CIDB. the employer is reasonably satisfied that the tenderer has in terms of the Construction Regulations, 2003, issued in terms of the Occupational Health and Safety Act, 1993, the necessary competencies and resources to carry out the work safely. No Tippex has been used on the bid document. The tenderer has not used an erasable pen and completed the bid document with a pencil.
5.17	The number of paper copies of the signed contract to be provided by the employer is One.
5.19	All requests shall be in writing.

PART T2 RETURNABLE DOCUMENTS

PART T2: RETURNABLE DOCUMENTS

1. Failure to fully complete the **compulsory** returnable documents shall render such a tender offer unresponsive.
2. Tenderers shall note that their signatures appended to each returnable form **represents a declaration that they vouch for the accuracy and correctness of the information provided**, including the information provided by candidates proposed for the specified key positions.
3. Notwithstanding any check or audit conducted by or on behalf of the Employer, the information provided in the returnable documents is accepted in good faith and as justification for entering into a contract with a tenderer. **If subsequently any information is found to be incorrect such discovery shall be taken as willful misrepresentation by that tenderer to induce the contract.** In such event the Employer has the discretionary right under contract condition 9.2 to terminate the contract.

The Tenderer must complete the following returnable Schedules:

Returnable Schedules required for Tender evaluation purposes

COMPULSORY TENDER DOCUMENTS	
FORM A	CERTIFICATE OF ATTENDANCE AT CLARIFICATION MEETING
FORM B	RECORD OF ADDENDA TO TENDER DOCUMENTS
FORM C	PROPOSED AMENDMENTS, QUALIFICATIONS AND ALTERNATIVES
FORM D	PREFERENCING SCHEDULE: BROAD BASED BLACK ECONOMIC EMPOWERMENT STATUS
FORM E	COMPULSORY DECLARATION
FORM F	MUNICIPAL DECLARATION AND RETURNABLE DOCUMENTS
FORM G	CERTIFICATE OF INDEPENDENT TENDER
FORM H	DECLARATION OF GOOD STANDING REGARDING TAX
FORM I	DECLARATION OF TENDERER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES
FORM J	REGISTRATION ON NATIONAL TREASURY CENTRAL SUPPLIER DATABASE
FORM K	DECLARATION OF TENDERER'S LITIGATION HISTORY
FORM L	AUTHORITY OF SIGNATORY
FORM M	SCHEDULE OF SPECIALIST SUBCONTRACTORS
FORM N	PROOF OF GOOD STANDING WITH COMPENSATION COMMISSIONER
FORM O	SCHEDULE OF CURRENT COMMITMENTS
FORM P	REGISTRATION WITH CIDB
RETURNABLE FOR QUALITY CRITERIA	
FORM Q	COMPANY EXPERIENCE IN RELATION TO SCOPE OF WORKS
FORM R	PLANT & EQUIPMENT
FORM S	FINANCIAL RESOURCES
FORM T	MANAGERIAL CAPACITY, EXPERIENCE AND QUALIFICATIONS
CERTIFICATE FOR TENDER COMPLIANCE	
FORM W	SCHEDULE OF TENDER COMPLIANCE

COMPULSORY TENDER DOCUMENTS

FORM A: CERTIFICATE OF ATTENDANCE AT CLARIFICATION MEETING

Notes to Tenderer:

1. Unless the attendee's name, details and signature also appear on the attendance register this Certificate of Attendance shall not be accepted and the tenderer's offer shall be deemed non- responsive.

This is to certify that I,

representative of (tenderer)

of (address)

.....

.....

telephone number

fax number

e-mail

attended the clarification meeting on (date)

Signature of Representative: _____

Signature of Project Manager: _____

FORM B: RECORD OF ADDENDA TO TENDER DOCUMENTS_(SIPDM)

We confirm that the following communications received from the Employer before the submission of this tender offer, amending the tender documents, have been taken into account in this tender offer:

	Date	Title or Details
■		
■		
■		
■		
■		
■		
■		
■		
■		

Attach additional pages if more space is required.

Signed Date

Name Position

FORM C: PROPOSED AMENDMENTS, QUALIFICATIONS AND ALTERNATIVES_(SIPDM)

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

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

(a) AMENDMENTS

Page, Clause or Item No	Proposed Amendment

Note: (1) Amendments to the General and Special Conditions of Contract are not acceptable.

(2) The Tenderer must give full details of all the financial implications of the amendments and qualifications in a covering letter attached to his tender.

(This is not an invitation for alternatives but should the Tenderer desire to make any departures for the provisions of this contract he shall set out his proposals clearly hereunder.

(b) ALTERNATIVES

Proposed Alternative	Description of Alternative

Note: (1) Individual alternative items that do not justify an alternative tender, and an alternative offer for time for completion should be listed here.

- (2) In the case of a major alternative to any part of the work, a separate Bill of Quantities, programme, etc. and a detailed statement setting out the salient features of the proposed alternatives must accompany the tender.*
- (3) Alternative tenders involving technical modifications to the design of the works and methods of construction shall be treated separately from the main tender offer.*

Signed _____

Name _____

Date _____

Position _____

FORM D: PREFERENTIAL PROCUREMENT REGULATIONS 2022**PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022**

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

NB: BEFORE COMPLETING THIS FORM, TENDERERS 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 invitations to tender:

- 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 To be completed by the organ of state

- a) The applicable preference point system for this tender is the 80/20 preference point system.

1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:

- (a) Price; and
(b) Specific Goals.

1.4 To be completed by the organ of state:

The maximum points for this tender are allocated as follows:

	POINTS
PRICE	80
SPECIFIC GOALS	20
Total points for Price and SPECIFIC GOALS	100

1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.

1.6 The organ of state reserves the right to require of a tenderer, either before a tender 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) “**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;
- (b) “**price**” means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;
- (c) “**rand value**” means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;
- (d) “**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; and
- (e) “**the Act**” means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

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:

$$\begin{array}{ccc} \mathbf{80/20} & \mathbf{or} & \mathbf{90/10} \\ \mathbf{Ps} = \mathbf{80} \left(\mathbf{1} - \frac{\mathbf{Pt} - \mathbf{Pmin}}{\mathbf{Pmin}} \right) & \mathbf{or} & \mathbf{Ps} = \mathbf{90} \left(\mathbf{1} - \frac{\mathbf{Pt} - \mathbf{Pmin}}{\mathbf{Pmin}} \right) \end{array}$$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest acceptable tender

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:

$$\begin{array}{ccc} \mathbf{80/20} & \mathbf{or} & \mathbf{90/10} \\ \mathbf{Ps} = \mathbf{80} \left(\mathbf{1} + \frac{\mathbf{Pt} - \mathbf{Pmax}}{\mathbf{Pmax}} \right) & \mathbf{or} & \mathbf{Ps} = \mathbf{90} \left(\mathbf{1} + \frac{\mathbf{Pt} - \mathbf{Pmax}}{\mathbf{Pmax}} \right) \end{array}$$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender 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. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/documentation stated in the conditions of this tender:

4.2. 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.

Table 1: Specific goals for the tender and points claimed are indicated per the table below.

(Note to organs of state: Where either the 90/10 or 80/20 preference point system is applicable, corresponding points must also be indicated as such.

Note to tenderers: The tenderer must indicate how they claim points for each preference point system.)

Item no.	The specific goals allocated points in terms of this tender	Number of points allocated (90/10 system)	Number of points claimed (90/10 system) (To be completed by the tenderer)
1.	100% black person or people owned enterprise;	1	
2.	More than 30% woman or women shareholding or owned enterprise;	1	
3.	More than 30% youth shareholding or owned enterprise;	1	
4.	More than 30% people living with disability shareholding or owned enterprise.	1	
5.	Enterprise located within the local area of jurisdiction (City of Mbombela)	1	
6	Enterprise who will sub-contract minimum of 30% of the contract value to EMEs in the ward or local communities where the services to be rendered or works to be undertaken; (Bidders shall list sub-contracting works or items)	1	
7	Corporate Social Investment (CSI) Plan. (see notes below)	3	
8	B-BBEE level 1 contribution (SANAS verified B-BBEE certificate for generic enterprise, and for EME and SME a sworn affidavit or CIPC issued certificate confirming annual turnover and level of Black Ownership)	1	

The City will utilise the CSD report for the above-mentioned information

Corporate Social Investment (CSI)

NB: The minimum total value of the CSI should not be less than 2% of the total project value excluding vat and contingencies. The CSI project should be delivered concurrently with the project. The final product should be delivered prior to the issuing of completion certificate. The nature of the CSI project must benefit the community at large. (1 page, Arial font size 12) Prospective bidders will be expected to provide the City with a written explanation on how to implement the Corporate Service Investment on that particular ward, community or region. The investment must benefit the community at large. In order to claim points, a detailed one page report must be included in the list of returnable documents. The corporate social investment initiatives must be implemented by the company/successful bidder. The final details of the CSI project will be finalized prior to the signing of the contract in consultations with relevant stakeholders.

DECLARATION WITH REGARD TO COMPANY/FIRM

4.3. Name of company/firm.....

4.4. Company registration number:

4.5. TYPE OF COMPANY/ FIRM

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

[TICK APPLICABLE BOX]

4.6. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I 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 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state 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 organ of state may, in addition to any other remedy it may have
 - (a) disqualify the person from the tendering 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) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted 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
 - (e) forward the matter for criminal prosecution, if deemed necessary.

.....
SIGNATURE(S) OF TENDERER(S)

SURNAME AND NAME:

DATE:

ADDRESS:

.....

.....

.....

4 Declaration

The tenderer declares that

- a) the tendering entity is a level contributor as stated in the submitted evidence of qualification as at the closing date for submissions
- b) the tendering entity has been measured in terms of the following code (tick applicable box)
 - ☐ Generic code of good practice
 - ☐ Other – specify
- c) the contents of the declarations made in terms of a) and b) above are within my personal knowledge and are to the best of my belief both true and correct

The undersigned, who warrants that he / she is duly authorized to do so on behalf of the tenderer, confirms that he / she understands the conditions under which such preferences are granted and confirms that the tenderer satisfies the conditions pertaining to the granting of tender preferences.

Signature:

Name:

Duly authorised to sign on behalf of:

Telephone:

Fax: Date:

Name of witness Signature of witness

Note:

- 1) Failure to complete the declaration will lead to the rejection of a claim for a preference.
- 2) Supporting documentation of the abovementioned claim for a preference must be submitted with the tender submission to be eligible for a preference. (see Clause 5.11.8 in Tender Data)

FORM E: COMPULSORY DECLARATION (SIPDM) (GBD 4)

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

Section 1: Enterprise Details**Name of Enterprise**

Name of enterprise:	
Contact person:	
Email:	
Telephone:	
Cell no	
Fax:	
Physical address	
Postal address	

Section 2: Particulars of companies and close corporations Company / Close Corporation registration number.

--	--

Section 3: SARS Information

Tax reference number	
VAT registration number	<i>State Not registered if Not Registered for VAT</i>

Section 5: National Treasury Central Supplier Database

Supplier number	
Unique registration reference number	

Section 6: Particulars of principals

principal: means a natural person who is a partner in a partnership, a sole proprietor, a director of a company established in terms of the Companies Act of 2008 (Act No. 71 of 2008) or a member of a close corporation registered in terms of the Close Corporation Act, 1984, (Act No. 69 of 1984).

Full name of principal	Identity number	Personal tax reference number

*insert separate page if necessary

Section 7: Record in the service of the state

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

- | | | | |
|--|--------------------------|---|--------------------------|
| a) a member of any municipal council | <input type="checkbox"/> | an employee of any department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act of 1999 (Act No. 1 of 1999) | <input type="checkbox"/> |
| b) a member of any provincial legislature | <input type="checkbox"/> | | |
| c) a member of the National Assembly or the National Council of Province | <input type="checkbox"/> | member of an accounting authority of any national or provincial public entity | <input type="checkbox"/> |
| 1. a member of the board of directors of any municipal entity | <input type="checkbox"/> | | |
| 2. an official of any municipality or municipal entity | <input type="checkbox"/> | an employee of Parliament or an employee of Parliament or a provincial legislature | <input type="checkbox"/> |

If any of the above boxes are marked, disclose the following:

Name of principal	Name of institution, public office, board or organ of state and position held	Status of service (tick appropriate column)	
		Current	Within last 12 months

*insert separate page if necessary

Section 8: Record of family member in the service of the state

family member: a person's spouse, whether in a marriage or in a customary union according to indigenous law, domestic partner in a civil union, or child, parent, brother, sister, whether such a relationship results from birth, marriage or adoption.

Indicate by marking the relevant boxes with a cross, if any family member of a principal as defined in section 5 is currently or has been within the last 12 months been in the service of any of the following:

- | | | | |
|--|--------------------------|---|--------------------------|
| d) a member of any municipal council | <input type="checkbox"/> | an employee of any department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act of 1999 (Act No. 1 of 1999) | <input type="checkbox"/> |
| e) a member of any provincial legislature | <input type="checkbox"/> | | |
| f) a member of the National Assembly or the National Council of Province | <input type="checkbox"/> | member of an accounting authority of any national or provincial public entity | <input type="checkbox"/> |
| 3. a member of the board of directors of any municipal entity | <input type="checkbox"/> | | |
| 4. an official of any municipality or municipal entity | <input type="checkbox"/> | an employee of Parliament or an employee of Parliament or a provincial legislature | <input type="checkbox"/> |

If any of the above boxes are marked, disclose the following:

Name of principal	Name of institution, public office, board or organ of state and position held	Status of service (tick appropriate column)	
		Current	Within last 12 months

*insert separate page if necessary

Section 9: Record of termination of previous contracts with an organ of state

Was any contract between the tendering entity including any of its joint venture partners terminated during the past 5 years for reasons other than the employer no longer requiring such works or the employer failing to make payment in terms of the contract.

☐ Yes ☐ No (Tick appropriate box)

If yes, provide particulars (insert separate page if necessary)

Section 10: Declaration

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the tendering entity confirms that the contents of this Declaration are within my personal knowledge, and save where stated otherwise in an attachment hereto, are to the best of my belief both true and correct, and:

neither the name of the tendering entity or any of its principals appears on:

a) the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004 (Act No. 12 of 2004).

National Treasury's Database of Restricted Suppliers (see www.treasury.gov.za)

ii) neither the tendering entity or any of its principals has within the last five years been convicted of fraud or corruption by a court of law (including a court outside of the Republic of South Africa);

iii) any principal who is presently employed by the state has the necessary permission to undertake remunerative work outside such employment (attach permission to this declaration);

iv) the tendering entity is not associated, linked or involved with any other tendering entities submitting tender offers

v) has not engaged in any prohibited restrictive horizontal practices including consultation, communication, agreement, or arrangement with any competing or potential tendering entity regarding prices, geographical areas in which goods and services will be rendered, approaches to determining prices or pricing parameters, intentions to submit a tender or not, the content of the submission (specification, timing, conditions of contract etc.) or intention to not win a tender;

vi) has no other relationship with any of the tenderers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest;

vii) neither the tenderer or any of its principals owes municipal rates and taxes or municipal service charges to any municipality or a municipal entity and are not in arrears for more than 3 months;

SARS may, on an on-going basis during the term of the contract, disclose the tenderer's tax compliance status to the Employer and when called upon to do so, obtain the written consent of any subcontractors who are subcontracted to execute a portion of the contract that is entered into in excess of the threshold prescribed by the National Treasury, for SARS to do likewise.

Signed: _____

Date: _____

Name: _____

Position: _____

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

NOTE 2: Section 30(1) of the Public Service Act, 1994, prohibits an employee (person who is employed in posts on the establishment of departments) from performing or engaging remunerative work outside his or her employment in the relevant department, except with the written permission of the executive authority of the department. When in operation, Section 8(2) of the Public Administration Management Act, 2014, will prohibit an employee of the public administration (i.e. organs of state and all national departments, national government components listed in Part A of Schedule 3 to the Public Service Act, provincial departments including the office of the premier listed in Schedule 1 of the Public Service Act and provincial departments listed in schedule 2 of the Public Service Act, and provincial government components listed in Part B of schedule 3 of the Public Service Act) or persons contracted to executive authorities in accordance with the provisions of section 12A of the Public Service Act of 1994 or persons performing similar functions in organs of state from conducting business with the State or to be a director of a public or private company conducting business with the State. The offence for doing so is a fine or imprisonment for a period not exceeding 5 years or both. It is also a serious misconduct which may result in the termination of employment by the employer.

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

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

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

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

ATTACH THE FOLLOWING DOCUMENTS TO THIS PAGE

- **For Closed Corporations**

CK1 or CK2 as applicable (Founding Statement) Certified Copies of the ID's of the Directors Certified Shareholders Certificate

OR

- **For Companies**

A copy of the Certificate of Incorporation Certified Copies of the ID's of the Directors, and Certified shareholders' register

OR

- **For Joint Venture Agreements**

- Joint Venture Agreement between all the parties,
- as well as the documents in (1) or (2) of each Joint Venture member.

OR

- **For Partnership**

1. Certified Copies of the ID's of the partners

OR

- **One person Business / Sole trader**

2. Certified Copy of ID

FORM F: MUNICIPAL DECLARATION AND RETURNABLE DOCUMENTS

(SIPDM)

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

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

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

Section 1: Enterprise Details / Name of enterprise:

Name of enterprise:	
Contact person:	
Email:	
Telephone:	
Cell no	
Fax:	
Physical address	
Postal address	

Section 2: Declaration for Contractor's services:

The enterprise has been awarded the following contract services by an organ of state during the last five years.

Name of organ of state	Estimated value of contracts	Nature of service e.g. quantity surveying	Service number similar to required service (yes / no)?

Attach separate page as necessary

Section 3: Goods, services or a combination thereof where the estimated total of the prices exceeds R 10 million including VAT

I / we certify that

1) (tick one of the boxes):

- ☐ the enterprise is not required by law to prepare annual financial statements for auditing.
- ☐ the enterprise is required by law to have audited annual financial statements and attached the audited financial statements for the past three financial years, or since the establishment as the enterprise was established within the past three years.

2) the enterprise and its directors has / have no undisputed commitments for municipal services towards a municipality or other service provider in respect of which payment is overdue for more than 30 days (i.e.: all municipal accounts are paid up to date) Attach Municipal Utility Account;

3) source of goods and / or services:

(tick one of the boxes and insert percentages if applicable):

- ☐ goods and / or services are sourced only from within the Republic of South Africa
- ☐ % of the total cost of goods and / or services will be sourced from outside the Republic of South Africa and the percentage of payment from the municipality or municipal entity which is expected to be transferred out of the Republic is %

I furthermore confirm that the following contracts were awarded to the enterprise by an organ of state during the last five years and attached particulars of any material non-compliance or dispute concerning the execution of such contracts:

Name of organ of state	Estimated number of contracts	Nature of contracts

*Attach separate page as necessary

I, the undersigned who warrants that I am duly authorised on behalf of the tendering entity, hereby declare that the contents of this Declaration are within my personal knowledge, and save where stated otherwise are to the best of my belief both true and correct.

Signed: _____

Date: _____

Name: _____

Position: _____

**ATTACHED HERETO AN ORIGINAL OR CERTIFIED COPY OF THE
LATEST MUNICIPAL UTILITY ACCOUNT**

FORM G: CERTIFICATE OF INDEPENDENT TENDER (GBD 9)

Notes to tenderer:

- a) This certificate conforms to Treasury Regulation 16A9 and the requirement of section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, that 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 tendering.
- b) Collusive tendering is a conspiracy between businesses that would normally be expected to compete, to agree not to compete, in a tender process.
- c) This certificate serves as a declaration by the tenderer that the tender submitted is free from any collusion with a competitor.

CERTIFICATE OF INDEPENDENT TENDER DETERMINATION

I, the undersigned, in submitting the accompanying tender:

 (Tender Number and Description) in response to the invitation for the tender 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 Tenderer)

- i) I have read and I understand the contents of this Certificate;
- ii) I understand that the accompanying tender will be disqualified if this Certificate is found not to be true and complete in every respect;
- iii) I am authorized by the tenderer to sign this Certificate, and to submit the accompanying tender, on behalf of the tenderer;
- iv) Each person whose signature appears on the accompanying tender has been authorized by the tenderer to determine the terms of, and to sign, the tender, on behalf of the tenderer;
- v) For the purposes of this Certificate and the accompanying tender, I understand that the word "competitor" shall include any individual or organization, other than the tenderer, whether or not affiliated with the tenderer, who:
 - (a) has been requested to submit a tender in response to this tender invitation;
 - (b) could potentially submit a tender in response to this tender invitation, based on their qualifications, abilities or experience; and
 - (c) provides the same goods and services as the tenderer and/or is in the same line of business as the tenderer
- vi) The tenderer has arrived at the accompanying tender 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.

-
- vii) 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 tender;
 - e) the submission of a tender which does not meet the specifications and conditions of the tender; or
 - f) bidding with the intention not to win the tender.
- viii) 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 tender invitation relates.
- ix) The terms of the accompanying tender have not been, and will not be, disclosed by the tenderer, directly or indirectly, to any competitor, prior to the date and time of the official tender opening or of the awarding of the contract.
- x) I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to tenders and contracts, tenders 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

Capacity under which Tender is Signed

Name of Tenderer

FORM H: DECLARATION OF GOOD STANDING REGARDING TAX (GBD 2)**ATTACH VALID TAX CLEARANCE CERTIFICATE AND
TAX COMPLIANCE STATUS (TCS) PIN TO THIS PAGE**

The Tax Clearance Certificate and Tax Compliance Status (TCS) PIN must be submitted together with the tender. Failure to submit the above-mentioned documentation will result in the invalidation of the tender.

In tenders where Consortia / Joint Ventures / Sub-contractors are involved, each party must submit a separate Tax Clearance Certificate, and Tax Compliance Status (TCS) PIN.

**FORM I: DECLARATION OF TENDERER'S PAST SUPPLY CHAIN
MANAGEMENT PRACTICES (GBD 8)**

Notes to tenderer:

1. This tender document must form part of all tenders invited.
2. This form serves as a declaration to be used by institutions 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 tender of any tenderer may be disregarded if that tenderer or any of its directors have;
 - a. abused the institution's supply chain management system;
 - b. committed fraud or any other improper conduct in relation to such system;
 - c. failed to perform on any previous contract.
4. In order to give effect to the above, the following questionnaire must be completed and submitted with this tender.

Item	Question	Yes	No
4.1	<p>Is the tenderer 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?</p> <p>(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).</p> <p>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.</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.1.1	If so, furnish particulars:		
4.2	<p>Is the tenderer or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)?</p> <p>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.</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.2.1	If so, furnish particulars:		
4.3	<p>Was the tenderer or any of its directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years?</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.3.1	If so, furnish particulars:		

4.4	Does the tenderer or any of its directors owe any municipal rates and taxes or municipal charges to the municipality / municipal entity, or to any other municipality / municipal entity, that is in arrears for more than three months?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.4.1	If so, furnish particulars:		
4.5	Was any contract between the tenderer and the municipality / municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.7.1	If so, furnish particulars:		

CERTIFICATION

I, THE UNDERSIGNED (FULL NAME)

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

I ACCEPT THAT, IN ADDITION TO CANCELLATION OF A CONTRACT, ACTION MAY BE TAKEN AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

Signature

Date

Capacity under which Tender is Signed

Name of Tenderer

**FORM J: REGISTRATION ON NATIONAL TREASURY CENTRAL SUPPLIER
DATABASE**

The tenderer shall provide a printed copy of the Active Supplier Listing on the National Treasury Central Supplier Database. (www.treasury.gov.za). Tenderers who are not registered on the Central Supplier Database should attach proof of their application for registration (refer to Tender Data Clause 4.1). In the case of a Joint Venture, a printed copy of the Active Supplier Listing must be provided for each member of the Joint Venture.

Name of Contractor:

.....

Central Supplier Database Supplier Number:

.....

***Affix Proof of the National Treasury Central Supplier Database to this page
(Full CSD required, not summary)***

FORM K: DECLARATION OF TENDERER'S LITIGATION HISTORY

Does the tenderer have any litigation with which tenderer (including its directors, shareholders or other senior members in previous companies) have been involved with any organ of state or state department within the last ten years?

YES

NO

If yes, furnish your details in table below.

NB: It is compulsory for all bidders to sign this form

The tenderer shall list below details of any litigation with which the tenderer (including its directors, shareholders or other senior members in previous companies) has been involved with any organ of state or state department within the last ten years. The details must include the year, the litigating parties, the subject matter of the dispute, the value of any award or estimated award if the litigation is current and in whose favour the award, if any, was made.

Client	Other Litigating Party	Dispute	Award Value	Date Resolved

Signature

Date

Capacity under which Tender is Signed

Name of Tenderer

FORM L: AUTHORITY OF SIGNATORY

Details of person responsible for tender process:

Name:

Contact number:

Office address:

.....

Signatories for close corporations and companies shall confirm their authority by attaching to this form **a duly signed and dated original or certified copy on the Company Letterhead** of the relevant resolution of their members or their board of directors, as the case may be.

PRO-FORMA FOR COMPANIES AND CLOSE CORPORATIONS:"By resolution of the board of directors passed on *(date)*

Mr.

has been duly authorized to sign all documents in connection with the Tender for Contract Number/Name

.....and any Contract which may arise there from on behalf of

.....

(BLOCK CAPITALS) SIGNED ON BEHALF OF THE COMPANY

IN HIS CAPACITY AS

DATE

FULL NAMES OF SIGNATORY

SIGNATURE

AS WITNESSES: 1. NAME SIGNATURE

2. NAME SIGNATURE

PRO-FORMA FOR JOINT VENTURES:**Certificate of Authority for Joint Ventures**

We, the undersigned, are submitting this tender offer in Joint Venture and hereby authorize..... Mr./Ms authorized signatory of the company....., acting in the capacity of lead partner, to sign all documents in connection with the tender offer and any contract resulting from it on our behalf.

NAME OF FIRM	ADDRESS	DULY AUTHORISED SIGNATORY
		Signature: Name: Designation:
		Signature: Name: Designation:
		Signature: Name: Designation:
		Signature: Name: Designation:

**ATTACHED HERETO THE DULY SIGNED AND DATED ORIGINAL OR CERTIFIED
COPY OF AUTHORITY OF SIGNATORY ON COMPANY LETTERHEAD**

FORM M: SCHEDULE OF SPECIALIST SUBCONTRACTORS
--

Notes to tenderer:

1. The tenderer shall list below the specialist items of work on this contract. Alternatives may be mentioned.
2. The tenderer shall state whether he intends to carry out any specialised work himself.

Acceptance of this tender shall not be construed as approval of all or any of the listed specialist subcontractors. Should any or all of the specialist subcontractors not be approved subsequent to the acceptance of the tender, it shall in no way invalidate this tender, and the tendered unit rates for the various items of work shall remain final and binding, even in the event of a subcontractor not listed below being approved by the engineer.

SPECIALISED ITEM	INDICATE IF SUB-CONTRACTED (Tick correct option)	
	YES	NO

In order to complete the Works under this Contract, I/we propose to employ the following sub-contractors to carry out the portion/type of work as detailed. **Affix Original or Certified proof of 3 previous projects for each sub-contractor.**

(Note: All proposed sub-contractors must be listed).

Sub-contractor: Name, Address and Telephone No.	Portion/type of work to be undertaken	
_____ _____ () _____		Previous value of work:
		Previous Experience:
_____ _____ () _____		Previous value of work:
		Previous Experience:

<hr/> <hr/> () <hr/>		Previous value of work:
		Previous Experience:
<hr/> <hr/> () <hr/>		Previous value of work:
		Previous Experience:

FORM N: PROOF OF GOOD STANDING WITH COMPENSATION COMMISSIONER

Notes to tenderer:

1. Discovery that the tenderer has failed to make proper disclosure may result in the City of Mbombela terminating a contract that flows from this tender on the ground that it has been rendered invalid by the tenderer's misrepresentation.
2. The tenderer shall attach to this Form evidence that he is registered and in good standing with the compensation fund or with a licensed compensation insurer who is approved by Department of Labour in terms of section 80 of the Compensation for Injury and Disease Act 1993 (COID) (Act 130 of 1993).

Affix certified Proof of Good Standing with Compensation Commissioner to this page

FORM O: SCHEDULE OF CURRENT COMMITMENTS

Notes to tenderer:

- (a) The tenderer shall list below all contracts currently under construction or awarded and about to commence and tenders for which offers have been submitted but awards not yet made.
- (b) In the event of a joint venture enterprise, details of all the members of the joint venture shall similarly be attached to this form.
- (c) The lists must be restricted to not more than 5 contracts and 5 tenders. If a tenderer's actual commitments or potential commitments are greater than 5 each, those listed should be in descending order of expected final contract value or sum tendered.

Contracts Awarded				
Employer	Project	Expected Value of contract (Inclusive of VAT)	Durations (Months)	Expected Completion Date

Tenders not Yet Awarded				
Employer	Project	Tendered Amount (Inclusive of VAT)	Tendered Durations (Months)	Expected Commencement Date

Signature

Date

Capacity under which Tender is Signed

Name of Tenderer

FORM P: REGISTRATION WITH CIDB

The tenderer shall provide a printed copy of the Active Contractor's Listing off the CIDB website. (www.cidb.org.za). Tenderers whose CIDB registration expires within 21 days after close of tender should attach proof of their application for re-registration (refer to Tender Data Clause 4.1). In the case of a Joint Venture, a printed copy of the Active Contractor's Listing must be provided for each member of the Joint Venture.

Name of Contractor:

Contractor Grading Designation:

CIDB Contractor Registration Number:

Expiry Date:

RETURNABLES FOR QUALITY CRITERIA

FORM Q: COMPANY EXPERIENCE IN RELATION TO SCOPE OF WORKS

The Tenderer will receive a maximum of 50 points based on information provided in this schedule.

The following is a statement of work of similar (roads) nature and size recently successfully executed by myself / ourselves:

- 1 Points will be given for projects completed of similar nature and size.
- 2 The tenderer scores **3 points** per project with a value of more than R10 million but less than R20 million, completed in the last 5 years.
- 3 The tenderer scores **7 points** per project with a value of more than R20 million but less than R30 million completed in the last 5 years.
- 4 The tenderer scores **10 points** per project with a value of more than R30 million completed in the last 5 years.
- 5 The tenderer may list only 5 projects of similar nature and size.
- 6 The maximum Quality points for each criterion are listed below.
- 7 The tenderer to provide reference letter from the client for each project completed, the reference letter must have contract amount, completion date, Contract appointment date, responsible Project Manager, etc duly signed by the client, incomplete information and failure to provide such will result in loss of points. The municipality reserves the rights to contact the client, CIDB and the Principal Agent to verify the documentation, Any Fraudulent information shall lead to the disqualification of the bidder and reporting of SCM abused conduct to National Treasury.
- 8 Failure to submit all relevant information per project will result in the forfeiture of all points for that relevant project.
- 9 The experience of the Tenderer or joint venture partners in a consortium will be evaluated based on experience in similar projects or similar areas and conditions in relation to the scope of work required for this project.
- 10 Documents requested above must be certified and not older than 3 months. Failure to adhere to the directive zero points will be allocated.

NB: Similar project (construction of roads excluding maintenance)

Appointment letter as well as Completion Certificate (signed by client, contractor and engineer) of Relevant Work (to be attached – zero points if any is not attached)	Consulting Engineer: Contact Person and Telephone Number	Employer: Contact Person and Telephone Number	Value of Work (inclusive of VAT)	Date Completed

BID NO: BID COM10/2023

UPGRADING OF MATSAFENI KAAPSCHEHOOP BUS ROUTE – WARD 14

*Attach additional pages if more space is required		Total Points		

FORM R: PLANT & EQUIPMENT

The tenderer will receive a maximum of 15 points based on information provided in this schedule.

1. The following are lists of major items of relevant equipment that I / we presently own or lease and will have available for this contract or will acquire for this contract if my / our tender is accepted.
2. The tenderer will receive Quality points for listing of plant available for this specific contract as follows:
 - Major plant for construction works if well identified and 100% is owned and available at start of contract maximum points will be as stated in allocated points if owned column.
 - No points will be allocated for hired plant as indicated in the Allocate points for hired plant column on the table below.
 - Points for the plant correctly identified and owned will be calculated according to the allocated points based on the quantities under the Quantities Required column.
3. Proof of ownership to be submitted: Natis to be attached.
4. Documents requested above must be certified and not older than 3 months. Failure to adhere to the directive zero points will be allocated. Proof of ownership to be submitted. Certified copies of motor vehicle license (MVLX) or motor vehicle license and license disc (MVL1) or certificate of registration (RC1) or any valid document issued by the department of transport (where applicable**). Invoices for equipment that are not traveling on the road will be accepted as proof of ownership (where applicable*). The invoice must be in the name of the bidding company or director(s).

Description, size, capacity, etc.	Allocate Points if owned	Quantity Required	Quantity owned	Points Scored
Motor grader (Cat 14H or Similar)	4.0	1		
Excavator (20 ton)	2.0	2		
Vibratory Roller	2.0	1		
Water Tanker (8000 Litre)	2.0	2		
Tipper Truck (10 m ³ or above)	4.0	4		
TLB (48 kw Capacity)	1.0	1		
Total	15.0			
Total Points Allocated				

*Attached additional pages if more space is required.

FORM S: FINANCIAL RESOURCES BANKING INFORMATION

The tenderer will receive a maximum of 15 points based on information provided in this schedule.

DETAILS OF TENDERERS BANKING INFORMATION**Notes to tenderer:**

- The tenderer shall attach to this form a letter of intent for 10% guarantee from a financial institution. (10 points)
- The tenderer shall attach stamped original proof of banking details(5 points)

BANK NAME:											
ACCOUNT NAME: (e.g. ABC Civil Construction cc)											
ACCOUNT TYPE: (e.g. Savings, Cheque etc.)											
ACCOUNT NO:											
ADDRESS OF BANK:											
CONTACT PERSON:											
TEL. NO. OF BANK / CONTACT:											
How long has this account been in existence:	<table border="1"> <tr> <td>0-6 months</td> <td></td> </tr> <tr> <td>7-12 months</td> <td></td> </tr> <tr> <td>13-24 months</td> <td></td> </tr> <tr> <td>More than 24 months</td> <td></td> </tr> </table>	0-6 months		7-12 months		13-24 months		More than 24 months		(Tick which is appropriate)	
0-6 months											
7-12 months											
13-24 months											
More than 24 months											

--

<p align="center">FORM S: FINANCIAL RESOURCES DECLARATION OF PROCUREMENT ABOVE R 10 MILLION (GBD5)</p>

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

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

YES / NO

- 1.1. If yes, submit audited 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 municipal for more than three months or any other service provider in respect of which payments is overdue for more than 30 days?

YES / NO

.....

- 2.1 If no, this serves to certify that the tenderer 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 then 30 days?

.....

- 2.2 If yes, please provide particulars

.....

- 2.1 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

.....

- a. If yes, furnish particulars

.....

- 4.1 Will any portion of goods or services be sourced from outside the Republic, and, if so, what 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 STE MAY ACT AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE

 Signature

 Date

 Capacity under which Tender is
 Signed

 Name of Tenderer

**FORM S: FINANCIAL RESOURCES
DOCUMENTATION OF INTENT TO PROVIDE A PERFORMANCE GUARANTEE**

The Tenderer will receive a maximum of 10 points based on information provided in this schedule.

The Tenderer must attach hereto an **Original Letter** from a financial institution with whom he has made the necessary arrangements, to the effect that the said financial institution will be prepared to provide the required performance guarantee when asked to do so. (Letter of Intent)

A Pro forma follows herewith for the tenderer to use.

**PRO-FORMA FOR A PERFORMANCE
GUARANTEE PERFORMANCE
GUARANTEE**

Employer

(Name and Address)

Contract No

Contract Title

-

WHEREAS

-

(hereinafter referred to as "the Employer") entered into, a Contract with:

(hereinafter called "the
Contractor")

on the _____ day of _

_____ 20

_____ for the construction of (Contract

Title)

at

AND WHEREAS it is provided by such Contract that the Contractor shall provide the Employer with security by way of a guarantee for the due and faithful fulfilment of such Contract by the Contractor;

AND WHEREAS

(hereinafter referred to as the

WE

Guarantor") has/have at the request of the Contractor, agreed to give such guarantee;

NOW THEREFORE WE do hereby guarantee and bind ourselves jointly and severally as Guarantor and Co-Principal Debtor to the Employer under renunciation of the benefits of division and exclusion for the due and faithful performance by the Contractor of all the terms and conditions of the said Contract, subject to the following conditions:

- 1) The Employer shall, without reference and/or notice to us, have complete liberty of action to act in any manner authorized and/or contemplated by the terms of the said Contract, and/or to agree to any modifications, variations, alterations, directions or extension of the Completion Date of the Works under the said Contract, and that its rights under this guarantee shall in no way be prejudiced nor or liability hereunder be affected by reason of any steps which the Employer may take under such Contract, or of any modification, variation, alterations of the Completion Date which the Employer may make, give,

concede or agree to under the said Contract.

- 2) This guarantee shall be limited to payment of a sum of money.
- 3) The Employer shall be entitled, without reference to us, to release any guarantee held by it, and to give time to or compound or make any other arrangement with the Contractor.

However, upon receipt by us of an authenticated copy of the Certificate of Completion in terms of the Contract, the amount of liability shall be reduced by 50% which shall be in force until the issue of the Final Approval Certificate at expiry of the Defects Liability Period

This guarantee shall remain in full force and effect until the issue of the Certificate of Completion in terms of the Contract, unless we are advised in writing by the Employer before the issue of the said Certificate of Completion

- 4) His intention to institute claims, and the particulars thereof, in which event this guarantee shall remain in full force and effect until all such claims have been paid of liquidated,
- 5) Our total liability hereunder shall not exceed the sum of

_____ (in words)
R _____ (in figures)

(10% of the tender sum) that amount I/we agree to hold at your disposal.

- 6) The Guarantor reserves the right to withdraw from this guarantee by depositing the Guaranteed Sum with the beneficiary, whereupon the Guarantor's liability hereunder shall cease.

I/We declare that I/we, on behalf of the Guarantor, waive the legal exceptions available to a guarantor and undertake to pay the said amount or such portion thereof as may be demanded, immediately on receipt of a written demand from you.

A certificate under your hand shall be sufficient and satisfactory evidence as to the amount of the Guarantor's liability for the purpose of enabling provisional sentence or any similar relief to be obtained against the Guarantor.

This guarantee is neither negotiable nor transferable, and must be surrendered to the Guarantor in the event of the full amount of the Guarantee being paid to the Employer.

- 7) I/We hereby choose our address for the serving of all notices for all purposes arising here from as

IN WITNESS WHERE OF this guarantee has been executed by us at _____

_____ on the _____ day of _____ 20

As witness:

1. _____ Signature _____
2. _____ Signature _____

Duly authorized to sign on behalf of
(Guarantor)

Address _____

FORM T: KEY PERSONNEL EXPERIENCE AND QUALIFICATIONS

The Tenderer will receive a maximum of 20 points based on information provided in this Schedule

Notes to tenderer:

1. The intention of this form is to demonstrate the tenderer's project structure, as well as the lines of responsibility between members of the project team and the overall company structure. Attach own organogram to this form.
2. Joint Venture tenders require each element of the venture to submit separate organograms that show the individual structure of each member company and the lines of responsibility of the proposed personnel involved in the project. In addition, there must also be a combined organogram that indicates how the joint venture itself will function and the proposed share of the work will become a contractual obligation between the members of the joint venture.
3. State the city or town where the company's head office is located. The locality of regional or satellite offices, regardless of degree of autonomy or size is not required. Only submit the number of offices other than the head office. Do not count offices outside RSA.
4. Registered professional engineers, technicians or technologists means those who are involved in the construction of roads and streets with related storm water structures. Registered professionals of other disciplines (e.g. mechanical) are considered as employees only.
5. For all foreign nationals must attach SAQA accreditation and certified proof of work permit

CONSTRUCTION PERSONNEL

i) Contract manager

Contracts Manager is required to have a Degree in Civil Engineering or equivalent qualification Registered Professional: ECSA or in terms of ECSA (PrEng, PrTechEng or SACPCMP qualification and a minimum of 10 years in roads construction experience in a contracts manager's role, as indicated below:

EXPERIENCE IN ROADS CONSTRUCTION	10	11	12	13	14
POINTS	1	2	3	4	5

ii) Site Agent

Site Agent is required to have a minimum of N.D Civil engineering or equivalent to a NQF 6 qualification and a minimum of 10 years in roads construction, as indicated below:

EXPERIENCE IN ROADS CONSTRUCTION	10	11	12	13	14
POINTS	1	2	3	4	5

iii) Site Foreman

Site Foreman on permanent/contract basis, with at least NQF 4 qualification or related qualification with experience in road projects of not less than seven (7) years. Points will be allocated on a pro-rata basis for experience between 7 to 10 years, as indicated below:

EXPERIENCE IN ROADS CONSTRUCTION	7	8	9	10
POINTS	2	3	4	5

iv) Safety Officer

Safety officer on permanent/contract basis, with a valid certificate issued by SACPCMP and with experience in road projects of not less than three (3) years. Points will be allocated on a pro-rata basis for experience between 3 to 5 years, as indicated below:

EXPERIENCE IN ROADS CONSTRUCTION	3	4	5
POINTS	2	3	5

Experience	Points
Provide detailed CVs and certified qualifications for all Key Personnel for each category stated above.	20

N.B Points to be allocated based on the CV's provided. The appointed contractor is to provide such personnel as attached or one with equivalent qualifications and experience. Failure to do so will result in zero points.

ATTACH CV'S AND CERTIFIED QUALIFICATIONS OF KEY PERSONNEL TO THIS PAGE

Note: Only CV's and Certified Qualifications of Key personnel that were named and shown on the organogram to be attached.

COMPETENCE ACHIEVEMENT SCHEDULE (QUALITY)

		MAXIMUM POINTS TO BE ALLOCATED	POINTS CLAIMED BY TENDERER	ALLOCATED POINTS
Company Experience:	Form Q	50		
Plant and Equipment:	Form R	15		
Financial References:	Form S	15		
Key Personnel:	Form T	20		
Sub- Total		100		
TOTAL		100		

Note:

Total allocated for Quality is 100 points. The minimum threshold required to qualify for the next stage of evaluation is 70 points. Only those tenders that achieve the minimum number will proceed to the price and preference evaluation stage.

SUPPLY CHAIN POLICY USING 80/20 PREFERENCE POINT SYSTEM

1	MAXIMUM POINTS TO BE ALLOCATED
Price	80
B-BBEE Status Level of Contribution	20
TOTAL	100

FORM W: SCHEDULE OF TENDER COMPLIANCE
--

Note to tenderer:

This Table has been created as an aid to ensure a tenderer's compliance with the completion of the returnable forms and schedules and subsequent placement in the correct envelope.

FORM NO / GBD NO	FORM DESCRIPTION	TICK IF COMPLETED
A	CERTIFICATE OF ATTENDANCE AT CLARIFICATION MEETING	
B	RECORD OF ADDENDA TO TENDER DOCUMENTS	
C	PROPOSED AMENDMENTS AND QUALIFICATIONS	
D	PREFERENCING SCHEDULE: BROAD BASED BLACK ECONOMIC EMPOWERMENT STATUS	
E	COMPULSORY DECLARATION	
F	MUNICIPAL DECLARATION AND RETURNABLE DOCUMENTS	
G	CERTIFICATE OF INDEPENDENT TENDER	
H	DECLARATION OF GOOD STANDING REGARDING TAX	
I	DECLARATION OF TENDERER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES	
J	REGISTRATION ON NATIONAL TREASURY CENTRAL SUPPLIER DATABASE	
K	DECLARATION OF TENDERER'S LITIGATION HISTORY	
L	AUTHORITY OF SIGNATORY	
M	SCHEDULE OF SPECIALIST SUBCONTRACTORS	
N	PROOF OF GOOD STANDING WITH COMPENSATION COMMISSIONER	
O	SCHEDULE OF CURRENT COMMITMENTS	
P	REGISTRATION WITH CIDB	
Q	COMPANY EXPERIENCE IN RELATION TO SCOPE OF WORKS	
R	PLANT & EQUIPMENT	
S	FINANCIAL RESOURCES	
T	KEY PERSONNEL, EXPERIENCE AND QUALIFICATIONS	

THE CONTRACT

PART C1 AGREEMENT AND CONTRACT DATA

PART C2 PRICING DATA

PART C3 SCOPE OF WORKS

PART C4 SITE INFORMATION

PART C1 **AGREEMENT AND CONTRACT DATA**

CONTENTS	PAGE(S)
C1.1 FORM OF OFFER	C1.1-1
C1.2 FORM OF ACCEPTANCE	C1.2-1
C1.3 SCHEDULE OF DEVIATIONS	C1.3-1
C1.4 CONTRACT DATA	C1.4-1 to C1.4-6
C1.5 PERFORMANCE GUARANTEE	C1.5-1 to C1.5-4
C1.6 AGREEMENT IN TERMS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT NO 85 OF 1993)	C1.6-1 to C1.6-3
C1.7 CERTIFICATE OF AUTHORITY FOR SIGNATORY TO AGREEMENT IN TERMS OF OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT NO 85 OF 1993)	C1.7-1 to C1.7-2

C1.1 FORM OF OFFER**C1.2 FORM OF ACCEPTANCE****C1.3 SCHEDULE OF DEVIATIONS**

C 1.1: FORM of OFFER**OFFER**

The employer, identified in the acceptance signature block, has solicited offers to enter into a contract for the procurement of: **UPGRADING OF MATSAFENI KAAPSCHEHOOP BUS ROUTE**

The tenderer, identified in the offer signature block, has examined the documents listed in the tender data and addenda thereto as listed in the tender returnables and, by submitting this offer, has accepted the conditions of tender.

By the representative of the tenderer, deemed to be duly authorized, signing this part of this form of offer and acceptance, the tenderer offers to perform all of the obligations and liabilities of the contractor under the contract, including compliance with all its terms and conditions according to their true intent and meaning, for an amount to be determined in accordance with the conditions of contract identified in the contract data.

The offered total of the prices, inclusive of any value added tax or sales tax which the law requires the employer to pay, is _____

_____ (in words) R_____ (in figures)

This offer may be accepted by the employer by signing the acceptance part of this form of offer and acceptance and returning one copy of this document to the tenderer before the end of the period of validity stated in the tender data, whereupon the tenderer becomes the party named as the contractor in terms of the conditions of the contract identified in the contract data.

for the TENDERER

Signature: _____

Name: _____

Capacity: _____

Witness:

Name: _____

Signature: _____

Date: _____

C1.2: FORM of ACCEPTANCE

ACCEPTANCE

By signing this part of this form of offer and acceptance, the employer identified below accepts the tenderer's offer. In consideration thereof, the employer shall pay the contractor the amount due in accordance with the conditions of contract identified in the contract data. Acceptance of the tenderer's offer shall form an agreement between the employer and the tenderer upon the terms and conditions contained in this agreement and in the contract, that is the subject of this agreement.

The terms of the contract, are contained in:

Part C 1: Agreements and contract data, (which includes this agreement) Part C 2:

Pricing data

Part C 3: Scope of work.

Part C 4: Site information

and drawings and documents or parts thereof, which may be incorporated by reference into Parts C1 to C4 above.

Deviations from and amendments to the documents listed in the tender data and any addenda thereto as listed in the tender schedules, as well as any changes to the terms of the offer agreed by the tenderer and the employer during this process of offer and acceptance, are contained in the schedule of deviations attached to and forming part of this agreement. No amendments to or deviations from said documents are valid unless contained in this schedule.

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

Notwithstanding anything contained herein, this agreement comes into effect on the date when the tenderer receives one fully completed original copy of this document, including the schedule of deviations (if any). Unless the tenderer (now contractor) within five working days of the date of such receipt, notifies the employer in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the parties.

for the EMPLOYER

Signature: _____

Date: _____

Name: _____

Capacity: _____

Witness:

Name: _____

Signature: _____

Date: _____

C1.3: SCHEDULE of DEVIATIONS

1 Subject

Details

2 Subject

Details

3 Subject

Details

4 Subject

Details

By the duly authorized representatives signing this agreement, the employer and the tenderer agree to and accept the foregoing schedule of deviations as the only deviations from and amendments to the documents listed in the tender data and addenda thereto as listed in the returnable schedules, as well as any confirmation, clarification or changes to the terms of the offer agreed by the tenderer and the employer during this process of offer and acceptance.

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

for the TENDERER

Signature: _____

Name: _____

Capacity: _____

for the EMPLOYER

Name: _____

Signature: _____

Date: _____

Capacity: _____

Witness:

Name: _____

Signature: _____

Date: _____

C1.4 CONTRACT DATA

C1.4: CONTRACT DATA

CONDITIONS OF CONTRACT

PART 1: DATA PROVIDED BY THE EMPLOYER

CONDITIONS OF CONTRACT

The General Conditions of Contract for Construction Works, Third Edition, 2015, published by the South African Institution of Civil Engineering, Private Bag X200, Halfway House, 1685, are applicable to this contract and is obtainable from www.saice.org.za.

CONTRACT SPECIFIC DATA

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

PART 1: DATA PROVIDED BY THE EMPLOYER

The following contract specific data are applicable to this Contract:

Clause	Description														
1.1.1.13	The Defects Liability Period is 12 months														
1.1.1.15	The Name of the Employer is the City of Mbombela .														
1.1.1.16	The Name of the Employer's Agent is Lihuzu Projects (Pty) Ltd														
1.1.1.26	The pricing strategy: Re-Measurement Contract														
1.2.1.2	<p>The Employer's address for receipt of communications is:</p> <table> <tr> <td>Physical address:</td><td>Postal address:</td></tr> <tr> <td>1 Nel Street</td><td>PO Box 45</td></tr> <tr> <td>MBOMBELA</td><td>MBOMBELA</td></tr> <tr> <td>1200</td><td>1200</td></tr> <tr> <td>Telephone: 013-759 2358</td><td></td></tr> <tr> <td>Fax: 013-753 4444</td><td></td></tr> <tr> <td>E-mail: Rudolph.Mashego@mbombela.gov.za</td><td></td></tr> </table>	Physical address:	Postal address:	1 Nel Street	PO Box 45	MBOMBELA	MBOMBELA	1200	1200	Telephone: 013-759 2358		Fax: 013-753 4444		E-mail: Rudolph.Mashego@mbombela.gov.za	
Physical address:	Postal address:														
1 Nel Street	PO Box 45														
MBOMBELA	MBOMBELA														
1200	1200														
Telephone: 013-759 2358															
Fax: 013-753 4444															
E-mail: Rudolph.Mashego@mbombela.gov.za															
1.2.1.2	<p>The address of the Employer's Agent is:</p> <table> <tr> <td>Physical address:</td><td>Postal address:</td></tr> <tr> <td>12 Suikerriet Street</td><td>PO Box 654</td></tr> <tr> <td>Central Park, Unit 45.2</td><td>Malelane</td></tr> <tr> <td>Nelspruit</td><td>1320</td></tr> <tr> <td>1200</td><td></td></tr> <tr> <td>Telephone: 013 744 6070</td><td></td></tr> <tr> <td>E-mail: info@lihuzu.co.za</td><td></td></tr> </table>	Physical address:	Postal address:	12 Suikerriet Street	PO Box 654	Central Park, Unit 45.2	Malelane	Nelspruit	1320	1200		Telephone: 013 744 6070		E-mail: info@lihuzu.co.za	
Physical address:	Postal address:														
12 Suikerriet Street	PO Box 654														
Central Park, Unit 45.2	Malelane														
Nelspruit	1320														
1200															
Telephone: 013 744 6070															
E-mail: info@lihuzu.co.za															
2.4	<p>Variations to the Conditions of Contract are:</p> <p>Add the following at the end of sub clause 2.4.1:</p> <p>" The several documents forming the Contract shall rank in the following order of precedence:</p> <ol style="list-style-type: none"> 1. Contract Agreement, 2. Form of Offer and Acceptance, 														

Clause	Description
	<p>3. Contract Data,</p> <p>4. Specification Data,</p> <p>5. Standardized Specifications,</p> <p>6. Drawings,</p> <p>7. Bill of Quantities,</p> <p>8. Statutory Regulations,</p> <p>9. Other standard specifications.</p> <p>If the contents of any part of the documents contradict any other part, the document in the highest position on the above order of precedence shall have preference and apply."</p>
4.3.3	<p>Add the following at the end of sub clause 4.3.2:</p> <p>"4.3.3 The Employer and the Contractor hereby agree, in terms of the provisions of Section 37(2) of the Occupational Health and Safety Amendment Act, 1993 (Act 85 of 1993), hereinafter referred to as 'the Act', that the following arrangements and procedures shall apply between them to ensure compliance by the Contractor with the provisions of the Act:</p> <ul style="list-style-type: none"> (i) The Contractor undertakes to acquaint the appropriate officials and employees of the Contractor with all relevant provisions of the Act and the Regulations promulgated in terms of the Act. (ii) The Contractor undertakes that all relevant duties, obligations and prohibitions imposed in terms of the Act and Regulations on the Contractor will be fully complied with. (iii) The Contractor accepts sole liability for such due compliance with the relevant duties, obligations and prohibitions imposed by the Act and Regulations and expressly absolves the Employer from himself being obliged to comply with any of the aforesaid duties, obligations and prohibitions, with the exception of such duties, obligations and prohibitions expressly assigned to the Employer in terms of the Act and its associated Regulations. (iv) The Contractor agrees that any duly authorized officials of the Employer shall be entitled, although not obliged, to take such steps as may be necessary to monitor that the Contractor has conformed to his undertakings as described in paragraphs (i) and (ii) above, which steps may include, but will not be limited to, the right to inspect any appropriate site or premises occupied by the Contractor, or any appropriate records or safety plans held by the Contractor. (v) The Contractor shall be obliged to report forthwith to the Employer and Employer's Agent any investigation, complaint or criminal charge which may arise as a consequence of the provisions of the Act and Regulations, pursuant to work performed in terms of this Contract, and shall, on written demand, provide full details in writing, to the Employer and Employer's Agent, of such investigation, complaint or criminal charge. <p>The Contractor shall furthermore, in compliance with Constructional Regulations 2003 to the Act:</p> <ul style="list-style-type: none"> (vi) Acquaint himself with the requirements of the Employer's health and safety specification as laid down in regulation 5(1) of the Construction Regulation 2014, and prepare a suitably and sufficiently documented health and safety plan as contemplated in regulation 6(1) of the Construction Regulation 2014 for approval by the Employer or his assigned agent. The Contractor's health and safety plan and risk assessment shall be submitted to the Employer for approval within seven (7) days after acceptance of the bid. and shall be implemented and maintained from the Commencement of the Works.

Clause	Description
	<p>(vii) The Employer, or his assigned agent, reserves the right to conduct periodic audits, as contemplated in the Construction Regulations 2003, to ensure that the Contractor is compliant in respect of his obligations. Failure by the Contractor to comply with the requirements of these Regulations shall entitle the Employer's Agent, at the request of the Employer or his agent, to suspend all or any part of the Works, with no recourse whatsoever by the Contractor for any damages incurred as a result of such suspension, until such time that the Employer or his agents are satisfied that the issues in which the Contractor has been in default have been rectified."</p> <p>(viii) Acquaint himself with the requirements of COVID-19 OCCUPATIONAL HEALTH AND SAFETY MEASURES IN WORKPLACES COVID-19 (C19 OHS), 2020, and prepare a suitably and sufficiently documented COVID-19 health and safety plan as contemplated in COVID-19 (C19 OHS), 2020 for approval by the Employer or his assigned agent. The Contractor's health and safety plan and risk assessment which includes the COVID-19 safety plan shall be submitted to the Employer for approval within seven (7) days after acceptance of the bid. The COVID-19 safety plan shall be implemented and maintained from the Commencement of the Works for as long as the declaration of a national disaster published in <i>Government Gazette 43096 on 15 March 2020</i> remains in force.</p> <p>The Employer and Contractor agree that the Contractor will comply with the provisions of "The Mine Health and Safety Act, (Act 29 Of 1996) as amended by the Mine Health and Safety Amendment Act (Act 72 of 1997).</p> <p>The following arrangements and procedures will apply:</p> <ul style="list-style-type: none"> (i) The Contractor shall himself obtain the Mining Authorization for the sites. (ii) Contractor shall assume responsibility for the Environmental Management Programs (EMP) in respect of the sites and shall ensure that the sites are rehabilitated at the conclusion of the Contract. (iii) The Contractor shall comply with the provisions of the Act and the requirements of the Director: Mineral Development of the Department of Minerals and Energy in making the necessary financial provisions to mine optimally and safely and to rehabilitate the surface of the land concerned satisfactory and to carry out the EMP. All costs incurred in providing a guarantee or other financial provision shall be borne by the Contractor. (iv) This Agreement shall hold good from the date on which the Mining Authorization is issued until the date on which a Closure Certificate is issued in terms of the Minerals Act, 1991. (v) Nothing in this Agreement shall exonerate the Contractor from compliance with any requirements of the Employer's Agent regarding the rehabilitation of sites prior to the issue of a Final Approval Certificate in terms of clause 5.16.2 of the General Conditions of Contract (2010). (vi) The Contractor shall undertake all the duties and accept all the responsibilities of the owner in compliance with the requirements of the Act as amended. (vii) The Contractor accepts responsibility for compliance with the Act, as amended, by all his sub-contractors whether or not selected and/or approved by the Employer.
5.3.1	<p>The documentation required before commencement with Works execution are:</p> <ul style="list-style-type: none"> • Health and Safety Plan (refer to clause 4.3.1) • Initial programme (Refer to clause 5.6.1) • Security (Refer to clause 6.2.1) • Insurance (Refer to Clause 8.6.1)
5.3.2	<p>The time to submit the documentation required, before commencement with Works execution is 14 calendar days.</p>
5.4.2	<p>The access and possession of site shall not be exclusive to the Contractor.</p>

Clause	Description
5.8.1	The non-working days are public holidays and Sundays. The special non-working days are: The year-end break from 22-Dec-2023 to 08-Jan-2024 OR AS PER SAFCEC TBA
5.13.1	The penalty for failing to complete the Works is: is 0.05 % of the Total Tender Sum per Calendar Day
5.14.1	Practical completion is reached when: The completed paving streets can be opened to traffic for use.
5.16.3	The latent defect period is 10 years after date of completion
6.5.1.2.3	The percentage allowances to cover all charges for the Contractor's and subcontractor's profits, timekeeping, clerical work, insurance, establishment, superintendence and the use of hand tools is 15% .
6.8.2	This contract does include for contract price adjustment
6.8.3	Price adjustments for variations in the costs of special materials are not allowed.
6.10.1.5	The percentage advance on materials not yet built into the Permanent Works is 80%
6.10.3	The limit of retention money is 10%
8.6.1.1.2	Not required.
8.6.1.1.3	The amount to cover professional fees for repairing damage and loss to be included in the insurance sum will be calculated at 12% of the claim value.
8.6.1.2	A coupon policy for Special Risks Insurance issued by the South African Special Risks Insurances Association is required.
8.6.1.3	The limit of indemnity for liability insurance is <u>R 5 000 000.00</u> for any single liability claim
10.5.2	Dispute resolution shall be ad-hoc adjudication.
10.5.3	The number of Adjudication Board Members to be appointed is one .
10.7.1	The determination of disputes shall be by arbitration .
Special Clause	The Contractor's CIDB grading must remain active at the same of higher level as at time of appointment, should the grading be suspended, downgraded and or expire the Contractor will only be allowed 21 days to remedy such and failure could result in termination of the Contract.

C1.5 FORM OF GUARANTEE

PRO FORMA PERFORMANCE

GUARANTEE

GUARANTOR DETAILS AND DEFINITIONS

"Guarantor" means:

Physical address:

"Employer" means:

"Contractor" means:

"Employer's Agent" means:

"Works" means:

"Site" means:

"Contract" means: The Agreement made in terms of the Form of Offer and Acceptance and such amendments or additions to the Contract as may be agreed in writing between the parties.

"Contract Sum" means: The accepted amount inclusive of tax of R

Amount in words:

"Guaranteed Sum" means: The maximum aggregate amount of R

Amount in words.....

"Expiry Date" means.....

CONTRACT DETAILS

Employer's Agent issues: Interim Payment Certificates, Final Payment Certificate and the Certificate Completion of the Works as defined in the Contract.

PERFORMANCE GUARANTEE

1. The Guarantor's liability shall be limited to the amount of the Guaranteed Sum.
2. The Guarantor's period of liability shall be from and including the date of issue of this Performance Guarantee and up to and including the Expiry Date or the date of issue by the Employer's Agent of the Certificate of Completion of the Works or the date of payment in full of the Guaranteed Sum, whichever occurs first. The Employer's Agent and/or the Employer shall advise the Guarantor in writing of the date on which the Certificate of Completion of the Works has been issued.
3. The Guarantor hereby acknowledges that:
 - 3.1 any reference in this Performance Guarantee to the Contract is made for the purpose of convenience and shall not be construed as any intention whatsoever to create an accessory obligation or any intention whatsoever to create a suretyship;
 - 3.2 its obligation under this Performance Guarantee is restricted to the payment of money.
4. Subject to the Guarantor's maximum liability referred to in 1, the Guarantor hereby undertakes to pay the Employer the sum certified upon receipt of the documents identified in 4.1 to 4.3:
 - 4.1 A copy of a first written demand issued by the Employer to the Contractor stating that payment of a sum certified by the Employer's Agent in an Interim or Final Payment Certificate has not been made in terms of the Contract and failing such payment within seven (7) calendar days, the Employer intends to call upon the Guarantor to make payment in terms of 4.2;

- 4.2 A first written demand issued by the Employer to the Guarantor at the Guarantor's physical address with a copy to the Contractor stating that a period of seven (7) days has elapsed since the first written demand in terms of 4.1 and the sum certified has still not been paid;
- 4.3 A copy of the aforesaid payment certificate which entitles the Employer to receive payment in terms of the Contract of the sum certified in 4.
5. Subject to the Guarantor's maximum liability referred to in 1, the Guarantor undertakes to pay to the Employer the Guaranteed Sum or the full outstanding balance upon receipt of a first written demand from the Employer to the Guarantor at the Guarantor's physical address calling up this Performance Guarantee, such demand stating that:
 - 5.1 the Contract has been terminated due to the Contractor's default and that this Performance Guarantee is called up in terms of 5; or
 - 5.2 a provisional or final sequestration or liquidation court order has been granted against the Contractor and that the Performance Guarantee is called up in terms of 5; and
 - 5.3 the aforesaid written demand is accompanied by a copy of the notice of termination and/or the provisional/final sequestration and/or the provisional liquidation court order.
6. It is recorded that the aggregate amount of payments required to be made by the Guarantor in terms of 4 and 5 shall not exceed the Guarantor's maximum liability in terms of 1.
7. Where the Guarantor has made payment in terms of 5, the Employer shall upon the date of issue of the Final Payment Certificate submit an expense account to the Guarantor showing how all monies received in terms of this Performance Guarantee have been expended and shall refund to the Guarantor any resulting surplus. All monies refunded to the Guarantor in terms of this Performance Guarantee shall bear interest at the prime overdraft rate of the Employer's bank compounded monthly and calculated from the date payment was made by the Guarantor to the Employer until the date of refund.
8. Payment by the Guarantor in terms of 4 or 5 shall be made within seven (7) calendar days upon receipt of the first written demand to the Guarantor.
9. Payment by the Guarantor in terms of 5 will only be made against the return of the original Performance Guarantee by the Employer.
10. The Employer shall have the absolute right to arrange his affairs with the Contractor in any manner which the Employer may deem fit and the Guarantor shall not have the right to claim his release from this Performance Guarantee on account of any conduct alleged to be prejudicial to the Guarantor.
11. The Guarantor chooses the physical address as stated above for the service of all notices for all purposes in connection herewith.
12. This Performance Guarantee is neither negotiable nor transferable and shall expire in terms of 2, where after no claims will be considered by the Guarantor. The original of this Guarantee shall be returned to the Guarantor after it has expired.
13. This Performance Guarantee, with the required demand notices in terms of 4 or 5, shall be regarded as a liquid document for the purposes of obtaining a court order.
14. Where this Performance Guarantee is issued in the Republic of South Africa the Guarantor hereby consents in terms of Section 45 of the Magistrate's Courts Act No 32 of 1944, as amended, to the jurisdiction of the Magistrate's Court of any district having jurisdiction in terms of Section 28 of the said Act, notwithstanding that the amount of the claim may exceed the jurisdiction of the Magistrate's Court.

Signed

Date

Guarantor's signatory (1)

Capacity

Guarantor's signatory (2)

Capacity

Witness signatory (1)

Witness signatory (2)

C1.6 AGREEMENT IN TERMS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, 1993
(ACT NO 85 OF 1993)

**AGREEMENT IN TERMS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, 1993
(ACT NO 85 OF 1993)**

THIS AGREEMENT made at

on this the day of in the year

between CITY OF MBOMBELA (hereinafter called "the Employer") of the one part, herein represented by

in his capacity as

and

(hereinafter called "the Mandatory") of the other part, herein represented by

in his capacity as

WHEREAS the Employer is desirous that certain works be constructed, Upgrading of Violet Street - Ward 13 and has accepted a Tender by the Mandatory for the construction, completion and maintenance of such Works and whereas the Employer and the Mandatory have agreed to certain arrangements and procedures to be followed in order to ensure compliance by the Mandatory with the provisions of the Occupational Health and Safety Act, 1993 (Act 85 of 1993);

NOW THEREFORE THIS AGREEMENT WITNESSETH AS FOLLOWS:

- 1 The Mandatory shall execute the work in accordance with the Contract Documents pertaining to this Contract.
- 2 This Agreement shall hold good from its Commencement Date, which shall be the date of a written notice from the Employer or Employer's Agent requiring him to commence the execution of the Works, to either
 - (a) the date of the Final Approval Certificate issued in terms of Clause 52.1 of the General Conditions of Contract (hereinafter referred to as "the GCC"),
 - (b) the date of termination of the Contract in terms of Clauses 54, 55 or 56 of the GCC.
- 3 The Mandatory declares himself to be conversant with the following:
 - (a) All the requirements, regulations and standards of the Occupational Health and Safety Act (Act 85 of 1993), hereinafter referred to as "The Act", together with its amendments and with special reference to the following Sections of The Act:
 - (i) Section 8 : General duties of employers to their employees;
 - (ii) Section 9 : General duties of employers and self-employed persons to persons other than employees;
 - (iii) Section 37 : Acts or omissions by employees or Mandatory, and
 - (iv) Subsection 37(2) relating to the purpose and meaning of this Agreement.
 - (b) The procedures and safety rules of the Employer as pertaining to the Mandatory and to all his subcontractors.
 - (c) **All the requirements, regulations and standards of the COVID-19 Occupational Health and Safety Measures in Workplaces, COVID-19 (C19 OHS), 2020.**
- 4 In addition to the requirements of Clause 33 of the GCC and all relevant requirements of the above-mentioned Volume 3, the Mandatory agrees to execute all the Works forming part of this Contract and to operate and utilise all machinery, plant and equipment in accordance with the Act.

- 5 The Mandatory is responsible for the compliance with the Act by all his subcontractors, whether or not selected and/or approved by the Employer.

The Mandatory warrants that all his and his subcontractors' workmen are covered in terms of the Compensation for Occupational Injuries and Diseases Act, 1993, which cover, shall remain in force whilst any such workmen are present on site. A letter of good standing from the Compensation Commissioner to this effect must be produced to the Employer upon signature of the agreement.

- 6 The Mandatory undertakes to ensure that he and/or subcontractors and/or their respective employers will at all times comply with the following conditions:
- (a) The Mandatory shall assume the responsibility in terms of Section 16.1 of the Occupational Health and Safety Act. The Mandatory shall not delegate any duty in terms of Section 16.2 of this Act without the prior written approval of the Employer. If the Mandatory obtains such approval and delegates any duty in terms of section 16.2 a copy of such written delegation shall immediately be forwarded to the Employer.
 - (b) All incidents referred to in the Occupational Health and Safety Act shall be reported by the Mandatory to the Department of Labour as well as to the Employer. The Employer will further be provided with copies of all written documentation relating to any incident.
 - (c) The Employer hereby obtains an interest in the issue of any formal inquiry conducted in terms of section 32 of the Occupational Health and Safety Act into any incident involving the Mandatory and/or his employees and/or his subcontractors.

In witness thereof the parties hereto have set their signatures hereon in the presence of the subscribing witnesses:

SIGNED FOR AND ON BEHALF OF THE EMPLOYER:

WITNESS	1 _____	2 _____
NAME	1 _____	2 _____

(IN CAPITALS)

SIGNED FOR AND ON BEHALF OF THE MANDATORY:

WITNESS	1 _____	2 _____
NAME	1 _____	2 _____

(IN CAPITALS)

**C1.7 CERTIFICATE OF AUTHORITY FOR SIGNATORY TO AGREEMENT IN TERMS OF
OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT NO 85 OF 1993)**

**CERTIFICATE OF AUTHORITY FOR SIGNATORY TO AGREEMENT IN TERMS
OF OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT NO 85 OF 1993)**

The signatory for the company that is the Contractor in terms of the above-mentioned Contract and the Mandatory in terms of the above-mentioned Act shall confirm his or her authority thereto by attaching to this page a duly signed and dated copy of the relevant resolution of the Board of Directors.

An example is given below:

"By resolution of the Board of Directors passed at a meeting held on _____ 20____,

Mr/Ms _____ whose signature

appears below, has been duly authorised to sign the AGREEMENT in terms of THE OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT 85 of 1993) on behalf of:

SIGNED ON BEHALF OF THE
COMPANY: _____

IN HIS CAPACITY
AS: _____

DATE: _____

SIGNATURE OF SIGNATORY: _____

WITNESS: 1. _____ 2. _____

NAME (in capitals): 1. _____ 2. _____

PART C2 PRICING DATA

C2.1 PRICING INSTRUCTIONS

C2.1: PRICING INSTRUCTIONS

- 1 The Tender Data, the Contract Data, the Scope of Work, the Site Information and the Drawings shall be read in conjunction with the Schedule of Quantities.
- 2 The Schedule comprises items covering the Contractor's profit and costs of general liabilities and of the construction of Temporary and Permanent Works.

Although the Tenderer is at liberty to insert a rate of his own choosing for each item in the Schedule, he should note the fact that the Contractor is entitled, under various circumstances, to payment for additional work carried out and that the Employer's Agent is obliged to base his assessment of the rates to be paid for such additional work on the rates the Contractor inserted in the Schedule.

The measurement and payment clauses of each Specification, read together with the relevant clauses of the Specification Data, all set out which ancillary or associated activities are included in the rates for the specified operations.
- 3 Descriptions in the Schedule of Quantities are abbreviated and may differ from those in the Standardized and Specification Data. No consideration will be given to any claim by the Contractor submitted on such a basis. The Schedule has been drawn up generally in accordance with the latest issue of Civil Engineering Quantities¹. Should any requirement of the measurement and payment clause of the appropriate Standardized or Specification Data be contrary to the terms of the Schedule or, when relevant, to the Civil Engineering Quantities, the requirement of the appropriate Standardized Specification or Specification Data as the case may be, shall prevail.
- 4 Unless stated to the contrary, items are measured and paid for net, in accordance with the Drawings, without any allowance having been made for waste.
- 5 The amounts and rates to be inserted in the Schedule of Quantities shall be the full inclusive amounts to the Employer for the work described under the several items. Such amounts shall cover all the costs and expenses that may be required in and for the construction of the work described, and shall cover the costs of all general risks, profits, taxes (but excluding value-added tax), liabilities and obligations set forth or implied in the documents on which the Tender is based.
- 6 An amount or rate shall be entered against each item in the Schedule of Quantities, whether or not quantities are stated. An item against which no amount or rate is entered will be considered to be covered by the other amounts or rates in the Schedule.

The Tenderer shall also fill in a rate against the items where the words "rate only" appears in the amount column. Although no work is foreseen under these items and no quantities are consequently given in the quantity column, the tender rates shall apply should work under these items actually be required.

Should the Tenderer group a number of items together and tender one sum for such group of items, the single tender sum shall apply to that group of items pro rata and not to each individual item, or should he indicate against any item that full compensation for such item has been included in another item, the rate for the item included in another item shall be deemed to be nil.

The tender rates, prices and sums shall, subject only to the provisions of the General Conditions of Contract, remain valid irrespective of any change in the quantities during the execution of the Contract.
- 7 The quantities of work as measured and accepted and certified for payment in accordance with the General Conditions of Contract, and not the quantities stated in the Schedule of Quantities, will be used to determine payments to the Contractor. The validity of the Contract shall in no way be affected by any differences between the quantities in the Schedule of Quantities and the quantities certified for payment.

The ordering of materials shall not be based on the quantities in the Schedule of Quantities. Materials ordered from the Schedule of Quantities without prior confirmation by the Employer's Agent shall be at the risk of the Contractor. No compensation shall be paid for materials ordered erroneously and all costs shall be borne by the Contractor.

¹ The standard system of measurement of civil engineering quantities published by the South African Institution of Civil Engineers.

- 8 The quantities of work as measured and accepted and certified for payment in accordance with the General Conditions of Contract, and not the quantities stated in the Schedule of Quantities, will be used to determine payments to the Contractor. The validity of the Contract shall in no way be affected by any differences between the quantities in the Schedule of Quantities and the quantities certified for payment.

The ordering of materials shall not be based on the quantities in the Schedule of Quantities. Materials ordered from the Schedule of Quantities without prior confirmation by the Employer's Agent shall be at the risk of the Contractor. No compensation shall be paid for materials ordered erroneously and all costs shall be borne by the Contractor.

- 9 For the purposes of this Schedule of Quantities, the following words shall have the meanings hereby assigned to them:

Unit : The unit of measurement for each item of work as defined in the COLTO Standardized Specification for Road and Bridge Works for State Authorities (1998 edition) or the Specification Data.

Quantity: The number of units of work for each item

Rate : The payment per unit of work at which the Tenderer tenders to do the work Amount

: The quantity of an item multiplied by the tender rate of the (same) item Sum :

An amount tender for an item, the extent of which is described in the Schedule of Quantities, the Specifications or elsewhere, but of which the quantity of work is not measured in units

- 10 The units of measurement indicated in the Schedule of Quantities are metric units. The following abbreviations may appear in the Schedule of Quantities:

mm	=	millimetre
m	=	meter
km	=	kilometre
km-pass	=	kilometre-pass
m ²	=	square metre
m ² -pass	=	square meter-pass
ha	=	hectare
m ³	=	cubic meter
m ³ -km	=	cubic meter kilometre
kW	=	kilowatt
kN	=	kilo-Newton
kg	=	kilogram
l	=	litre
kl	=	kilolitre
MI	=	mega litre
t	=	ton (1 000 kg)
%	=	per cent
MN	=	mega-Newton
MN-m	=	mega-Newton-meter
PC Sum	=	Prime Cost Sum
Prov Sum	=	Provisional Sum
Sum	=	Lump Sum

C2.2 SCHEDULE OF QUANTITIES

C2.2: BILL OF QUANTITIES

SCHEDULE OF QUANTITIES

C2.2-2 to C2.2-19

SUMMARY OF SCHEDULE OF QUANTITIES

C2.2-20 to C2.2-20

SCHEDULE OF QUANTITIES

SUMMARY OF SCHEDULE OF QUANTITIES

SECTION	DESCRIPTION	AMOUNT R
13.00	CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS	
14.00	HOUSING, OFFICES AND LABORATORY FOR THE ENGINEER'S SITE PERSONNEL	
15.00	ACCOMODATION OF TRAFFIC	
17.00	CLEARING AND GRUBBING	
18.00	DAYWORK SCHEDULE	
21.00	DRAINS	
22.00	PREFABRICATED CULVERTS	
23.00	CONCRETE KERBING, CONCRETE CHANNELLING, CHUTES AND DOWNPIPES, AND CONCRETE LININGS FOR OPEN DRAINS	
31.00	BORROW MATERIALS	
33.00	MASS EARTHWORKS	
34.00	PAVEMENT LAYERS OF GRAVEL MATERIAL	
35.00	STABILIZATION	
36.00	CRUSHED STONE BASE	
51.00	PITCHING, STONEMWORK AND PROTECTION AGAINST EROSION	
52.00	GABIONS	
54.00	GUARDRAILS	
55.00	FENCING	
56.00	ROAD SIGNS	
57.00	ROAD MARKINGS	
58.00	LANDSCAPING AND PLANTING PLANTS	
59.00	FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS	
64.00	CONCRETE FOR STRUCTURES	
73.00	CONCRETE BLOCK PAVING FOR ROADS	
74.00	PATENTED EARTH RETAINING SYSTEMS	
TOTAL CARRIED FORWARD TO SUMMARY OF SCHEDULES		

SUMMARY OF SCHEDULES		
NO	DESCRIPTION	AMOUNT R
1	MATSAFENI KAPSCHEHOOP BUS ROUTE ROAD (6.28KM)	
2	Sub-Total A:Summary Schedules	
3	10% Contingencies	
4	Sub-Total B	
5	6% Escalation	
6	Sub-Total C	
7	VAT 15%	
8	TOTAL CONSTRUCTION COST	

PART C3 SCOPE OF WORKS

PART C3: SCOPE of WORK

<u>CONTENTS</u>	<u>PAGES</u>
C3.1 DESCRIPTION OF WORKS.....	C3.1-1
C3.1.1 Employer's Objectives	C3.1-1
C3.1.2 Overview of the Works.....	C3.1-1
C3.1.3 Extent of Works.....	C3.1-1
C3.1.4 Location of the Works	C3.1-1
C3.1.5 Temporary Works	C3.1-1
C3.2 ENGINEERING	C3.2-1
C3.2.1 Design.....	C3.2-1
C3.2.2 Employer's Design.....	C3.2-1
C3.2.3 Contractor's Design	C3.2-1
C3.2.4 Drawings	C3.2-1
C3.2.5 Design Procedure	C3.2-2
C3.3 PROCUREMENT	C3.3-1
C3.3.1 Preferential Procurement.....	C3.3-1
C3.3.2 Subcontracting	C3.3-1
C3.4 CONSTRUCTION	C3.4-1
C3.4.1 Works Specifications.....	C3.4-1
C3.4.2 Project Specifications Relating to Standard Specifications	C3.4-2
C3.5 MANAGEMENT	C3.5-1
C3.5.1 Management of the Works.....	C3.5-1
C3.6 HEALTH AND SAFETY.....	C3.6-1
C3.6.1 Health and Safety Requirements and Procedures.....	C3.6-1
C3.6.2 Protection of the Public.....	C3.6-1
C3.6.3 Barricades and Lighting.....	C3.6-1
C3.6.4 Traffic Control on Roads.....	C3.6-2
C3.6.5 Measures Against Disease and Epidemics	C3.6-2
C3.6.6 Aids Awareness	C3.6-2

C3.1: DESCRIPTION of WORKS

C3.1 DESCRIPTION OF THE WORKS

C3.1.1 EMPLOYER'S OBJECTIVES

The employer's objectives are to deliver public infrastructure using labour-intensive methods with the aim of services delivery, job creation and poverty alleviation. The work entails upgrading of Matsafeni Kaapschehoop Bus Route from gravel surface to a formal paved road. As part of the construction of the new road, job creation will occur through the employment of local labourers, local subcontractors.

The Employer desires that the work required be of a high standard and be completed in the shortest practical time whilst creating jobs for local labourers and contractors.

C3.1.2 OVERVIEW OF THE WORKS

The Contract entails the upgrading of Matsafeni Kaapschehoop Bus Route from gravel surface to a formal paved road. The road under consideration is approximately 6.3 km in length and provide access to residential houses located alongside the road. There are no formal cadastral boundaries for this area. The road currently meanders in between existing fences and boundary walls.

No formal cross section exists with roadway width varying between 6, 0 m to 8,0m. The existing road reserve varies in width of approximately 10 m to 20 m for sections of the proposed route. The road reserve is well defined within the existing boundary fences. The road provides direct access to individual properties. The existing stormwater drainage will be upgraded with a completely new system consisting of pipe culverts and open earth lined drains in combination with mountable kerbs and edge beams.

Through traffic will be diverted onto adjacent roads. Local traffic will need to be accommodated within the road reserve providing access to local properties adjacent to the road.

The proposed new road will as far as possible follow the same horizontal alignment of the existing road, although improvements will be made to the road alignment (particularly the vertical alignment).

C3.1.3 EXTENT OF WORKS

The Works to be carried out by the Contractor under this Contract comprise mainly the following:

- (a) Contractor's establishment on site
- (b) Compliance with EMP requirements
- (c) Compliance with OHS act requirements
- (d) Provisions of temporary workforce (ABE)
- (e) Training of temporary workforce
- (f) Housing, offices and laboratories for the engineer's personnel
- (g) Maintenance of the road reserve including daily dust control
- (h) Identifying and relocating of existing services
- (i) Construction of bypasses where necessary
- (j) Construction of road and access roads
- (k) Clearing and grubbing
- (l) Construction of 80 mm segmental concrete block paving

- (m) Construction of a new stabilized subbase layers
- (n) Construction of gravel selected layers
- (o) Construction of roadbed layer
- (p) Construction of fill where required
- (q) Structural strengthening of poor subgrade conditions
- (r) Storm-water upgrades
- (s) Construction of mountable kerbs
- (t) Construction of concrete edge beams
- (u) Construction of grouted stone pitching
- (v) Installation of road markings
- (w) Installation of road signs

Details of the work are shown on the drawings and estimated quantities of the various types of work to be carried out under the contract are given in the Schedule of Quantities.

The Contractor's obligations shall also include strict compliance with any Environmental specifications and/or reports deemed to form part of this contract as well as any Occupation Health and Safety requirements.

This description of the Works is not necessarily complete and shall not limit the work to be carried out by the Contractor under this Contract.

Approximate quantities of each type of work are given in the Schedule of Quantities.

C3.1.4 LOCATION OF THE WORKS

The site is situated at Matsafeni Township. The proposed bus route start near Matsafeni Taxi Rank which is situated in Woodhouse and ends where the Aircrafts Maintenance International is situated, approximately 2 km west of the Hermansburg Rd. The site currently have an unpaved gravel road The GPS co-ordinates are as follows:

The centre coordinates for the proposed site are Latitude: 25°28'9.18"S, Longitude: 30°55'41.53"E.

C3.1.5 TEMPORARY WORKS

The Contractor shall, as relevant,

- a) provide temporary drainage works, temporary pumps and other equipment as might be necessary for the protection, draining and dewatering of the works; and
- b) Construct and maintain haulage, temporary access and construction roads, subject to the approval of the Employer, and permit the Employer, other Contractors, statutory bodies or any other person who might require legitimate access to or through the site for the purpose of executing legitimate business, free and unhindered usage of such roads.
- c) Temporary water connections, Contractor's offices, storage sheds, latrines, barricading of Works shall be located in an approved position and subject to the approval of all authorities concerned.
- d) Safety and Security of the Contractors' temporary works shall be at the Contractors' discretion.
- e) The camp shall be adequately guarded during or outside working hours.

C3.2: ENGINEERING**C3.2 ENGINEERING****C3.2.1 DESIGN**

- (a) The Employer is responsible for the design of the permanent Works as reflected in the Contract Documents unless otherwise stated.
- (b) The Contractor is responsible for the design of the temporary Works (if applicable) and their compatibility with the permanent Works.
- (c) The Contractor shall supply all details necessary to assist the Engineer in the compilation of the record drawings.

C3.2.2 EMPLOYER'S DESIGN

The Employer's Design is contained in the Tender Documentation and Drawings. Amendments to the design, if necessary, will be issued during the construction phase.

C3.2.3 CONTRACTOR'S DESIGN

Where the Contractor is to supply the design of designated parts of the permanent Works or temporary Works, he shall supply full working drawings supported by a professional engineer's design certificate.

C3.2.4 DRAWINGS

The Contractor shall use only the dimensions stated in figures on the Drawings in setting out the Works, and dimensions shall not be scaled from the Drawings, unless required by the Employer's Agent. The Employer's Agent will, on the request of the Contractor in accordance with the provisions of the Conditions of Contract, provide such dimensions as may have been omitted from the Drawings.

The Contractor shall ensure that accurate as-built records are kept of all infrastructure installed or relocated during the contract. The position of pipe bends, junction boxes, duct ends, and all other underground infrastructure shall be given by either co-ordinates or stake value and offset. Where necessary, levels shall also be given. A marked-up set of drawings shall also be kept and updated by the Contractor. This information shall be supplied to the Employer's Agent's Representative on a regular basis.

All information in possession of the Contractor, required by the Employer's Agent and/or the Employer's

Agent's Representative to complete the as-built/record drawings, must be submitted to the Employer's Agent's Representative before a Certificate of Completion will be issued.

The Drawings prepared by the Employer for the permanent Works are listed below and are bound in a separate document or is attached at the back of this volume. The Employer reserves the right to issue and/or amended additional drawings during the Contract.

C3.3.5 Scope of mandatory subcontract works and proposed rates

- a) Kerbing.....R 45-60/m²
- b) Paving.....R55-60/m²
- c) V – Drains-----R80-90/m
- d) Gabions-----R 150-180/m³
- e) Brickwall -----R60/m²
- f) Hire of toilet-----R 3000/month
- g) Speed hump-----R 2600-2800/number
- h) Remove and erect front fences
- i) Road Marking
- j) Plant & Materials

However, local subcontractors should be considered provided they are capable.

N.B. All labour rates should be as per current SAFCEC rate.

No	DRAWING NUMBER	DRAWING TITLE	PURPOSE
1	LIH202223- G-00	CONTRACT NAMEBOARD	FOR TENDER
2	LIH202223- G-01	GENERAL LAYOUT	FOR TENDER
3	LIH-202223-G-02	SECTIONAL LAYOUT (ROAD 1 CH0 – CH1709)	FOR TENDER
4	LIH-202223-G-03	SECTIONAL LAYOUT (ROAD 2 CH0 – CH295, ROAD 3 CH0 – CH2420)	FOR TENDER
5	LIH-202223-G-04	SECTIONAL LATOUT (ROAD 4 CH0 – CH1264)	FOR TENDER
6	LIH-202223-L-01	LONGITUDINAL SECTION (ROAD 1) CH0 – CH800	FOR TENDER
7	LIH-202223-L-02	LONGITUDINAL SECTION (ROAD 1) CH800 - CH1600	FOR TENDER
8	LIH-202223-L-04	LONGITUDINAL SECTION (ROAD 1) CH1600 - CH1709	FOR TENDER
9	LIH-202223-L-06	LONGITUDINAL SECTION (ROAD 3) CH0 - CH800	FOR TENDER
10	LIH-202223-L-07	LONGITUDINAL SECTION (ROAD 3)CH800 – CH1600	FOR TENDER
11	LIH-202223-L-08	LONGITUDINAL SECTION (ROAD 3)CH1600 – CH2400	FOR TENDER
12	LIH-202223-L-09	LONGITUDINAL SECTION (ROAD 3)CH2400 – CH3030	FOR TENDER
13	LIH-202223-L-10	LONGITUDINAL SECTION (ROAD 4)CH0 – CH800	FOR TENDER
14	LIH-202223-L-11	LONGITUDINAL SECTION (ROAD 4)CH800 – CH1264	FOR TENDER
15	LIH-202223-X-01	ROAD CROSS SECTIONS 1	FOR TENDER
16	LIH-202223-X-02	ROAD CROSS SECTIONS 2	FOR TENDER
17	LIH-202223-X-03	ROAD CROSS SECTIONS 3	FOR TENDER
18	LIH-202223-X-04	ROAD CROSS SECTIONS 4	FOR TENDER
19	LIH-202223-X-05	ROAD CROSS SECTIONS 5	FOR TENDER
20	LIH-202223-X-06	ROAD CROSS SECTIONS 6	FOR TENDER
21	LIH-202223-X-07	ROAD CROSS SECTIONS 7	FOR TENDER
22	LIH-202223-X-08	ROAD CROSS SECTIONS 8	FOR TENDER
23	LIH-202223-D-01	CROSS SECTIONS AND LAYERWORKS	FOR TENDER
24	LIH-202223-R5-06	SIDE DRAINS AND ACCESS DRAINS	FOR TENDER
25	LIH-202223-R5-07	BUS STOPS AMD BUS SHELTERS	FOR TENDER
26	LIH-202223-R6-03	TYPICAL SERVICE DUCTS AND MARKER DETAILS	FOR TENDER
27	LIH-202223-R6-08	MISCELENOUS DETAILS	FOR TENDER
28	LIH-202223-R6-09	TYOICAL STORMWATER KERB AND CONCRTE CHANNEL	FOR TENDER
29	LIH-202223-R6-010	SPEED HUMP AND RAISED ISLAND DETAIL	FOR TENDER
30	LIH-202223-SW-01	EROSION, TRENCHES AND DRAINS	FOR TENDER
31	LIH-202223-SW-02	TYPICAL STORMWATER STRUCTURE (1 OF 2)	FOR TENDER
32	LIH-202223-SW-03	TYPICAL STORMWATER STRUCTURE (2 OF 2)	FOR TENDER
33	LIH-202223-SW-05	POSITIONING OF SUBSOIL	FOR TENDER
34	LIH-202223-SWL-01	STORMWATER LONGSECTION 1	FOR TENDER
35	LIH-202223-SWL-02	STORMWATER LONGSECTION 2	FOR TENDER
36	LIH-202223-SWL-03	STORMWATER LONGSECTION 3	FOR TENDER
37	LIH-202223-SWL-04	STORMWATER LONGSECTION 4	FOR TENDER

C3.2.5 DESIGN PROCEDURES

Not applicable.

C3.3: PROCUREMENT

C3.3 PROCUREMENT

C3.3.1 PREFERENTIAL PROCUREMENT

C3.3.1.1 Requirements

Tenders will be evaluated in terms of the City of Mbombela Preferential Procurement Policy. Points will be awarded for price and specific contract participation goals as contained in the Tender Data.

C3.3.1.2 Resource standard pertaining to targeted procurement

The Preferential Procurement Policy (PPP) of the City of Mbombela is applicable to this project. Refer to the Tender Data.

C3.3.2 SUBCONTRACTING

C3.3.2.1 Scope of mandatory subcontract works

- k) Paving - R50/ m²
- l) Kerbing - R45 / m
- m) V – Drains - R80-R100 /m³ (15% -20% of total price)
- n) Gabions - R
- o) Water lines - R
- p) Erect diamond fences – R60/m
- q) Brick wall – R80/m
- r) Speed humps – R2,650/ Speed hump
- s) Relocation of Pit toilets – R 1200/Toilet
- t) Hiring of Mobile toilets – R2500/month

However, local subcontractors should be considered provided they are capable

C3.3.2.2 Preferred subcontractors/suppliers

Where possible, local subcontractors should be considered for subcontract work provided they are capable.

C3.3.2.3 Subcontracting procedures

The contractor is solely responsible for negotiating with local subcontractors.

C3.3.2.4 Attendance on subcontractors

Not applicable.

C3.4: CONSTRUCTION

C3.4 CONSTRUCTION

C3.4.1 WORKS SPECIFICATIONS

The following specifications shall apply for the construction of the Works.

C3.4.1.1 Standard Specifications

The COLTO Standard Specifications for Road and Bridge Works for State Road Authorities (1998 Edition) shall apply for the construction of the Works.

The term "project specification" must be replaced by "scope of works" wherever it appears in these standardised specifications.

The term "Engineer" must be replaced by "Employer's Agent" wherever it appears in these standardised specifications.

C3.4.1.2 National and International Standards

The SANS or BS Specifications and Codes of Practice shall apply for the construction of the Works.

Wherever any reference is made to the South African National Standards (SANS) and the British Standards Specification (BSS) in either these Bill of Quantities or the Specification of Materials and Methods to be used (OOG-001E), this reference shall be deemed to read "SANS or equivalent standard" and BS or equivalent standard" respectively.

C3.4.1.3 Particular Specifications

The following particular specifications shall apply for the construction of the Works.

Various other specifications specified in the COLTO Standard Specifications or the Project Specifications.

Latest Sabita Manual, Manual 25 entitled "*Quality Management in the Handling and Transport of Bituminous Binders*".

TG2 Second Edition May 2009, "*Technical Guideline for Bitumen Stabilised Materials (BSM)*" issued by the Asphalt Academy.

C3.4.1.4 Variations and Additions to the COLTO 1998 Edition Standardized Specifications

The references to the General Conditions of Contract appearing in the COLTO Standard Specifications refer to the COLTO General Conditions of Contract which is superseded in this contract by the General Conditions of Contract for Construction Works 2015. The corresponding clause in the latter document pertaining to the reference in the COLTO Standard Specifications is listed in the table below.

Clause No. in the Standard Specifications	Clause No. in COLTO GCC 1998	Equivalent Clause No. in GCC 2015
1202	15	5.6.1
1206	14	Deleted
1209	52	6.10.1
1210	54	5.14.1
1212(1)	49	6.8
1215	45	5.5.1
1217	35	8.2.1
1303	49	6.8
1303	53	6.11.1
1303	12	5.3.1
1303	45	5.5.1
1403	40(1)	6.4.1

Clause No. in the Standard Specifications	Clause No. in COLTO GCC 1998	Equivalent Clause No. in GCC 2015
1505	40	6.4.1
31.03	40	6.4.1
3204(b)	40	6.4.1
3303(b)	2	3.2.1
5803(c)	40	6.4.1
5805(d)	40	6.4.1
6103(c)	40	6.4.1
Item 83.03	22	5.15.1
ALL SECTIONS	48	6.6

Variations and additions to the COLTO 1998 Standardized Specifications are listed in section C3.4.1.1 of this document.

C3.4.1.5 Amendments to the COLTO 1998 Edition Standardized Specifications

There are no amendments to the Standard Specifications as issued by the Committee of Land Transport Officials (COLTO).

C3.4.2 PROJECT SPECIFICATIONS RELATING TO STANDARD SPECIFICATIONS

This part of the project specifications deals with matters relating to the standard specifications. Where reference is made in the standard specifications to the project specifications this part shall also contain the relevant information e.g. the requirements where a choice of materials or construction methods are provided for the standard specifications.

In certain clauses, the Standardized Specifications allow a choice to be specified in the Specification Data between alternative material or methods of construction, and for additional requirements to be specified to suit a particular contract. Details of such alternatives or additional requirements applicable to this contract are contained in this part of the Specification Data. It also contains such additional specifications as are required for this particular contract.

The number of each clause and each payment item in this part of the project specifications consists of the prefix "B" followed by a number corresponding to the number of the relevant clause or payment item in the Standardized Specifications. New clauses and payment items not covered by clauses or payment items in the Standardized Specifications if included here are also designated "B", followed by a number. The new numbers follow on the last clause or item number used in the relevant section of the Standardized Specifications.

Clauses and pay items referring to labor intensive methods are prefixed by "L" in the project specifications.

(A) SECTION 1300: CONTRACTOR'S SITE ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS**B1301 PAYMENT**

Add the following at the end of Item 13.01(1).

" and provided the Contractor has fulfilled his obligations as far as the Engineer's

office, laboratory and housing accommodation is concerned".

Add the following new pay item:-

Item Unit

B13.01(a) Services for Community Liaison Officer (provisional Sum) Months

The CLO will be paid **R8 738.17/pm**. Contractor will only claim

Handling fee under item B13.01 (b)

B13.01(b) Handling cost and profit in respect of sub-items B13.01(a) %

B13.02 Training:

(a)	Provisional sum for training allowance to targeted labor undergoing training	
(i)	Technical Skills	No
(ii)	Generic Skills	No
(iii)	Entrepreneurial skills	No
(iv)	Remuneration of labors undergoing technical skills training.	No
(v)	Training Venue	No

Payment of items will be based on acceptable quote from at least three accredited training service providers. Payment will be as invoiced from nominated service provider after completion of training.

Contractor will claim handling fee under item B13.03 (b)

(b) Contractors handling costs, profit and all other charges in respect % of sub-item B13.03 (a)

B13.03(a) Contractors time related obligation in OHS:

All staff and compliance in respect of occupational health and safety Act, construction regulations and **COVID-19 (C19 OHS), 2020** will be paid by the contractor Months

B13.03(b) Contractors time related obligation EMP:

All staff and compliance in respect of Environmental Management Plan regulation will be paid by the contractor Months

B13.04 Relocation and/or protection of existing services:

(a) By the contractor

Payment of the item will be based on actual length of relocation and or Protection of Services Including equipment to carry out the required relocation and/or protection of services.

Any materials to be used must be approved by the Engineer on site.

(b) By the service provider (provisional Sum)

Invoice of nominated and approved service provider will be certified for payment after work done. Contractor will claim handling fee under item B13.02 (c).

(c) Handling cost in respect of B13.05 (b) %

B13.05	Information Board	
	Supply, transport to site and erect contract signboard	Number (No.)
	As indicated on drawing.	
B13.06	Hand excavation to determine the position of existing	
	Service in soft material	m ³
	Payment for excavation in soft material by hand as directed By Engineer on site	

(B) SECTION 1400: HOUSING, OFFICES AND LABORATORIES FOR THE ENGINEER'S SITE PERSONNEL**B1401 OFFICES AND LABORATORIES****(a) General**

Delete the fourth sentence in the first paragraph of Sub-clause 1402 (a) and replace with:

Office buildings shall have timber or concrete floors covered with edge-to-edge foam-backed needle-punched carpeting, and laboratory buildings shall have concrete floors.

Add the following new paragraph at the end of this sub-clause:

The offices, laboratory and stores shall, unless otherwise agreed, be erected in close proximity to the contractor's offices and laboratory, and the entire area shall be fenced with security fencing and provided with a gate. The contractor shall take all reasonable precautions to prevent unauthorised entry to the Engineer's offices and laboratories and to ensure the general security of the offices and laboratories.

B1401 MEASUREMENT AND PAYMENT

Amend the following pay items under item:

Item	Unit
B14.01 Office and laboratory accommodation	
(a) Office accommodation for the Engineer	Month
Payment will be provision of renting the office of the Engineer from local office parks or rental of mobile office space.	
(b) Handling cost and profits in respect of sub-item B1401 (a)	%
B14.03 (b) Prime cost items and items paid for in a lump sum:	
Add the following sub-items	
(d) Provisional Sums items	
(i) Provision for use by the Engineer for an independent Geotechnical laboratory	No
Payment will be as invoice by the independent laboratory for test conducted on instruction of Engineer	
(ii) Handling cost and profits in respect of sub-item B1403 (d) (i)	%
(iii) Provision for Training of Engineering Technician	Month
Payment will be made monthly for the remuneration of Engineering Technician appointed by Client/Engineer for on-site Training.	
(iv) Handling cost and profits in respect of sub-item B1403 (d) (iii)	%
(v) Provision for use by Engineer of Surveyor	No
Payment will be as invoiced by the Surveyor for work conducted on instruction of Engineer	
(vi) Handling costs and profit in respect of subitem B14.03 (d)(v) above	%
(vii) Provision for use by Engineer of Environmental Specialist	No
Payment will be as invoiced by the Environmental Specialist for work conducted on instruction of Engineer	
(viii) Handling costs and profit in respect of sub-item B14.03(d)(vx) above	%

- | | |
|---|------------|
| (ix) Provision of a direct independent telephone line for the Engineer
, including the cost of calls in connection with contract administration and telephone rental | Month |
| (x) Handling costs and profit in respect of subitem B14.03(d)(ix) above | % |
| (xi) Provision of Site Monitoring Fees- Resident Engineer | Month |
| (xii) Provision of Site Monitoring Fees- Assistant Resident Engineer | Month |
| Payment will be as invoiced by the Engineer for work conducted | |
| (xiii) Handling costs and profit in respect of subitem
B14.03(d)(xi) and (xii) above | % |
| (xiv) Provision of safety consultant | Month |
| Payment will be as invoiced by the Safety Consultant for work conducted on instruction of Engineer | |
| (xv) Handling costs and profit in respect of subitem
B14.03(d)(xiv) above | % |
| (xvi) Provision of social facilitator | Month |
| Payment will be as invoiced by the Social Facilitator for work conducted on instruction of Engineer | |
| (xvii) Handling costs and profit in respect of subitem
B14.03(d)(xvi) above | % |
| (xviii) Provision for Independent Engineer for Design Reviews | No Payment |
| will be as invoiced by the Independent Engineer for work conducted on instruction of Engineer | |
| (xix) Handling costs and profit in respect of subitem (xviii) above | % |

(C) SECTION 1500: ACCOMMODATION OF TRAFFIC**B1502 GENERAL REQUIREMENTS****(e) Access to properties**

Add the following:

“Where the alignment of the new road coincides with the alignment of the existing road, a number of accesses to private properties will have to be operational and maintained during the constructional period. No separate payment will be made for providing acceptable and safe access across the new road at all times during construction of the road.”

(i) Traffic safety officer

Add the following after sub-clause (viii):

“(ix) Be responsible for contacting all the relevant authorities in the event of an accident on the site of the Works

(vi) Arrange for the removal of broken down vehicles that obstruct the normal traffic flow

The Contractor shall provide the traffic safety officer with all the necessary resources to carry out his duties as specified, inter alia, light delivery van (LDV), personnel, warning signs and revolving amber flashing lights. A warning sign with the words “CONTRACTOR TRAFFIC CONTROL” and/or “AANNEMER VERKEERSBEHEER” in clearly legible letters shall be mounted on the vehicle at least 1,5m above ground level to be clearly visible. The vehicle shall be equipped with two revolving amber-coloured flashing lights with a minimum intensity of 55W. The flashing lights shall always be switched on and the warning sign be displayed when the vehicle is used on the site.

No separate payment will be made for the traffic safety officer, his vehicle, personnel and equipment and the cost thereof shall be included in the Contractor’s cost for his establishment and general obligations (Section 1300).”

Add the following new sub clauses:

“(j) Handing over the site

The total extent of the site between the limits of construction as described in this document and indicated on the drawings will be handed over to the contractor at the commencement of the contract period. The engineer however reserves the right to adjust this arrangement should progress or safe passage of traffic warrant such a change.

(k) Use of explosives in close proximity of temporary deviations

The contractor shall arrange all necessary traffic control and other requirements to safeguard the traffic on temporary deviations during blasting operations.

(l) Land taken up for deviations

Negotiations with landowners to obtain the land taken up by temporary deviations will be undertaken by the employer. A prime cost sum is allowed in the bill of quantities for payment of compensation to affected landowners. All other negotiations regarding temporary access to properties, land-use, fencing requirements etc. shall be dealt with by the contractor in conjunction with the engineer and be confirmed in writing and be kept on record by the contractor.

“(m) Maximum lengths of construction areas

A temporary deviation, where the proposed road follows the existing route shall be constructed along the length of existing road. Traffic shall generally be accommodated as follows:

On a two-way two lane gravel deviation (Class 1) constructed partially outside or adjacent to the existing road reserve boundaries of road.

(i) On one-way single lane gravel deviation (Class 2) constructed inside the existing road reserve boundaries and on either side of road. In this instance special cognisance shall be taken to accommodate traffic to private properties.

A maximum length of one section of approximately 5,0km or two sections of 3,0km each of deviation (Class 1 or 2) shall be operational at a time and no relieve of this limitation shall be considered by the engineer except where the programme necessitates such at the construction of bridges.”

B1503 TEMPORARY TRAFFIC CONTROL FACILITIES

Add the following after the first paragraph:

“All temporary road signs, devices, sequences, layouts and spacing shall comply with the requirements of the Road Traffic Act, 1996 (Act 93 of 1996), the National Road Traffic Regulations, 2000, the South African Road Traffic Signs Manual, the requirements of the relevant road authority and the drawings. All temporary traffic control facilities shall comply with the guidelines set in SA Road Traffic Signs Manual, Volume 2, and Chapter 13: Roadwork Signing, (SARTSM, June 1999, obtainable from the Government Printer, Pretoria).”

(b) Road signs and barricades

Add the following:

“All the temporary road signs are to be mounted on posts as specified in section 5600 of the specifications. Provision shall be made for the supply and erection of the signs and the maintenance of the signs during the construction period. Provisions shall also be made for the removal of the temporary road signs on completion of the construction work when such signs are no longer required.

Temporary road signs and channelization devices shall be manufactured in accordance with the latest edition of the South African Road Traffic Signs Manual (June 1999) and placed as shown on the drawings and in Road Signs Note 13. Delineators shall be manufactured from a non-metal material and shall be mounted on a base section also manufactured of non-metal material. Single as well as back-to-back mounted delineators are required.

The obligation to arrange safe passage of traffic shall always be vested with the contractor regardless what is indicated on the drawings of the engineer.”

(c) Channelization devices and barricades

Add the following:

“Drums shall not be used as channelization devices.

TW 401 and TW 402 delineators shall comply with the following requirements:

- a) It shall be manufactured from a flexible material and shall comply with SABS 1555. The blade portion of the delineator shall be positively affixed to a base unit which in turn shall be stable on its own or be stabilized by means of sandbags when used on the road.
- ii) The blade shall be retro-reflectorized, with class 1 yellow sheeting on the side facing oncoming traffic.
- iii) It shall nominally be 1000mm high x 250mm wide and the bottom edge of the delineator shall not be more than 200mm above the road surface.
- iv) It shall be subject to the approval of the Engineer.

The maximum spacing between centres of delineators shall be as shown on the drawings or as directed by the Engineer.”

(e) Warning devices

Add the following:

“It is a requirement of this contract that all construction vehicles and plant used on the works will be equipped with rotating amber flashing lights and warning boards as specified in the standard specifications. Construction vehicles travelling outside the limits of construction areas shall however, not operate the warning lights.

The warning lights shall have a base diameter of at least 170mm and the amber bulb cover a height of at least 150mm high. It shall be a requirement that the contractor also provides the engineer's site personnel with warning lights for their vehicles (a maximum of two lights are required) without any payment applicable.

B1514 TEMPORARY FENCING AND GATES

Replace the contents of this clause with the following:

“Where temporary fencing is ordered by the engineer, it shall be paid for under item 55.06 of the standard specifications. The temporary fencing shall be new fencing material, which shall subsequently be dismantled and removed and erected at an alternative position as directed by the engineer. When ordered by the engineer, temporary fences and gates shall be moved to new locations or either left in place or when no longer required be dismantled and removed from site if so directed. Allowance is made in the bill of quantities for moving existing fences and gates.”

Add the following clause:

B1517 RETRO-REFLECTIVE MATERIAL

“Retro-reflective material for temporary signs shall comply with the requirements of SABS 1519-1 for weathered material. Tests shall be carried out with a field retro-reflectometer and the testing procedure and classification are described in Clause B 8118. The value of the coefficient of Retro- Reflection shall be at least 60% of the values indicated in Table B 8118/1.”

B1518 MEASUREMENT AND PAYMENT

Renumber item 15.01 as B15.01 and add the following:

“The tendered rate shall also include for all measures necessary to safeguard traffic on temporary deviations during blasting operations.”

Renumber item 15.03 as B15.03 Add the following sub-item:

“ITEM	UNIT
B15.14 The provision and maintenance of rotating lights, etc. for the use of the Engineer and his staff	
(a) Rotating Amber lights	number (No)
(b) Safety vests	number (No)

The unit of measurement shall be the number of Rotating Amber lights and Safety Vests supplied to the supervisory staff.

The tendered rate shall include full compensation for providing and maintaining hats and the jackets equipped with high visibility retro-reflective and/or fluorescent panels in red, yellow and white for the duration of the contract”.

(D) SECTION 1700: CLEARING AND GRUBBING

B1702:	DESCRIPTION OF WORK a) Clearing Add the following: Clearing as described shall in all cases be undertaken in such a manner that the topsoil is preserved and not contaminated with other debris or rubbish. Cross- sections for the determination of earthworks quantities shall be taken after clearing (topsoil or unsuitable roadbed material) and roadbed preparation if applicable. Payment for gabion boxes and mattresses which have to be removed and the material sorted and stacked shall be made under section 5200.	
B1704:	MEASUREMENT AND PAYMENT	
	Item	Unit
	B17.07	Removal of topsoil material and temporary stockpiling thereof in:
	a) Topsoil in windrows alongside the work area	cubic metre (m ³)
	b) Topsoil in windrows on the edges of borrow pits or spoil areas	cubic metre (m ³)
	<p>The unit of measurement for items (a) and (b) shall be the cubic metre of topsoil removed to windrow or temporary stockpile. The volume of topsoil removed shall be measured in cut, calculated from the difference in cross-sections of the natural ground level before the commencement of clearing to cross-sections taken after the removal of the topsoil.</p> <p>The contractor shall constantly liaise and agree with the Engineer as to the depth of topsoil to be removed. Where, in the opinion of the Engineer, material that would not normally be classed as topsoil to be removed. Where, in the opinion of the Engineer, material that would normally be classed as topsoil has also been excavated, the excavation shall be backfilled and compacted with selected material at the contractor' expense. Should material that is deemed by the Engineer not to be topsoil, be removed and stockpiled together with material classed as topsoil, the contractor shall be responsible for the removal of this unsuitable soil from the stockpile and the replacement of the quantity of topsoil contaminated by the unsuitable material at his cost. The quantity of topsoil to be replaced shall be determined by the Engineer.</p> <p>The rates tendered shall include for the excavation of the topsoil and where required, the loading and hauling thereof to temporary stockpile as well as the maintenance of the stockpile until re-use of the material. The rates tendered shall also include for all supervision required to ensure that only topsoil is removed.</p>	

(E) SECTION 2100: DRAINS**B2101: SCOPE**

Amend the first paragraph to read:

“This section covers all work both rehabilitative and new work in connection with the excavation and construction of open drains, subsoil drainage and banks and dykes at the locations and to the sizes, shapes, grades and dimensions as shown on the drawings or as directed by the Engineers, and the test flushing of subsoil drains.”

B2104: SUBSOIL DRAINAGE

(a) Materials

(ii) Natural permeable material

Add the following to the 2nd paragraph:

“The crushed stone shall be coarse (19mm nominal) and shall be washed clean of all fines”, conforms to the following specification:

Percentage passing through a 26,5mm sieve: 100 %. Percentage passing through a 19,0mm sieve: 60-85 %.

(iii) Synthetic-fibre filter fabric

Under item (4) Selection, of this sub-clause, replace the 1st paragraph with the following:

“The filter-fabric used for subsoil drains shall be grade 2 and shall satisfy the criteria for a grade 2 geotextile as given in Table 2104/2.”

(b) Construction of subsoil drainage systems Add the following sub-clause:

“(v) Proving of pipes in subsoil drainage systems

On completion of the pipe laying and prior to backfilling, all pipe joints shall be surveyed as proof of their installation to line and level. After backfilling the pipes shall be proved by pulling through a cylindrical cleaning brush followed by a wooden mandrill \pm 400mm long and 5mm in diameter less than the bore of the pipe. Proving of pipes shall not be paid for separately and the cost thereof shall be deemed to be included in the rate tendered for laying the pipe.”

B2107: MEASUREMENT AND PAYMENT

Item

Unit

B21.01 Excavation for open drains

Add the following to the penultimate paragraph:

“The tendered rate shall also include full compensation for trimming the open drains” “This item does not include the excavations for the earth channel along the road profile as per typical cross section, which is deemed included in the mass earthworks (Section 3300). This item is specifically for additional open drains leading away from the road profile, like mitre drains, etc.”

(F) SECTION 2200: PREFABRICATED CULVERTS**B2203 MATERIALS****d) Fine granular material**

Add the following:

“In addition to clause 22.03(d) the Engineer may allow approved selected fine material to be used as bedding material.”

B2204 CONSTRUCTION METHODS

Replace the third paragraph with the following:

“All culverts shall be constructed by the ‘trench method’.”

B2207 UNSUITABLE FOUNDING CONDITIONS

Substitute the second paragraph of Clause 2207 with the following:

“The width of the excavation and cushion to be as shown on the drawings.”

B2211 BACKFILLING OF PREFABRICATED CULVERTS

Substitute the second sentence in the ninth paragraph with the following:

“The cement/soil mixture shall consist of CEM II 32,5 cement and of an approved gravel of sub-base quality (G5) mixed in proportion of 1:10.”

B2215 SERVICE DUCTS

Substitute the fourth paragraph with the following paragraph:

“The depth of the excavation shall be such that a minimum coverage of 1,0 m is allowed for between the road surface/shoulders or any part of the road formation surface. The excavation for service ducts will further be done to ensure that the duct is 600 mm below any part of the natural ground and will allow for the thickness of the pipe bedding. All service ducts will be placed in a 1:10 cement/soil mixture, at least 75 mm thick on either side of the pipe. Service ducts shall extend 1m outside the road reserve.”

B2218 MEASUREMENT AND PAYMENT

Add the following clauses:

"B2219 CONSTRUCTION TOLERANCES

The installation of prefabricated pipes, portal and rectangular culverts and ducts shall comply with the requirements stated below:

(a) Level

The permissible deviation from the specified level shall be ± 25 mm.

(b) Alignment and grade

The permissible deviation of the alignment and grade of each culvert and pipeline shall be ± 20 mm from the specified line and level, or from the line between culvert or pipe inverts at successive manholes or catchpits, as applicable, when measured over any 6 m length, and all such deviations shall be gradual. Reverse falls are unacceptable.”

(G) **SECTION 2300: CONCRETE KERBING, CONCRETE CHANNELLING, OPEN CONCRETE CHUTES AND CONCRETE LININGS FOR OPEN DRAINS**

B2302 MATERIALS

(b) **Kerbing and channeling**

Add to Sub-clause 2302(b) the following:

Precast kerbs shall preferably be factory produced by a reputable manufacture of the articles and shall comply with the requirements of SABS 927.

B2304 CONSTRUCTION

(b) **Prefabricated concrete Kerbing and channeling**

Add to Sub-clause 2304(b) the following:

All precast kerbs shall be provided with continuous in-situ concrete backing (haunching), the cost of which shall be included in the tendered rate.

Dimensions of the triangular-shaped (in cross-section) haunching shall be calculated as follows: If the difference in levels between the top of the kerbs and the sub base on which the kerb is laid is (h), then the height of the haunch is $2/3h$ and the width of the haunch is h.

(e) **Cast in-situ kerbs and channels**

Add to Sub-clause 2304(e) the following:

Where new Kerbing and channeling has to be laid in an existing bitumen surface, the surface shall be neatly cut to a straight line with an angle grinder or similar approved means along the edge of the channel. The existing road foundation shall then be carefully removed over the width and depth required to construct the new kerbs and channel.

During the construction of the in-situ channel, the contractor shall take care not to stain or damage the existing road surface. Any damage, excess overbreak, undermining or staining shall be repaired by the Contractor at his own expense.

Add the following new Sub-clauses to Clause 2304:

(m) **Formwork and finish**

All visible edges of cast in-situ channels shall be rounded with a rounding tool.

(H) SECTION 3300: MASS EARTHWORKS**B3303: CLASSIFICATION OF CUT AND BORROW**

(a) Classes of excavation

Add to Sub-clause 3303(a) the following:

(i) Soft excavation

Add the following at the end:

Or

“Soft excavation shall be excavation in material which can be efficiently ripped by a bulldozer with a mass of at least 35 tons when fitted with single tine ripper and an engine developing approximately 220 kW at the flywheel”.

Remove item 3303 (a) (ii) Intermediate excavation. There will be no intermediate material measured in this contract and except from hard excavations all excavations must be considered as soft excavation.

(iii) Hard Excavation Add the following:

A full survey including proto report of all dwellings within a radius of 200m of a blasting area needs to be conducted before blasting operations commence. The Contractor is liable for any damage that occurs to any structure, cable, sewer, pipe, etc. and immediately notifies the Employer's Agent of any such damage. The Employer's Agent arranges for the damage to be repaired by the owners of the damaged service and the cost of such repairs is deducted from any monies due to the Contractor.

B3305: TREATING THE ROADBED

(d) In Situ treatment of Roadbed

Wherever shown on the drawings or as may be directed by the engineer, the roadbed shall be treated in situ by undesirable formations of hard or rocky materials being broken up in order to achieve a uniform standard of compaction or to improve drainage.

Treatment in situ shall consist of ripping or blasting the roadbed to depths, which, on normally cambered sections, shall increase from the centre of the roadbed to the edges. Unless otherwise indicated on the drawings or directed by the engineer. The depth of ripping in the centre of the Roadbed shall be not less than 300 mm and at the edges of the roadbed not less than 500 mm. Similarly, the depth of drilling and blasting shall be not less than 700 mm at the center of the roadbed. And shall slope outwards to not less than 1 000 mm at the edges of the roadbed. On Super elevated sections the treatment shall, if so directed by the engineer or shown on the drawings, have a uniform cross fall and a minimum depth of 400 mm in the case of ripping and 850 mm in the case of blasting.

After ripping or blasting, the material shall be processed as follows:

Where the engineer instructs the contractor to rip the in situ material, all the material shall be sized by rolling or knapping until the maximum dimensions of any clod or spall do not exceed two-thirds of the thickness of the layer after compaction.

The material shall then be compacted as described in section 3200 and in subclause 3304(b) by means of eight passes by an approved combination of various rollers.

Where instructed by the engineer, the contractor shall blast the in situ material, and all the material shall be processed and compacted as described in subclause 3209(c).

Where instructed by the engineer, the contractor shall blast the in situ material, and all the material shall be processed and compacted as described in subclause 3209(c).

B3306: CUT AND BORROW

(a) Dimensions of Cuts

Delete the third paragraph from Clause 3306(a), apart from the first sentence thereof. Add the following:

Cut and borrow to fill will be measured under Item 33.01. The Contractor shall take note of the nature of the earthworks alongside the existing road. No extra over payments will be made in respect of the nature of the site or due to the dimensions of a particular cutting.

B3307: FILLS

(d) Benching

Add the following:

“Benching of fill and pavement layer material is required to be undertaken into the existing fill embankments and pavement layers. No additional payment shall be made over and above the normal pay items applicable to earthworks and pavement layers where benching is required for widening of the existing road formation. Benching shall be undertaken as shown on the drawings. It is a requirement that benching shall always be started at the bottom of the existing fill progressing to the top of the formation. The dimensions and details of benching are shown on the drawings.”

(i) Widening of fills

In the eight paragraph of Sub-clause 3307(i), delete the sentence "An extra over payment for the widening of existing fills will apply under Item 13.16."

Add the following:

No extra over payments will be made in respect of the nature of the site or due to the dimensions of the fills being widened or constructed.

B3312: MEASUREMENT AND PAYMENT

General directions

Delete Note (3) Work in Restricted Areas and replace with the following:

On this Contract, no extra over payment will be made due to the nature of the site or the size of the work area available. All costs associated with carrying out the works are deemed to be included in the tendered rates for the items in the Schedule of Quantities.

Item

B33.01: Cut and borrow to fill, including free-haul up to 1,0 km:

B33.04: Cut to spoil, including free-haul up to 1,0 km:

The free-haul distance for cut and borrow to fill and cut to spoil is 1,0 km for this contract.

B33.12: In Situ Treatment of roadbed:

(I) SECTION 3400: PAVEMENT LAYERS OF GRAVEL MATERIAL

B3402:	MATERIALS (a) General All layers shall comply with the requirements of Tables 3402/1, 3402/2, 3402/4 and 3402/5 of the Standard Specification. The requirements of Section 3500: Stabilization shall also apply to the relevant layers. Material requirements for gravel pavement layers are in accordance with TRH4 and shall be indicated on the drawings. There shall be no measurement of Intermediate class excavation. All excavation that is not Hard shall be deemed as Soft.	
B3406:	QUALITY OF MATERIALS AND WORKMANSHIP Add to Clause 3406 the following: Test results and re-measurements shall be assessed in accordance with the provisions of Section 8200: Quality Control (Scheme 1) of the standard specifications, as amended in these project specifications.	
B3407:	MEASUREMENT AND PAYMENT Delete the note at the start of the measurement and payment clause dealing with work in restricted areas. On this Contract, no extra over payment will be made due to the nature of the site or the size of the work area available. All costs associated with carrying out the works are deemed to be included in the tendered rates for the items in the Schedule of Quantities.	
	B34.04:	In-situ reconstruction of existing pavement layers as:
	(a) Gravel selected layer compacted to 93% of modified AASHTO density using	
	ii) Non cemented material, 150mm thick (m ³)	
	The unit of measurement shall be the cubic meter of compacted pavement layer, and the quantity shall be calculated from the authorized dimensions of the completed layer.	
	B34.06:	Extra over item 34.04 for adding extra material as specified
	(a) Gravel selected layer (neat G7 or better commercially sourced) (m ³)	
	The unit of measurement shall be the cubic meter of compacted pavement layer, and the quantity shall be calculated from the authorized dimensions of the completed layer. The tendered rates shall provide full compensation for procuring from commercial sources, furnishing and placing all materials and compacting of the material, over an unlimited free haul distance where material is obtained from commercial sources, and for the testing, protecting and maintaining of layers as specified.	

(J) SECTION 3500: STABILIZATION B3502 MATERIALS**(a) Chemical Stabilising Agents**

Add the following after the first paragraph:

“The Contractor must receive confirmation from the Engineer on the type and quality of stabilising agent before ordering.”

Replace sub clause (ii) with the following:

“(ii) Common Cement

Common Cements shall comply with the requirements of SANS EN 197-1 as specified in Clause B1229. CEM II cements shall be utilised.”

(e) Water

Add the following:

“Water used in the compaction and curing of stabilised layers shall comply with the criteria specified in Table 8116/1.”

B3503 CHEMICAL STABILISATION**a) Preparing the layer**

Add the following:

“The surface of the layer to be stabilized shall be watered and rolled to obtain a smooth compacted surface without loose or coarse patches in order to ensure a uniform application of stabilizing agent or agents.

Payment for preparing the layer surface to these standards shall be deemed to be included in the tendered rates of sections 3400 and 3500.”

(b) Applying the stabilizing agent

Add the following:

“The minimum rate of application shall be 2, 0% by mass of the specified stabilizing agents. The engineer may order a variation in the rate of application. The spreading of stabilizing agent/s shall be done by placing bags along the road and spreading by hand using rubber squeegees to obtain a uniform layer of stabilizing agent/s. Bags which have become damaged or wet shall not be used and such bags shall be replaced at the contractor’s cost. No additional payment other than the scheduled payment items shall be considered if more than one type of stabilizing agent is used for the stabilization of a layer.”

(d) Mixing in the stabilizing agent

Add the following:

“Where chemically stabilized pavement layers are constructed, no stabilizing agent may be spread or mixed beyond the specified width. The contractor shall not mix material for stabilization on adjacent bituminous surfaces.

Where existing and new works are joined (longitudinal joints and others), the material shall be satisfactorily mixed and compacted without any permeable or loose patches.”

(e) Watering

Add the following paragraph after the third paragraph:

“The contractor’s attention is drawn to the provisions of the third paragraph of this standard clause, especially the second sentence, which states:

The moisture content of the material during compaction shall never exceed 80% of the saturated moisture content of the natural material without stabilizing agents.

This requirement will be rigorously enforced on site to reduce the occurrence and magnitude of shrinkage cracks.”

(f) Compaction

Add the following:

"The entire layer, regardless of its thickness, shall be processed within the time limitations stipulated in sub-clause B3503 (i).

"The preparation of the stabilised materials for Modified AASHTO compaction testing shall be in accordance with the requirements of TMH1, Method A16T and the compaction thereof to TMH1, Method A7."

(g) Finishing at junctions

In the first sentence after "damage to" add the following:

".....the existing pavement or....."

(h) Curing the Stabilised Work

Replace the first paragraph with the following:

"The stabilized layer shall be protected against rapid drying out by being kept continuously wet or damp by watering at frequent intervals until one of the methods of protection listed below is put into effect. Stabilized layers which are not kept continuously wet or damp but is subjected to consecutive wet-dry cycles, may be rejected by the engineer should he consider the layer to have been adversely affected. Method (iii) and (iv) shall not be applicable."

Amend the final paragraph to read:

"No additional payment will be made for curing as described above."

(i) Construction Limitations

In Table 3503/1, delete "8 hours" for ordinary Portland cements and cement blends and replace with: "6 hours"

Amend the last paragraph to read as follows:

"No traffic or plant not actually used for processing or curing the layer shall be allowed to pass over the treated layers for a period of at least 5 days after compaction is completed. Thereafter tipping and spreading of the overlaying layer may proceed. Construction of the overlaying layer shall only proceed after a minimum period of 7 days after compaction of the treated layers is completed."

Add the following:

"No stabilisation shall be done with falling air temperatures when the air temperature falls to below 7 °C, or during rising air temperatures, when the air temperature is below 3 °C.

Moisture content tests shall not be undertaken more than one day in advance of in-situ stabilisation operations. Care shall be taken to ensure that samples are representative of the in-situ material. Checks shall be conducted when wet weather occurs between initial testing and work commencing on any section."

B3505 BITUMINOUS STABILISING**(b) Mixing in the additive**

In the third line, change "sub-clause 3503(b)" to "sub-clause B3503 (b)".

(e) Compaction

In the first line of the first paragraph, change "sub-clause 3503(f)" to "sub-clause B3503 (f)".

(f) Finishing at junctions

In the second line change "sub-clause 3503(g)" to "sub-clause B3503 (g)".

(g) Construction limitations

In the second paragraph, delete the word "Limited".

B3506 TOLERANCES**(a) Rate of application**

(i) Chemical stabilizing agents add the following:

“Stabilizer content after construction shall be determined by TMH 1 test method A 15(d). The coefficient of variation for each lot shall not exceed the following:

30% for in place mixing, and

20% for plant mixing (in situ recyclers shall be considered plant mixers) Where:

Coefficient of variation = $\frac{S_n \times 100}{X_n}$

X_n

S_n = Standard deviation of “n” determinations of stabilizing agent content, and

X_n = Mean of “n” determinations of stabilizing agent content, with n = 4 minimum”

B3509 QUALITY OF MATERIALS AND WORKMANSHIP

Replace the second paragraph with the following:

“The test results and measurements shall be judged in accordance with the provisions of Section 8300.”

Add the following after the fourth paragraph:

“The stabilized material sampled from the layer for the compaction of Modified AASHTO briquettes, shall be prepared according to TMH 1 method A16 T i.e. discard materials coarser than a 37,5 mm test sieve, and compact according to TMH 1 method A7. The compacted specimens are used for the determination of unconfined compressive strength, indirect tensile strength, wet/dry durability and maximum dry density / optimum moisture content relationship.”

B3510 MEASUREMENT AND PAYMENT

Amend the following payment item.

“ITEM

UNIT

B35.02 Chemical Stabilizing Agents

Replace subitem (a) with the following:

(a) Common cements to SANS EN 197-1 (CEM II 32,5)

ton (t)”

(K) SECTION 4100: PRIME COAT B4102 MATERIALS**(a) Priming Material**

Add the following priming material:

“MSP1 or Colprime E complying with SABS 307.”

B4104 WEATHER AND OTHER LIMITATIONS

Replace paragraph (g) with the following:

- “(g) When the moisture content of the upper 50 mm of the layer is higher than 50% of the optimum moisture content determined according to TMH1 method A7.”

B4106 APPLICATION OF THE PRIME COAT

Add the following to paragraph (b):

“The temperatures for storage and spraying of MSP1 or Colprime E shall be in accordance with the supplier’s specification.”

Add the following sub-clause:

- “(j) The nominal rate of application of the prime coat shall be 0,7 l/m².”

B4110 MEASUREMENT AND PAYMENT**ITEM****UNIT****B41.01 Prime coat:**

Add the following sub item:

- “(e) Emulsion prime, “Colprime E” or similar
”

litre (l)

(L) SECTION 4200: ASPHALT BASE AND SURFACING B4202 MATERIALS**(a) Bituminous binders**

Add the following:

“The bitumen binder for the manufacturing of the continuously graded asphalt surfacing shall be 60/70 penetration grade bitumen. The bitumen binder for the manufacturing of the continuously graded asphalt base shall be 40/50 penetration grade bitumen”

(b) Aggregates

(viii) Grading Add the following:

“The aggregate grading for the continuously graded asphalt surfacing shall be as specified for a medium grading as per Table 4202/7 in the standard specifications.

The use of crushed stone base material shall not be permitted. The mix shall be manufactured using single size coarse aggregate fractions. The use of natural sands will not be permitted. The engineer may request a reconsideration of the blend to achieve any grading within the given envelope.”

(c) Fillers

Add the following:

“All asphalt mixes specified for use in the works shall contain at least 1% by mass of CEM I 32,5 active filler.”

B4203 COMPOSITION OF ASPHALT BASE AND SURFACING MIXTURES

Delete the fifth paragraph and replace with the following:

“The design of the asphalt mixes shall be in accordance with “Interim Guidelines for the Design of Hot-Mix Asphalt in South Africa (June 2001)”, and appropriate research results. The mix properties and requirements shall be as specified in the project specifications.

The relevant asphalt mixes for the base and surfacing layers shall comply with the requirements in table B4203/2.”

TABLE B4203/2: ASPHALT MIX REQUIREMENTS: BASE AND SURFACING

Property	Continuously graded base mixes	Continuously graded surfacing mixes	Stone mastic asphalt mixes
Marshall stability (Kn)	8 – 18	8 – 18	-
Marshall Flow (mm)	2 – 6	2 – 6	-
Stability /Flow (Kn/mm)	>2,5	> 2,5	-
VMA (%)	> 14	> 15	> 17
VFB (%)	65 – 75	65 – 75	
Air voids (%)	4 – 6	4 – 6	3 – 5
Indirect tensile strength @ 25°C (kPa)	> 1000	> 1000	> 400
Dynamic Creep Modules @ 40°C (Mpa)	> 20	> 20	-
Modified Iottmann* (TSR)	> 0,7	> 0, 8	> 0,7
Air permeability @ 7% voids (cm ²)	< 1 x 10 ⁻⁸	< 1 x 10 ⁻⁸	<1 x 10 ⁻⁸
Binder film thickness (microns)	5,5 – 8,0	5,5 – 8,0	-
Filler bitumen ratio	1 – 1,5	1 – 1,5	-

B4205 GENERAL LIMITATIONS AND REQUIREMENTS AND THE STOCKPILING OF MIXED MATERIAL**(c) Surface Requirements****(iii) Tack Coat**

Add the following new paragraph:

“Hand spraying shall only be permitted on areas approved by the engineer. The binder distribution shall be capable to apply the binder evenly over the full area. The equipment shall comply with clause 4103. Tack coat shall be applied to all transverse and longitudinal joints by hand utilizing a paint brush.”

B4206 PRODUCING AND TRANSPORTING THE MIXTURE**(b) Production of the mixture****(ii) Using drum-type mixer plants:**

Add the following:

“Pre blending of aggregate fractions shall not be permitted and the Contractor shall ensure that sufficient cold-feed bins are installed to accommodate each individual aggregate fraction, including the filler.”

(c) Transporting the mixture

Add the following paragraph:

“Special precautions shall be taken by the Contractor to ensure that the temperature of the total mass of asphalt does not decrease by more than 10° C from point of dispatch to the point where it is to be paved. The use of the thermal blankets is obligatory.”

Add the following sub-clause:

“(f) Approval of asphalt mixture

Before any asphalt is placed on the road, the Engineer shall approve the mix design. The approval process shall be as follows:

The Contractor shall prepare and submit a laboratory design mix with test results at four different bitumen contents. The design mix shall be submitted on the prescribed form D3 of TMH 10: “Instruction for the completion of as-built materials data sheets” with all the necessary test results completed. In addition, the proposed asphalt mixture shall be subjected to gyratory testing. All the expenses in preparing and submitting the laboratory design mix shall be to the Contractors cost.

Samples of all aggregate and bitumen shall be submitted with the laboratory design mix to enable the Engineer to carry out check design testing as necessary. The above design and aggregate shall be submitted to the Engineer at least six weeks before it is intended to commence with any asphalt production.”

B4208 JOINTS

Add the following to this clause:

“Where the difference in level between the new work and the existing road surface exceeds 25 mm, joints shall be treated as follows:

Transverse steps at the end of a day’s work shall be tapered off at a slope of 1 vertical to 20 horizontal (1:20) to tie in with the existing surface. The tapered section shall be removed before surfacing is recommenced and a joint formed in accordance with clause 4208 of the specification.

Longitudinal joints exposed to traffic shall be provided with a taper of compacted asphalt material over the full length of the exposed joint. The width of the taper shall be at least 5 times the difference in level between the old and new work.

All costs involved in the provision and removal of these temporary ramps shall be deemed to have been included in the rates tendered for the relevant asphalt pay item.”

B4214 QUALITY OF MATERIAL AND WORKMANSHIP**(b) Coring of asphalt layers**

Add the following:

“A suitable coring machine shall be available when asphalt paving is taking place. Cores shall only be drilled after a minimum period of 24 hours after placement of the asphalt layer and when the road temperature is 20 °C or less. Core holes shall be filled with hot mix asphalt and compacted, all within 24 hours of the core being drilled. Coring shall be carried out within 48 hours after the paving has been completed and supplied to the Engineer. The test results of cores shall be submitted to the Engineer within 24 hours after coring.”

(c) Routine inspection and tests

Add the following paragraph:

“The Contractor shall keep accurate records of:

- (i) The position where every truckload of asphalt is paved (chainage, lane, time and date).
- (ii) The temperatures of the asphalt in the trucks both at the mixing plant and at the paving equipment immediately prior to discharging the load.
- (iii) The truck number from which control samples are taken. All samples taken shall be appropriately numbered.”

(M) SECTION 5600: ROAD SIGNS B5601 SCOPE

Replace “South African Road Traffic Signs Manual” in the second paragraph with:

“SADC Road Traffic Signs Manual and the Road Traffic Act No. 29 of 19137 and Regulations”

Add the following:

“This section also covers the supply and erection of permanent danger plates at culverts and bridges at the locations indicated on the drawings or as directed by the engineer.”

B5603 MANUFACTURING OF ROAD SIGN BOARDS AND SUPPORTS**(a) Road signboards**

Add the following:

“The contractor shall make every effort to ensure that signboards are correct in all respect and before dispatching the boards from the manufacturer’s factory shall provide the Engineer with a 100 mm x 150 mm colour photograph of each sign face for approval of the correctness of the legend. Such approval will not imply final acceptance of the board. If the Contractor is in any doubt as to the correctness of the sign detail, the sign designer shall be contacted for verification.”

(a)(ii) Steel profile road signboards

Add the following:

“Where the letter or legends cross the horizontal joints of the sign panels, the letter shall be cut on the joint and both ends folded around the radius.

Retro-reflective material to adjoining Chromadek panels on a sign shall be practical visual match of the specified colour.”

B5604 ROAD SIGN FACES AND PAINTING

Add the following new sub-clause:

“(e) Application of retro-reflective material

All sign faces shall be faced with diamond grade retro-reflective material. Painted front sign faces shall not be used.

Where applied to Chromadek sections, retro-reflective material shall be applied as specified for aluminium section in Clause 5603(d) of the Standard Specification, and of Clause B5603(a)(ii) of this project Specification.”

B5605 STORAGE AND HANDLING

Add the following:

“The following shall not be allowed on the sign face:

Drilling of holes, except for the fastening of overlays Application of any form of adhesive

Cleaning with any chemicals that are not specifically approved by the manufacturer of the retro-reflective material

Covering the sign face with an impermeable material that does not allow free circulation of air.”

B5606 ERECTING ROAD SIGNS**(c) Erection**

Add the following:

“After erection the signboard shall be thoroughly cleaned with a cleaning agent approved by the retro-reflective material’s manufacturer.

All vegetation obstructing the new or replaced sign board shall be removed and disposed of as instructed by the Engineer.”

B5608 DISMANTLING, STORING AND RE-ERECTING EXISTING ROAD SIGNS

Add the following:

“Existing overhead and ground mounted road signs that are being replaced by new signs shall be dismantled and disposed of by the Contractor. Where possible the dismantling of the signs shall not be before the replacement sign is erected and displayed. Where dismantling of the sign is required before erection of the replacement sign, the dismantling shall not take place until immediately before work is to commence on the replacement, and the replacement shall be completed and the new sign displayed as soon as possible thereafter (within 72 hours).

Dismantling shall include sign panels and ground mounted sign supports.

Ground mounted sign supports shall be cut off just below ground level. Material excavated for removal of buried poles shall be replaced, and any depression made good using excess material from excavation for new signs.

Pay items are provided in the Bill of Quantities. Payment will differentiate between different types of sign panels.”

B5609 MEASUREMENT AND PAYMENT

Amend the following payment item:

ITEM	UNIT
B56.01 Road sign boards with painted or coloured semi-matt background. Symbols, lettering, and borders in diamond grade retro-reflective material, where the sign board is constructed from:” m²	

Amend the last two lines of the second paragraph to read:

“Completion, delivery, installation of the road sign board complete as specified, and the removal and disposal of all vegetation obstructing the motorists’ view of the new or replaced sign board.”

Add the following payment item:

‘B56.10 Hazard plates at culverts
(a) Provision and erection of hazard plates at culvert structures as per drawing No

The tendered rate shall include full compensation for all the labour and material, painting, lettering posts, excavation, backfilling with soil-cement, etc. as may be necessary for completing the work in accordance with the details shown on the drawing.’

(N) SECTION 5700: ROAD MARKINGS**B5701 SCOPE**

Replace “South African Road Traffic Signs Manual” in the second paragraph with: “SADC Road Traffic Signs Manual”

B5702 MATERIALS

Add the following sub-clause to item 5702(a):

“(v) Retro-reflective Glass beads

The retro-reflective beads shall be glass beads that comply with the requirements for glass beads specified in CKS 192.

The beads shall be delivered to the site in sealed bags, marked with the name of the manufacturer, the batch number and an inspection seal of the SABS, confirming that the beads form part of a lot tested by the SABS and comply with the requirements of CKS 192. Alternatively, the Contractor shall at all times have a SABS certificate on the site, identifying the batches to which the inspection seals apply and certifying that they have been tested by the SABS, and comply with the requirement of CKS 192.”

B5704 MECHANICAL EQUIPMENT FOR PAINTING

Add the following sentence at the end of the first paragraph:

“The Road-marking machine shall be fitted with a device to guide the operator to the centre of the line to be painted. This device shall be used at all times of operation.”

B5706 SETTING OUT THE ROAD MARKINGS

Add the following:

“Where road markings are to be replaced after milling/overlay seal, it is essential that all existing barrier lines and other road marking lines be accurately referenced before commencement of milling or other operations which will obliterate the existing road markings. The position of barrier lines shall be re-assessed on site by the Engineer before the Contractor commences with the road marking.”

B5707 APPLYING THE PAINT

Add the following:

“The Contractor’s establishment on site and general obligations shall be deemed to fully include the establishment of the road-marking team, irrespective of the number of times the road-marking team is required to be onsite or is required to move within the site.”

B5710 TOLERANCES**(c) Alignment of markings**

Add the following paragraphs:

“When an unbroken line and a broken line are painted alongside each other, the beginning and the end of the unbroken line shall coincide with the beginning of one broken line and the end of another broken line. When existing lines are repainted, the new markings shall not deviate more than 100 mm in the longitudinal direction nor 10 mm in the transverse direction from the existing marking.

The alignment of the road studs shall not deviate from the true alignment by more than 10 mm and shall be positioned so that the reflective faces are within 5° of a right angle to the centre line of the road.”

Add the following sub-clause:

“(e) Testing

(i) Plant

Before painting any permanent road markings, the Contractor shall satisfy himself and the Engineer, by painting test lines on a section of pavement other than the section required to be marked:

- (1) that the painting machine is in good working order and properly adjusted;
- (2) that the operator is fully experienced; and
- (3) that the machine sprays at the specified rate of paint application.

The Contractor shall bear the cost of all materials and workmanship required for the above plant tests.

In addition, the Contractor shall conduct random paint thickness tests and dip/spread tests as required by the Engineer.”

B5711 GENERAL

Insert the following into the last sentence of the last paragraph between “black paint” and “or chemical paint remover”:

“, bituminous emulsion, slurry”

Add the following to the last paragraph:

“Where black paint is used, it shall be matt.” Add the following new clause:

“B5715 REMOVAL OF EXISTING ROAD STUDS

The existing road studs shall be removed from the road surface prior to milling.”

B5714 MEASUREMENT AND PAYMENT ITEM UNIT

B57.06 Setting out and pre-marking the lines (excluding traffic island markings, lettering and symbols)

Add the following:

“Referencing of existing barrier lines and other road marking lines prior to milling and other operations, shall be included in the tendered rate for setting out and pre-marking.”

(O) SECTION 6400: CONCRETE FOR STRUCTURES**B6402 MATERIALS****(a) Cement**

Replace this sub-section with the following:

"Refer to section 1142 for specification of cement."

CEM I 42,5, CEM II A-S 32,5, CEM II/A-V 32,5, or CEM III A may be used for the manufacture of reinforced concrete members.

B6404 CONCRETE QUALITY**(b) Strength concrete**

Add the following paragraph:

"The cement content for any class of structural concrete or mass concrete used in structures shall not be less than 300 kg/m³ of concrete.

The contractor must provide the engineer with complete mix designs and materials for strength concrete at least six (6) weeks before the first concrete is cast on the project".

B6405 MEASURING THE MATERIALS**(c) Aggregates**

Add the following:

"All concrete for structures shall be manufactured by mechanical mass batching unless authorised otherwise by the engineer for minor concrete structures or for labour-intensive methods."

B6407 PLACING AND COMPACTING**(a) General**

Add the following after the third paragraph:

"Concrete shall only be placed up to 20:00 at the latest. Under exceptional circumstances the Engineer may allow night work on condition that proper lighting arrangements can be made and a new and rested shift for night work is provided and ambient temperatures are such as to not adversely affect the setting of the concrete."

B6408 CONSTRUCTION JOINTS**(a) General**

Add the following:

"No construction joints other than those indicated on the drawings will be permitted without the written approval of the engineer".

B6409 CURING AND PROTECTING

Add the following:

"The surface area of bridge and culvert floor slabs and decks shall be cured as follows:

- (i) The area of freshly cast and finished concrete surface shall be immediately covered as specified in clause 6409(e).
- (ii) After the concrete has set sufficiently the entire area shall be treated with an approved curing compound as specified in clause 6409(f)."

B6414 QUALITY OF MATERIALS AND WORKMANSHIP**(a) Criteria for compliance with the requirements**

Add the following:

"Quality control shall be carried out by the engineer as specified in Section 8200: Quality Control (Scheme 1)."

Add the following new paragraph:

(d) Concrete cores - strength requirements

"Cores will only be drilled if authorised by the engineer. This will only be considered if the contractor's own cubes, when crushed by the engineer, attained the required 28-day cube strength."

B6414 QUALITY OF MATERIALS AND WORKMANSHIP**(a) Criteria for compliance with the requirements**

Add the following sentence:

'Judgement plan B of Section 8200 shall apply.'

(P) SECTION 8100: TESTING MATERIALS AND WORKMANSHIP B8103 THE COSTS OF TESTING

Add the following sub clauses:

“(a) Testing as required by the Engineer

Testing required by the Engineer shall be conducted by an approved commercial laboratory on all materials and workmanship to ensure compliance with the requirements of the specifications.

(b) Quality control

The tests, frequency of tests and lot sizes shall be in accordance with TMH5.”

B8105 TESTING OF AGGREGATES

Add the following sub-clause:

“(c) Ethylene Glycol Weathering Test for durability of aggregates used in seals and asphalt**(i) Method**

Selected 100 number single sized chippings from a representative sample retained on the 13.2 mm sieve but passing the 19 mm sieve. The selected aggregate chippings shall be oven dried for 12 hours and the mass of the chippings shall then be determined to the nearest 0.001 kilogram. The chippings shall then be immersed in ethylene glycol contained in a glass container for 28 days. After 28 days the chippings shall be removed from the ethylene glycol and oven dried for 12 hours. The mass of the chippings shall then be determined and the percentage weathering loss shall be calculated from the results.

(ii) Acceptance Criteria

Only aggregate that shows a breakdown after 28 days in ethylene glycol of less than 2% shall be used in seals or in asphalt.”

B8110 TESTS RELATING TO CHEMICAL STABILIZATION

Add the following sub-clause:

“(d) The wet-dry durability test for cement-treated materials using the hand brushing method.”**(i) Scope**

This method covers the procedure for determining the soil-cement losses obtained by repeated wetting, drying and hand brushing of hardened soil-cement specimens (see note (3)).

(ii) Apparatus

- (1) A moisture curing room capable of maintaining a relative humidity of 95 to 100 percent and a temperature of 22 °C to 25 °C, or suitable plastic bags capable of holding specimens and carriers in a airtight condition in a water bath as described in (2) below.
- (2) A suitable water bath with thermostatic control capable of maintaining a temperature of 22 °C to 25 °C.
- (3) A balance to weigh up to 10 kg, accurate to 0,5 g.
- (4) A drying oven capable of maintaining temperatures of 71°C ± 3 °C and 110 °C ± 5 °C.
- (5) A wire scratch brush made of 50 mm by 1,6 mm flat 26 gauge wire bristles assembled in 50 groups of 10 bristles and mounted to form five longitudinal rows and 10 transverse rows on a 200 by 65 mm wooden block.

(iii) Method

(1) Preparation of specimens

Prepare specimens in accordance with the procedure described in method A19 in TMH1 with the following exceptions:

Use the material passing the 37, 5 mm sieve and discard the material remaining on the sieve.

Use the apparatus and compaction method as described in method A7 (modified AASHTO) in TMH1.

(2) Curing of specimens

Cure the specimens for seven days at a relative humidity of 95 to 100 percent and a temperature of 22 °C to 25 °C in a suitable curing room or in plastic bags and a suitable water bath. Alternative the specimens may be rapid cured (see note (5)).

(3) Wetting, drying and brushing

After curing, remove the specimens from the curing room or plastic bag, allow to cool if necessary, and submerge them in water at room temperature for a period of five hours. Remove the specimens from the water and place them in an oven at 71 °C for 42 hours. Remove the specimens from the oven. Give each specimen two firm strokes on all areas with the wire scratch brush. The brush must be held parallel to the long axis of the specimen or parallel to the ends as required to cover all areas of the specimen. Apply these strokes to the full height and width of each specimen with a firm stroke corresponding to approximately 13, 5 kN force (see note (4)).

The procedure described so far constitutes one cycle (48 hours) of the wet-dry durability test. After brushing the specimens are again submerged in water and the procedure repeated for a total of 12 cycles (see note (2)).

(4) Determination of soil-cement losses

After 12 cycles, dry the specimens to constant mass at 110 °C and determine the oven-dry mass of the specimens. The data collected will permit the calculation of the soil-cement losses of the specimens after the prescribed 12-cycle test.

(iv) Calculations

(1) Calculate the soil-cement loss of the specimens as a percentage of the original oven-dry mass of the specimens as follows:

$$L = \frac{W - M}{W} \times 100$$

Where

$$L = \text{soil-cement loss (\%)}$$

$$W = \text{original calculated oven-dry mass (g) (calculated according to paragraph 3.5 in method A19 in TMH1)}$$

$$M = \text{final oven-dry mass (g)}$$

(2) The percentage loss shall be calculated and reported to the nearest 0.1 percent. These results are normally required for designing a mix and are reported graphically against relevant cement content.

(v) Notes

1. Mass determination of the specimens before and after brushing are usually made at the end of each cycle during research or special investigations.
2. If it is not possible to run the cycle continuously because of Sundays or holidays or for any other reason, the specimens should be held in the oven during the lay-over period.
3. The test was originally developed to determine the wet-dry durability of cement-treated material. It can, however, be used with equal success on material treated with other chemical stabilisers, for example lime, or mixes of lime and milled blast furnace slag, or cement and milled blast furnace slag.
4. The pressure is measured as follows:

Clamp a specimen in a vertical position on the edge of a platform scale and zero the scale. Apply vertical brushing strokes to the specimen and note the force necessary to register approximately 1,36 kg.
5. Rapid curing

Seal each specimen airtight in a suitable container or plastic bag. Carefully place the briquettes on suitable holders or in pans and place in the oven at the relevant temperature and period given below:

Stabilizing agent	Temp (°C)	Time (hours)
Cement	70 – 75	24 ± 0.5
PBFC	70 – 75	24 ± 0.5
Lime	60 ± 2	45 ± 1
Lime/FA	60 ± 2	45 ± 1
Lime/MBFS	60 ± 2	45 ± 1

B8117 MEASUREMENT AND PAYMENT

Amend the following payment item:

“ITEM**UNI”****B81.02 Testing of materials**

- | | | |
|-----|-------------------------------------|----------|
| (a) | Testing as required by the engineer | Prov Sun |
| (b) | Handling cost and profit | 9 |

Payment will be done in accordance with Clause 45 of the GCC.”

(Q) **SECTION 8200: QUALITY CONTROL** B8302 JUDGEMENT PLANS: GENERAL Add the following paragraph:

“Where it is not specified in the Standard Specifications or the Project Specifications which Judgment plan will be used by the Engineer for quality control, Judgment Plan B shall be use.

C3.5: MANAGEMENT**C3.5 MANAGEMENT****C3.5.1 MANAGEMENT OF THE WORKS****C3.5.1.1 Applicable SANS and SABS Standards**

The COLTO (1998 Edition) Standardized Specifications listed in C3.4.1.1 are applicable.

C3.5.1.2 Particular/Generic Specifications

Not applicable.

C3.5.1.3 Methods and Procedures**(a) Maintenance of access and streets**

The operation of construction vehicles on existing roads or streets, or streets that have been completed to the level of subbase, base or surfaced treatment, shall be limited to the traffic with an axle load not exceeding that allowed by the Road Traffic Ordinance of the authority concerned, or any amendment thereof. Hauling is strictly forbidden on sections of road or streets that have been completed as described above. The Contractor shall make use of a temporary haul road, or where not practically possible, program his work in such a manner that the haulage materials shall be restricted to that required for the particular section of street. No additional payment shall be made for the use of temporary haul roads and all relevant costs shall be deemed covered by the appropriate rates.

No additional payment will be made for the construction of temporary access roads to the construction site, borrow areas or the spoil sites, except for payment made under payment item 15.01 in the Bill of Quantities.

Should the Contractor make use of existing roads or streets for haulage, he shall be held responsible to clear the road or street of any spillage caused by his activities within one (1) day after such spillage occurred. No additional payment will be made for the cleaning of the spillage.

(b) Blasting operation

All blasting shall be carried out by a competent, registered blaster. The blaster shall furnish to the Engineer copies of all the permits required to purchase, transport, use and dispose of unused blasting material. The Contractor shall inform the commander of the local SAPS at least 1 day prior to the date and time blasting is about to take place.

No blasting operations shall take place on weekends or holidays or weekdays after 17h00.

The Contractor shall ensure that sufficient suitable material, to the satisfaction of the blaster, is available and in place before the blast is initiated.

(c) Normal working hours

Normal working hours shall be from 07h00 until 17h00 on weekdays from Monday to Friday. It shall be from 07h00 until 13h00 on Saturdays.

Work on other days will only be allowed after written approval has been granted by the Engineer.

(d) Interference with municipal staff and operations

The Contractor shall ensure that none of his staff interfere in any way with any municipal staff member or their functions.

Any person ignoring this shall be removed permanently from site, all at the expense of the Contractor.

(e) Access for other contractors

The Contractor shall provide reasonable access to other Contractors carrying out work on the site from time to time, as and when such access is required. The Contractor is entitled to request reasonable notification of at least 24 hours before access by others is required.

The contractual responsibilities of the Contractor shall remain in full force in spite of the other Contractors having access to the site.

(f) Giving notice of work to be covered up

The Contractor shall give the Engineer at least 24 hours' notice prior to a request for examination of materials or work to be covered up. This request must be made in the request book on site.

Should such a request be made and upon inspection the Engineer found that the works or materials are not yet ready for inspection, the Contractor shall reimburse the Engineer within 30 days of invoice for all expenses incurred as a result.

(g) Sequence of the works

The Contractor shall execute the Works in accordance with the approved programme.

C3.5.1.4 Quality plans and control (Testing)

Refer to Section C3.4.2.5 (b).

C3.5.1.5 Environmental Management Plan (EMP)**(a) Demarcation of the site**

For the purpose of the EMP, the site shall be demarcated into two distinct areas, viz;

- (i) The construction camp comprising all buildings, hostels, offices, lay down yards, vehicle wash areas, fuel and material storage area, batching areas and other infrastructure that is required for the running of the job.
- (ii) The working area in which construction activities are permitted to take place. No infrastructure, permanent lay down or storage areas shall be established in this working area unless specified in the project specification or prior approval is obtained from the Engineer.

(b) Construction camp

The Contractor shall provide the Engineer with a plan showing the positions of all buildings, yards, vehicle wash areas, batching areas and other infrastructure for approval by the Engineer at least ten (10) days prior to the commencement date.

(c) Fencing of site

If a temporary fence is required, the Contractor shall erect and maintain such a fence (demarcating the boundary of the working area, construction camp and access roads) to the satisfaction of the Engineer.

This fence shall be erected before the commencement of any other work on site. The fence shall be removed after completion of the project and the site reinstated to its original state.

(d) Workshops

All workshops shall be located inside the demarcated construction camp area as approved by the Engineer prior to establishment. The workshop shall have a smooth impermeable concrete floor sloped to one side where oil is trapped in an oil trap or sump to contain any spillages of substances such as oil.

Waste material shall be disposed of in accordance with the national, regional and local by-laws regulations and by-laws. The waste shall be regularly removed and disposed of at an approved site.

(e) Eating areas

The Contractor's employees shall eat in a designated eating area indicated on the drawing approved by the Engineer. The Contractor shall provide adequate shade and provide scavenger proof and waterproof refuse bins. Cooking will only take place in this area on well-maintained gas cookers with fire extinguishers present. Open fires other than the gas cookers shall not be allowed.

(f) Watchmen

The Contractor shall have a watchman present on site during non-working hours and on holidays to ensure the safety of plant and materials on site.

(g) Ablution facilities

The exact location of toilets shall be approved by the Engineer. The Contractor shall provide the toilets and maintain and service it on a daily basis. The toilets shall be kept clean. Regular inspections shall be conducted by the Engineer. Burial of waste on site is strictly forbidden. Leaking or broken toilets shall be removed and replaced immediately by the Contractor.

(h) Solid waste

"Solid waste" refers to construction debris, chemical waste, tins, cans, paper, wrappers, excess concrete, waste timber, etc.

The Contractor shall establish a waste control and removal system. He shall submit a method statement to the Engineer for approval prior to commencement.

Appropriate solid waste containers shall be provided for the storage of waste. The containers shall be water proof. The waste shall be removed on a regular basis to prevent the accumulation of waste on site and disposed of at an approved waste site.

(i) Wastewater

Water shall be used sparingly on site. Where possible, wastewater shall be recycled. A wastewater management plan shall be submitted to the Engineer for approval 10 days prior to the commencement date.

The management plan shall detail the expected extent of the contamination of each wastewater stream and how the Contractor plans to deal with it.

Wastewater shall be prevented from flowing into the Olifants River.

(j) Fuel storage area

Fuel shall be stored on site in a depot at a location as agreed with the Engineer. The Contractor shall ensure that liquid fuels are stored in tanks with lids. The tanks shall be placed on a sloped smooth concrete surface with an oil trap on the lower end to collect any spillage.

Fuel shall be kept under lock at all times.

(k) Concrete batching area

Cement and concrete is hazardous to the environment due to the high pH of the material and the chemicals it contains.

The Contractor shall furnish to the Engineer for approval a method statement for the mixing of concrete. Concrete shall not be mixed directly on the ground. Care must be taken to ensure that wastewater and contaminated material is collected and disposed of correctly.

(l) Equipment maintenance and storage

All equipment and vehicles shall be kept in good working order and serviced regularly. Leaking equipment shall be repaired immediately or removed from site. Where possible, maintenance and service shall take place only in the workshop. Permission must be obtained from the Engineer if the aforementioned cannot be adhered to.

The Contractor shall demarcate an area in which the equipment and vehicles may be stored. The location shall be approved by the Engineer.

(m) Materials handling, use and storage

The Contractor is responsible to ensure that all material suppliers are aware of the EMP's restrictions and conditions. The Contractor shall be held responsible should deliveries not comply with the EMP requirements.

The Contractor shall comply with all relevant national, regional and local legislation with regard to the transport, use and disposal of hazardous material.

The Contractor shall furnish to the Engineer a list of all hazardous materials to be used on site, together with the handling, storage and disposal procedures of the materials. This information shall be available to all personnel on site.

The location of the hazardous material store shall be within the demarcated construction camp area. The location shall be approved by the Engineer.

Where possible, the Contractor shall ensure that the refueling of vehicles takes place only at the fuel storage area in the construction camp. If this is not possible, the Contractor shall obtain permission from the Engineer to refuel at any other place. Contaminated material and wastewater at the refueling area shall be contained and disposed of correctly.

(n) Emergency procedures

The Contractor shall ensure that emergency procedures for the following situations are submitted for approval to the Engineer;

Fire – the Contractor shall inform the relevant authority immediately as soon as a fire starts. The Contractor shall ensure that his staff and subcontractors are fully aware of the procedures to be followed in the event of a fire.

Spillages – the Contractor shall ensure that his staff and subcontractors are fully aware of the procedures to be followed in the event of a spillage. The Engineer must be informed immediately about a spill. The Contractor shall ensure that the necessary materials and equipment is on site to deal with spills and leaks. The cleanup of spills and leaks shall be for the account of the Contractor.

(o) Care of surrounding areas

The Contractor shall ensure that no contamination of or damage to the surrounding areas or watercourses shall occur as a result of any of his activities during construction.

C3.5.1.6 Planning and programming

The programme to be furnished by the Contractor to the Engineer for approval shall be in the form of a Gantt chart. The critical path shall be indicated in red.

C3.5.1.7 Other Contractors on site

No other road construction contractors will be on site during the implementation of the project.

C3.5.1.8 Recording of weather

The Contractor shall record the weather conditions on a daily basis in the site diary. Rainfall figures and strong wind which could delay the Works shall be noted and recorded.

C3.5.1.9 Format of communications

All communication regarding the Contract shall be channelled through the Engineer or his representative.

C3.5.1.10 Planning and programming

Management meeting shall be held monthly on site for the duration of the project on dates to be agreed upon.

C3.5.1.11 Daily records

Daily records of plant, personnel, materials, etc., shall be kept daily by the Contractor and noted in the site diary to be supplied by the Contractor before commencement date of the project.

C3.6: HEALTH AND SAFETY**C3.6 HEALTH AND SAFETY****C3.6.1 HEALTH AND SAFETY REQUIREMENTS AND PROCEDURES**

Before starting work on site, the Contractor shall present to the Engineer his Health and Safety Plan which includes the COVID-19 plan for approval. He shall also appoint a health and Safety Officer in writing and give a copy of the letter of appointment to the Engineer.

The Health and Safety Specification is attached as Appendix B and must be referred to when compiling the Health and Safety Plan.

(a) Construction Regulations, 2003

The Contractor shall be required to comply with the Occupational Health and Safety Act, 1993: Construction Regulations, 2003 (the regulations) as promulgated in Government Gazette No 25207 and Regulation Gazette No 7721 of 18 July 2003. Non-compliance with these regulations, in any way whatsoever, will be adequate reason for suspending the Works.

The proposed type of work, materials to be used and potential hazards likely to be encountered on this Contract are detailed in the Project Specifications, Schedule of Quantity and Drawings, as well as in the Employers' Health and Safety Specifications (regulation 4(1)) of the Construction Regulations 2003.

The Contractor shall in terms of regulation 5(1) provide a comprehensive health and safety plan detailing his proposed compliance with the regulations, for approval by the Employer.

The Contractor shall at all times be responsible for full compliance with the approved plan as well as the Construction Regulations and no extension of time will be considered for delays due to non-compliance with the abovementioned plan or regulations.

Payment items are included in the Schedule of Quantities to cover the Contractor's cost for compliance with the OHS Act and the abovementioned regulations.

(b) COVID-19 Occupational Health and Safety Measures in Workplaces COVID-19 (C19 OHS), 2020

The Contractor shall be required to comply with the COVID-19 Occupational Health and safety Measures in Workplaces act: COVID-19 (C19 OHS),2020 for as long as the declaration of a national disaster published in Government Gazette 43096 on 15 March 2020 remain in force. Non-compliance with these regulations, in any way whatsoever, will be adequate reason for suspending the Works or termination of contract.

C3.6.2 PROTECTION OF THE PUBLIC

The site is accessible to the general public. The Contractor shall ensure that all personnel entering the construction site is fully informed about the dangers, dos and don'ts on the site. The Contractor shall ensure that non-construction personnel are protected within the guidelines of the OH&S Regulations.

C3.6.3 BARRICADES AND LIGHTING

All excavations, into which a person may fall, shall be securely barricaded at all times in accordance with the requirements of the applicable OH&S Regulations.

C3.6.4 TRAFFIC CONTROL ON ROADS

The Safety Officer shall take full responsibility for the traffic control in and around the site. The personnel on site shall be fully informed and trained by the Safety Officer regarding the construction traffic and general traffic control.

C3.6.5 MEASURES AGAINST DISEASE AND EPIDEMICS

Necessary measures must be adopted and implement occupational health and safety measures to reduce and eliminate the escalations of infections in workplaces against disease, epidemics and pandemics on site as and when directed by the Department of Labour.

C3.6.6 AIDS AWARENESS

All construction personnel shall be given an Aids Awareness briefing session by the Safety Officer.

C3.6.7 COVID-19 AWARENESS

All construction personnel shall be given a COVID-19 Awareness briefing session by the Safety Officer.

PART C4 SITE INFORMATION

PART C4: SITE INFORMATION**GENERAL**

This section describes the site at the time of tender to enable the tenderer to price his tender and to decide upon his method of working and programming and risks.

CONTENTS

SI1	Site location
SI2	Climatic Condition
SI3	Geotechnical Investigation
SI4	Photographs of existing information

SI 1 project Location

1.1 Site Location

The site is situated IN Matsafeni Township. The proposed bus route start near Matsafeni Taxi Rank which is situated in Woodhouse and ends where the Aircrafts Maintenance International is situated, approximately 2 km west of the Hermansburg Rd. The site is currently an unpaved gravel road, the approximate GPS co-ordinates for the proposed site are Latitude: 25°28'9.18"S, Longitude: 30°55'41.53"E.

The proposed site locality map is shown in Figure 1 below.

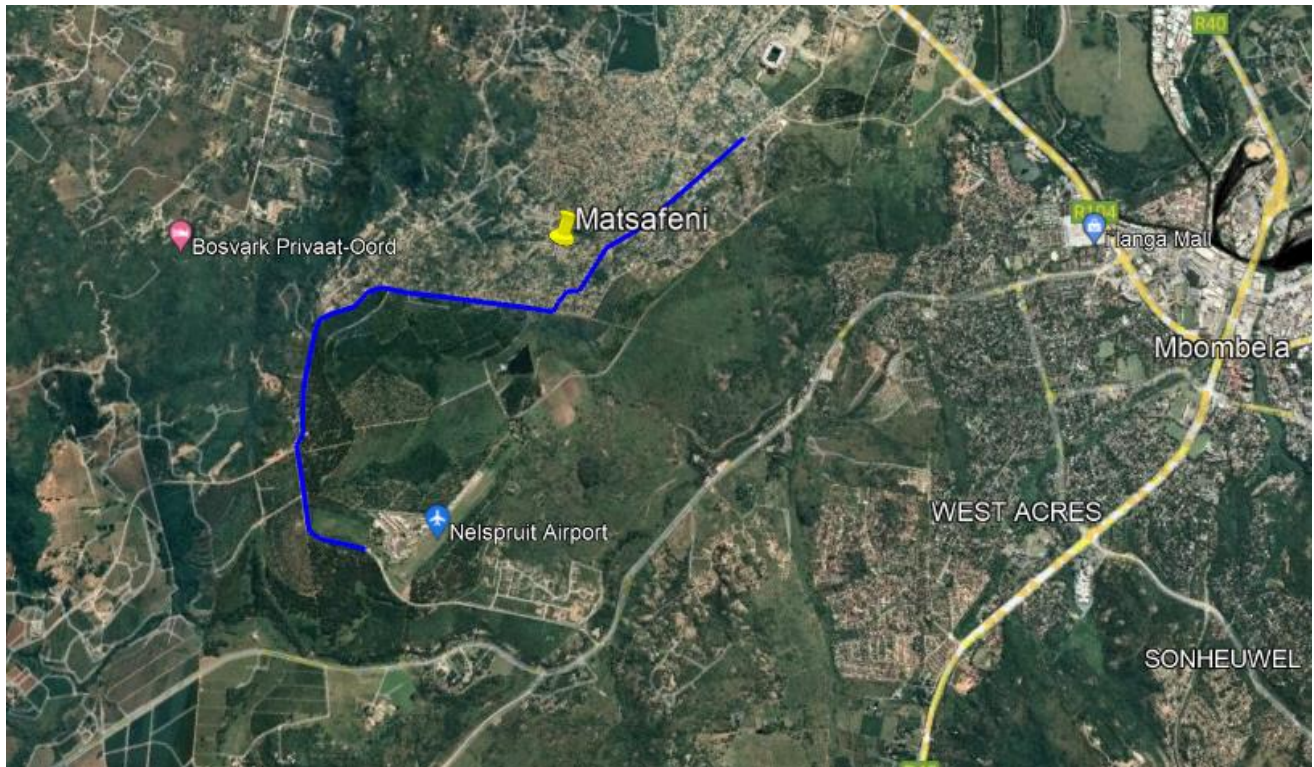


Figure 1: Locality Plan of the Project

SI 2 Climatic Condition

The climate in Mbombela is warm and hot temperate. In summer, there is more rainfall in the Mbombela area with an average annual rainfall of approximately 953mm per year, most of which occurs in heavy isolated falls between October and March. The greatest amount of rainfall occurs in January with an average of 168.12mm. The average low temperatures 14.7 degrees Celsius (°C) and the average high temperatures is 28.16 degrees Celsius (°C). Weinert developed an N-value which is the ratio of the annual evaporation versus annual precipitation of a region and has been defined for Southern Africa region (Weinert, 1980). Climatic regime of the present and recent past plays an important role in the soil profile below the earth's surface (A.B.A Brink). The N-values are therefore used to characterise mode of weathering of the rocks within the subcontinent.

Weinert demonstrated that chemical decomposition is the predominant mode of rock weathering in areas where climatic "N-value" is less than 2. In areas where climatic N-value is between 2 and 5, disintegration is the predominant form of weathering, although some chemical decomposition of the primary rock minerals still takes place. Where the climatic N-value is greater than 5, secondary minerals do not develop to an appreciable extent and all weathering takes place by mechanical disintegration of the rock. Disintegration is the predominant form of weathering, although some chemical decomposition of the primary rock minerals still takes place.

SI 3 Geotechnical Investigation

Regional Geology

According to the 1:250 000 Council for Geoscience published geological map, “No 2530 Barberton”, the proposed study is underlain by biotite trondhjemite gneiss of the Swazium era indicated as (Zg) on the geological map. Figure 3 below shows an extract of the geological map.

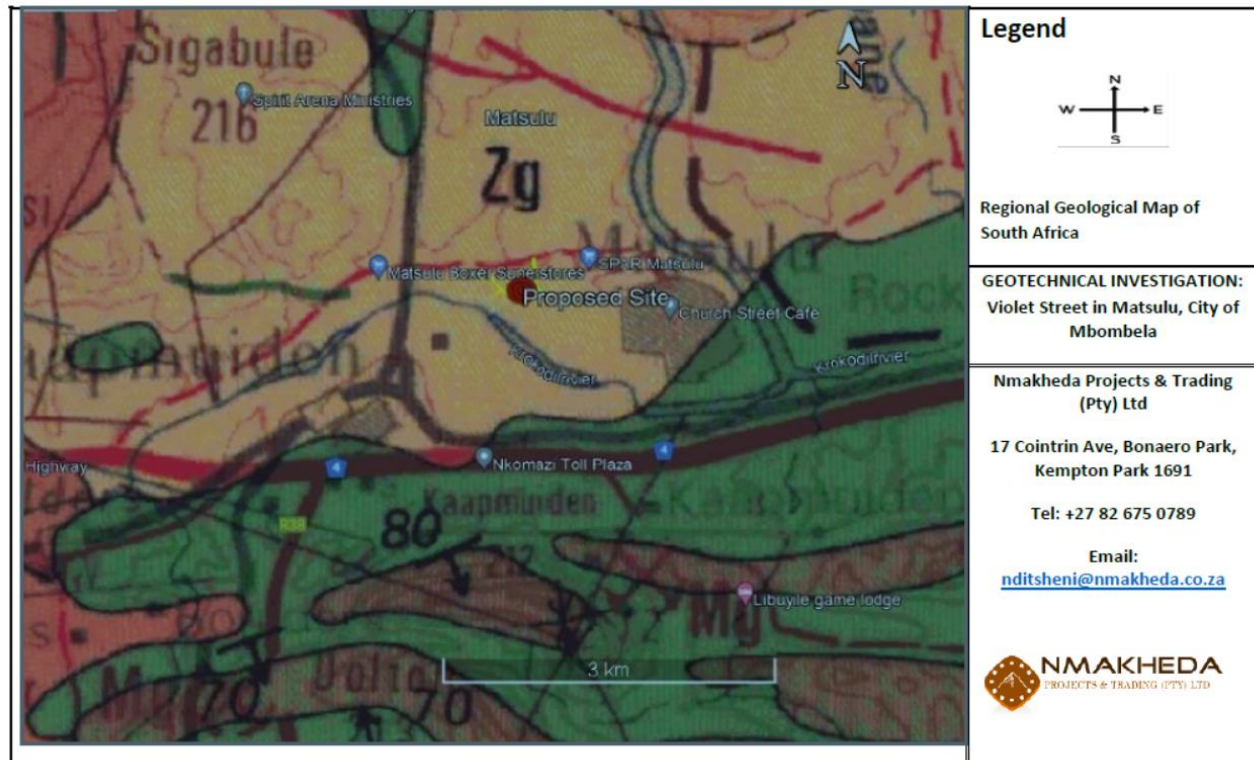


Figure 3: Extract from the 1:250 000 Geological Map (2530) Baberton.

Seismicity

Seismic-hazard can be described as being the physical effects of an earthquake or earth tremor. Examples of such phenomenon include surface faulting, ground shaking and ground liquefaction (Kijko A et al, 2004). The peak ground acceleration (PGA) is the maximum acceleration of the ground shaking during an earthquake. The seismic hazard map of South Africa (Council for Geoscience, 2003) indicates that the proposed site lies within an area where there is a 10% probability that Peak Ground Acceleration (PGA) of between 0.125g and 0.1g will be exceeded in 50years. Based on this information, the risk of seismic events for the study area is low. Figure 4 below indicates the seismic hazard map of South Africa with the location of proposed study area in red.

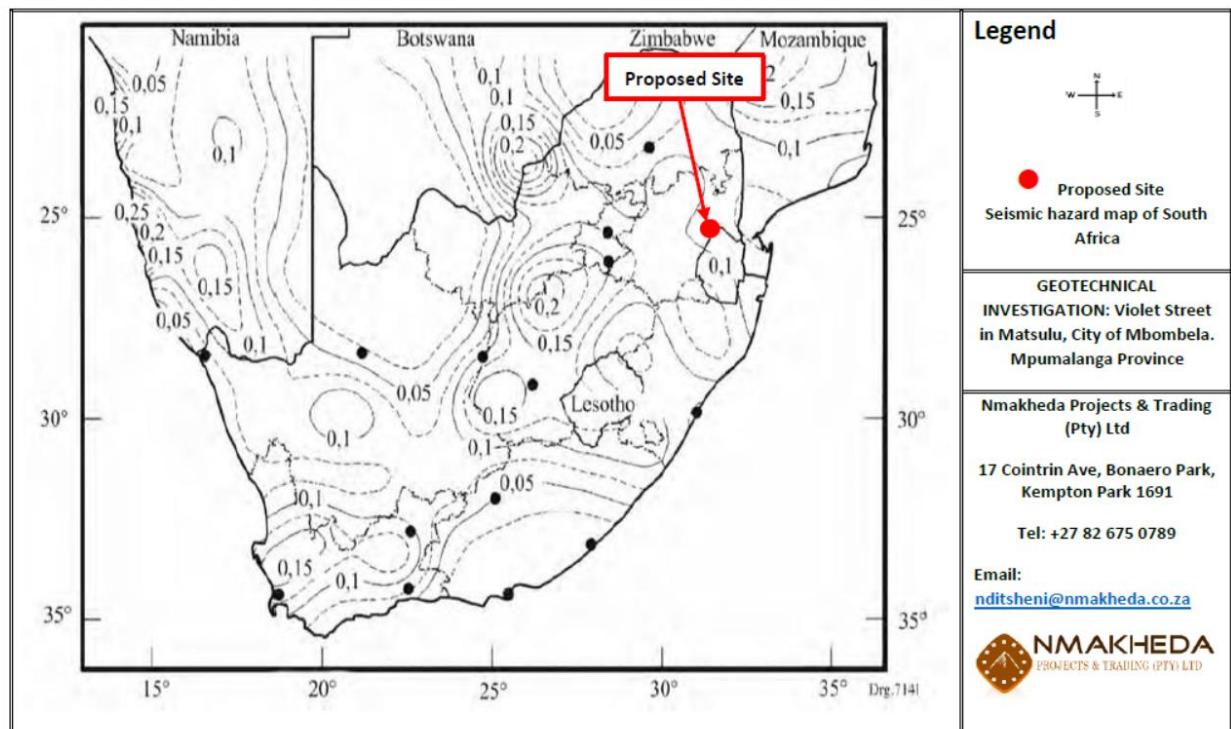


Figure 4: Extract from seismic hazard map of South Africa.

Dolomitic Land

Information obtained from Council for Geoscience (CGS), access to data, maps and information shows that the site is not underlain by dolomite rock at surface or at depth (<100m). The site is therefore not classified as dolomitic land and is not at risk in terms of dolomite related surface subsidence. Generally, soluble rock, such as limestone or dolomite was not found on the site and no instability associated with this rock type is anticipated (<https://maps.geoscience.org.za>).

Undermining

No indication of the presence of undermined ground was found during the desk study or field investigation. It is certain that the site is not undermined at shallow depth and there is no risk of surface settlements/subsidence that may be caused by mining activities. However, it is advisable for the site engineer to verify this with the Department of Mineral Resources to ascertain if there is any undermined ground in the area.

Geological Fault

Our review of geologic literature/geological map and site investigation indicates that there are no known active, potentially active or inactive faults crossing the proposed site.

Method of Investigation

This chapter of the report describes the field work and activities that were conducted in order to assess the geotechnical conditions at the proposed site. These included the following components:

- Excavation of Nine (09) test pits using Tractor Loader Backhoe (TLB) for the proposed road.
- Soil profiling and sampling.
- Dynamic Cone Penetrometer of Nine (09) tests.
- Laboratory testing of disturbed soil samples.

Test Pitting

A total of thirty-one test pits designated TP1 to TP31 were excavated to an average depth of 1.0m below existing ground level (EGL). The positions of the test pits were captured by means of a hand held GPS (with accuracy of 5 to 8m) with the recovered materials profiled by an

engineering geologist in accordance with Jennings et al., (1973).

Table 1: Summary of Test Pit Information

TP No.	Coordinates	Fill	Residual Granite					Groundwater Seepage	Excavation depth
		Gravelly sands (m)	Silty clays (m)	Gravelly clays (m)	Sand (m)	Silty sands (m)	Gravelly sands (m)		
TP01	25°28'14.29"S 30°55'37.34"E	0.0-0.4	---	---	0.4-1.0	---	---	None	Terminated at 1.0m on residual Biotite Granite. No Refusal.
TP02	25°28'19.82"S 30°55'33.69"E	0.0-0.3	0.3-1.0	---	---	---	---	None	Terminated at 1.0m on residual Biotite Granite. No Refusal.
TP03	25°28'25.12"S 30°55'29.44"E	---	---	---	0.0-0.2	---	0.2-1.3	None	Terminated at 1.3m on residual Biotite Granite. No Refusal.
TP04	25°28'30.46"S 30°55'25.44"E	---	---	---	---	---	0.0-1.0	None	Terminated at 1.0m on residual Biotite Granite. No Refusal.
TP05	25°28'35.96"S 30°55'21.53"E	---	---	---	---	---	0.0-1.0	None	Terminated at 1.0m on residual Biotite Granite. No Refusal.
TP06	25°28'40.87"S 30°55'16.54"E	---	0.4-1.1	---	---	---	0.0-0.4	None	Terminated at 1.1m on residual Biotite Granite. No Refusal.
TP07	25°28'45.85"S 30°55'12.25"E	---	---	0.2-1.0	0.0-0.2	---	---	None	Terminated at 1.0m on residual Biotite Granite. No Refusal.
TP08	25°28'51.88"S 30°55'9.58"E	---	---	---	---	0.0-0.2	0.2-1.0	None	Terminated at 1.0m on residual Biotite Granite. No Refusal.
TP09	25°28'56.98"S 30°55'6.35"E	---	---	---	---	0.0-0.6	0.6-1.1	None	Terminated at 1.1m on residual Biotite Granite. No Refusal.
TP10	25°29'3.05"S 30°55'2.56"E	---	0.0-0.6	---	---	---	0.6-1.0	None	Terminated at 1.0m on residual Biotite Granite. No Refusal.
TP11	25°29'3.75"S 30°54'55.77"E	---	0.0-0.3	---	---	---	0.3-1.0	None	Terminated at 1.0m on residual Biotite Granite. No Refusal.
TP12	25°29'4.44"S 30°54'48.69"E	---	0.0-0.7	0.7-1.0	---	---	---	None	Terminated at 1.0m on residual Biotite Granite. No Refusal.
TP13	25°29'5.16"S 30°54'41.61"E	---	---	0.4-1.0	0.0-0.4	---	---	None	Terminated at 1.0m on residual Biotite Granite. No Refusal.
TP14	25°29'5.89"S 30°54'34.50"E	---	---	---	---	0.0-0.4	0.4-1.1	None	Terminated at 1.1m on residual Biotite Granite. No Refusal.
TP15	25°29'6.58"S 30°54'27.34"E	---	---	---	---	0.0-0.3	0.3-1.1	None	Terminated at 1.1m on residual Biotite Granite. No Refusal.

TP No.	Coordinates	Fill	Residual Granite					Groundwater Seepage	Excavation depth
			Gravelly sands (m)	Silty clays (m)	Gravelly clays (m)	Sand (m)	Silty sands (m)		
TP16	25°29'7.35"S 30°54'20.10"E	—	0.7-1.0	—	—	—	0.0-0.7	None	Terminated at 1.0m on residual Biotite Granite. No Refusal.
TP17	25°29'8.10"S 30°54'13.21"E	—	0.7-1.0	—	—	—	0.0-0.7	None	Terminated at 1.0m on residual Biotite Granite. No Refusal.
TP18	25°29'13.43"S 30°54'8.49"E	—	0.3-1.0	—	—	—	0.0-0.3	None	Terminated at 1.0m on residual Biotite Granite. No Refusal.
TP19	25°29'17.37"S 30°54'2.80"E	—	0.3-1.0	—	—	—	0.0-0.3	None	Terminated at 1.0m on residual Biotite Granite. No Refusal.
TP20	25°29'22.77"S 30°53'59.78"E	—	0.0-1.0	—	—	—	—	None	Terminated at 1.0m on residual Biotite Granite. No Refusal.
TP21	25°29'28.95"S 30°54'0.14"E	—	0.0-0.4 0.7-1.0	—	—	—	0.4-0.7	None	Terminated at 1.0m on residual Biotite Granite. No Refusal.
TP22	25°29'35.63"S 30°54'0.58"E	—	0.0-1.0	—	—	—	—	None	Terminated at 1.0m on residual Biotite Granite. No Refusal.
TP23	25°29'41.91"S 30°54'1.89"E	—	0.0-1.0	—	—	—	—	None	Terminated at 1.0m on residual Biotite Granite. No Refusal.
TP24	25°29'48.21"S 30°54'4.07"E	—	0.0-1.0	—	—	—	—	None	Terminated at 1.0m on residual Biotite Granite. No Refusal.
TP25	25°29'54.15"S 30°54'4.74"E	—	0.0-1.0	—	—	—	—	None	Terminated at 1.0m on residual Biotite Granite. No Refusal.
TP26	25°30'0.22"S 30°54'7.58"E	—	0.0-1.0	—	—	—	—	None	Terminated at 1.0m on residual Biotite Granite. No Refusal.
TP27	25°30'6.05"S 30°54'10.34"E	—	0.4-1.0	—	—	0.0-0.4	—	None	Terminated at 1.0m on residual Biotite Granite. No Refusal.
TP28	25°30'11.61"S 30°54'13.47"E	—	0.0-1.0	—	—	—	—	None	Terminated at 1.0m on residual Biotite Granite. No Refusal.
TP29	25°30'12.69"S 30°54'20.58"E	—	0.0-0.6	—	—	—	0.6-1.0	None	Terminated at 1.0m on residual Biotite Granite. No Refusal.
TP30	25°30'12.55"S 30°54'27.74"E	—	0.0-1.0	—	—	—	—	None	Terminated at 1.0m on residual Biotite Granite. No Refusal.
TP31	25°30'12.70"S 30°54'29.88"E	—	0.2-1.1	—	—	—	0.0-0.2	None	Terminated at 1.1m on residual Biotite Granite. No Refusal.

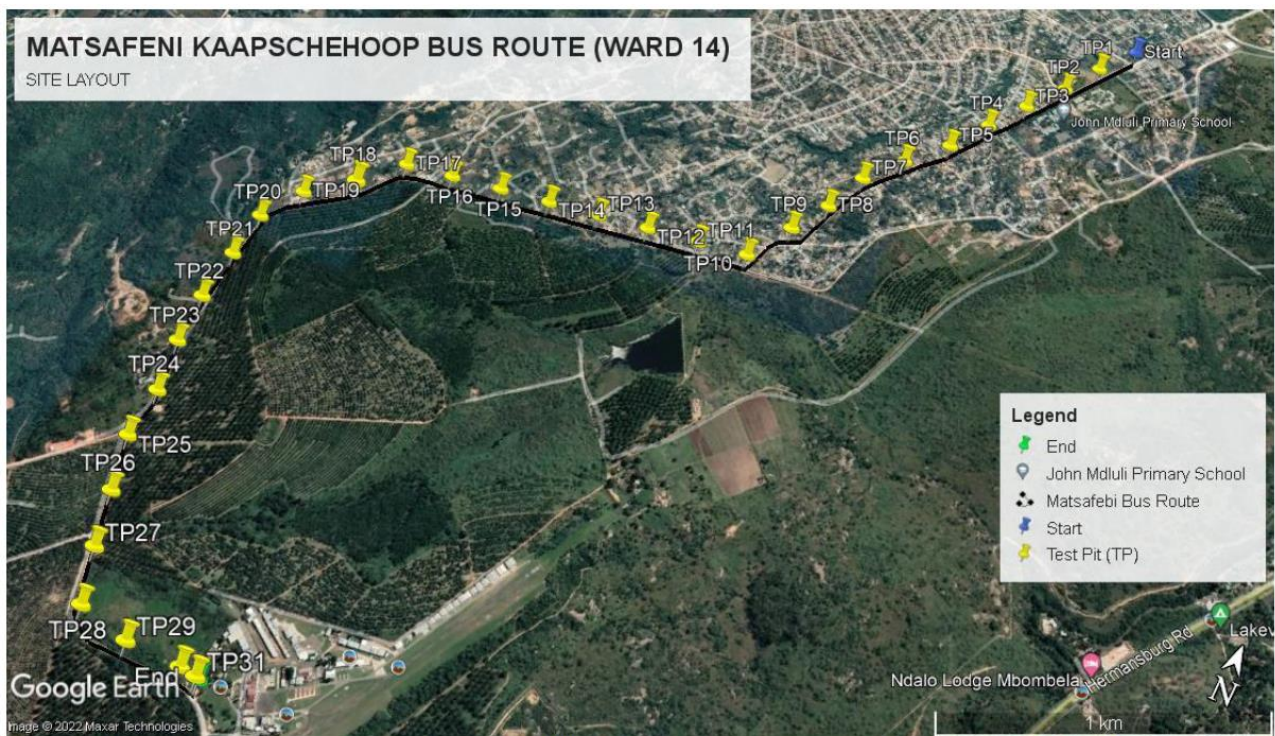


Figure 1: Site map showing location of the Geotechnical Investigation test pits and DCP

positions, Mbombela Local Municipality, Ehlanzeni District Municipality in Mpumalanga Province.

Dynamic Cone Penetrometer (DCP) Testing

The DCP test is a penetration test for the evaluation of the mechanical strength or consistency of the in-situ materials. The California bearing ratio (CBR) is derived from DCP test data to assess the strength of the underlying structural layers. DCP testing was carried out very close to test pits positions. The DCP test results and derived CBR values are included in Appendix C of this report. DCP positions are shown on Figure 5 above. The coordinates of the DCP tests are presented in Table 2 below together with the final depth of penetration.

Table 1 : Foundation Indicator Tests**Summary of laboratory test results**

TP No	Depth (m)	Description Sample No.	Soil composition (%)			Atterberg limits			USC S	GM
			Silt & clay	Sand	Gravel	LL	PI	LS		
1,16&27	0.4-1.0	SS/001/363	30	62	8	27	10	5.0	SC	1.19
2	0.3-1.0	SS/002/364	61	38	1	31	9	4.5	CL	0.60
3,8,9&11	0.2-1.3	SS/003/365	15	77	8	28	6	3.0	SM/SC	1.47
4,5&7	0.5-1.1	SS/004/366	22	67	11	25	5	2.5	SM/SC	1.39
6,18,19,23,24,25,26,28,30&31	0.4-1.1	SS/005/367	36	44	20	30	10	5.0	SC	1.29
10	0.6-1.0	SS/006/368	48	42	10	35	14	5.0	SC	0.96

12,13,17&22	0.7-1.0	SS/007/369	26	64	10	26	5	2.5	SM/SC	1.22
14,15,21&29	0.4-1.1	SS/008/370	28	57	15	30	9	4.5	SC	1.40
20	0.0-1.0	SS/009/371	39	36	25	32	10	5.5	SC	1.29

Legend

GM = Grading modulus

LL = Liquid Limit

PI = Plasticity Index

LS = Linear Shrinkage

The site comprises of clayey sands in TP1, TP6,TP10,TP14,TP15, TP18, TP20, TP19, TP21, TP23, TP24, TP25, TP26, TP28,TP29, TP30 &TP31 (avg. 0.0-1.0m) which have a Plasticity Index that ranges from of 9-14% with a Grading Modulus that ranges from 1.19-1.40.

The site comprises of inorganic clays of low to medium PI in TP2 (avg. 0.3-1.0m) which have a Plasticity Index of 9% with a Grading Modulus of 0.60.

The site comprises of silty/clayey sands in TP3, TP4, TP5, TP7, TP8 ,TP9 TP11 , TP12 ,TP13 , TP17 ,&TP22 (avg. 0.2-1.0m) which have a Plasticity Index that ranges from of 5-6% with a Grading Modulus that ranges 1.22-1.47.

These results indicate that the majority of soil material found on site are not potentially expansive and active soils due to plasticity index that is less than 12%, liquid limit that is less than 30% and linear shrinkage that is less than 7% according to soil classification related to plasticity index and activity of soil by Van Der Merwe (1964).

Borrow Pit details

Potential Borrow Pit at Matsafeni have been identified. The borrow pit is situated about 4.78 km from the proposed road. The location of the borrow pit is as follows:

Borrow Pit: **25°29'38.2"S 30°53'52.05"E**

As per the TRH14 classification, the borrow pit meet the requirements of G6 material and can be used for the proposed development.

UCS designs was carried out on the borrow pit material, where by 2% of CEM (PPC) 42.5N met the **C4** classification and 3% of CEM (PPC) 42.5N met the **C3** classification as per COLTO. See test results in Volume 2, Appendix D

ANNEXURE A: OCCUPATIONAL HEALTH AND SAFETY SPECIFICATIONS

OCCUPATIONAL HEALTH AND SAFETY SPECIFICATIONS**CONTENTS**

PARTICULAR SPECIFICATIONS.....	A-1
AGREEMENT OCCUPATIONAL HEALTH AND SAFETY	A-10
CONTRACTOR'S HEALTH AND SAFETY DECLARATION	A-13 PRO
FORMA NOTIFICATION	A-16

PARTICULAR SPECIFICATIONS

SECTION OHS: OHSA 1993: HEALTH AND SAFETY SPECIFICATION

OHS 1 SCOPE

This specification covers the health and safety requirements to be met by the Contractor to ensure a continued safe and healthy environment for all workers, employees and subcontractors under his control and for all other persons entering the site of works.

This specification shall be read with the Occupational Health and Safety Act (Act No 85 and amendment Act No 181) 1993, and the corresponding Construction Regulations 2014, and all other safety codes and specifications referred to in the said Construction Regulations **and the COVID-19 Occupational Health and Safety Measures in Workplaces, COVID-19(C19 OHS), 2020.**

In terms of the OHSA Agreement in Section (C1.4) of the Contract document, the status of the Contractor as mandatory to the Employer (client) is that of an employer in his own right, responsible to comply with all provisions of OHSA 1993, the Construction Regulations 2014 and **COVID-19(C19 OHS), 2020.**

This safety specification and the Contractor's own Safety Plan, the Construction Regulations 2014 as well as **COVID-19(C19 OHS), 2020**, shall be displayed on site or made available for inspection by all workers, employees, inspectors and any other persons entering the site of works.

The following are possible risks associated with this project:

- Please insert the risks associated with the project here

Additional risks may arise from specific methods of construction selected by the Contractor which are not necessary covered in the above.

OHS 2 DEFINITIONS

For the purpose of this contract the following shall apply:

Employer where used in the contract documents and in this specification, means the Employer as defined in the General Conditions of Contract and it shall have the exact same meaning as **“client”** as defined in the Construction Regulations 2014. **“Employer”** and **“client”** is therefore interchangeable and shall be read in the context of the relevant document.

- (c) **“Contractor”** wherever used in the contract documents and in this specification, shall have the same meaning as **“Contractor”** as defined in the General Conditions of Contract.

In this specification the terms **“principal contractor”** and **“contractor”** are replaced with **“Contractor”** and **“subcontractor”** respectively.

For the purpose of this contract the **Contractor** will, in terms of OHSA 1993, be the mandatory, without derogating from his status as an employer in his own right.

- (d) **“Engineer”** where used in this specification, means the Engineer as defined in the General Conditions of Contract. In terms of the Construction Regulations the Engineer may act as agent on behalf of the Employer (the client as defined in the Construction Regulations).

OHS 3 TENDERS

The Contractor shall submit the following with his tender:

- (a) a documented Health and Safety Plan as stipulated in Regulation 7 of the Construction Regulations. The Safety Plan must be based on the Construction Regulations 2014 and **COVID-19(C19 OHS), 2020** and will be subject to approval by the Employer;
- (b) a declaration to the effect that he has the competence and necessary resources to carry out the work safely in compliance with the Construction Regulations 2014;
- (c) a declaration to the effect that he made provision in his tender for the cost of the health and safety measures envisaged in the Construction Regulations.
- (d) Failure to submit the foregoing with his tender, will lead to the conclusion that the Contractor will not be able to carry out the work under the contract safely in accordance with the Construction Regulations.

OHS 4 NOTIFICATION OF COMMENCEMENT OF CONSTRUCTION WORK

After award of the contract, but before commencement of construction work, the Contractor shall, in terms of Regulation 3, notify the Provincial Director of the Department of Labour in writing if the following work is involved:

- (a) the demolition of structures and dismantling of fixed plant of height of 3,0m or more;
- (b) the use of explosives;
- (c) construction work that will exceed 30 days or 300 person-days;
- (e) excavation work deeper than 1,0m; or
- (f) working at a height greater than 3,0m above ground or landings.

The notification must be done in the form of the pro forma included under Section T2 (Forms to be Completed by Tenderer) of the tender document.

A copy of the notification form must be kept on site, available for inspection by inspectors, Employer, Engineer, employees and persons on site.

OHS 5 RISK ASSESSMENT

Before commencement of any construction work during the construction period, the Contractor shall have a risk assessment performed and recorded in writing by a competent person. (Refer Regulation 9 of the Construction Regulations 2014).

The risk assessment shall identify and evaluate the risks and hazards that may be expected during the execution of the work under the contract, and it shall include a documented plan of safe work procedures to mitigate, reduce or control the risks and hazards identified.

The risk assessment shall be available on site for inspection by inspectors, Employer, Engineer, subcontractors, employees, trade unions and health and safety committee members, and must be monitored and reviewed periodically by the Contractor.

OHS 6 APPOINTMENT OF EMPLOYEES AND SUBCONTRACTORS**6.1 Health and Safety plan**

The Contractor shall appoint his employees and any subcontractors to be employed on the contract, in writing, and he shall provide them with a copy of his documented Health and Safety Plan, or relevant sections thereof. The Contractor shall ensure that all subcontractors and employees are committed to the implementation of his Safety Plan.

6.2 Health and safety induction training

The Contractor shall ensure that all employees under his control, including subcontractors and their employees, undergo a health and safety induction training course by a competent person before commencement of construction work. No visitor or other person shall be allowed or permitted to enter the site of the works unless such person has undergone health and safety training pertaining to hazards prevalent on site.

The Contractor shall ensure that every employee on site shall at all times be in possession of proof of the health and safety induction training issued by a competent person prior to commencement of construction work.

OHS 7 APPOINTMENT OF SAFETY PERSONNEL

7.1 Construction Supervisor

The Contractor shall appoint a full-time **Construction Supervisor** with the duty of supervising the performance of the construction work.

He may also have to appoint one or more competent employees to assist the construction supervisor where justified by the scope and complexity of the works.

7.2 Construction safety officer

Taking into consideration the size of the project and the hazards or dangers that can be expected, the Contractor shall appoint in writing a full-time or part-time **Construction Safety Officer** if so decided by the client. The Safety Officer shall have the necessary competence and resources to perform his duties diligently.

Provision shall be made by the Contractor in his rates, to cover the cost of this dedicated construction safety officer appointed after award of the contract.

7.3 Health and safety representatives

In terms of **Section 17 and 18 of the Act (OHSA 1993)** the Contractor, being the employer in terms of the Act for the execution of the contract, shall appoint a **health and safety representative** whenever he has more than 20 employees in his employment on the site of the works. The health and safety representative must be selected from employees who are employed in a full-time capacity at a specific workplace.

The number of health and safety representatives for a workplace shall be at least one for every 100 employees.

The function of health and safety representative(s) will be to review the effectiveness of health and safety measures, to identify potential hazards and major incidents, to examine causes of incidents (in collaboration with his employer, the Contractor), to investigate complaints by employees relating to health and safety at work, to make representations to the employer (Contractor) or inspector on general matters affecting the health and safety of employees, to inspect the workplace, plant, machinery etc. on a regular base, to participate in consultations with inspectors and to attend meetings of the health and safety committee.

7.4 Health and safety committee

In terms of **Sections 17 and 18 of the Act (OHSA 1993)** the Contractor (as employer), shall establish one or more **health and safety committee(s)** where there are two or more health and safety representatives at a workplace. The persons selected by the Contractor to serve on the committee shall be designated in writing.

The function of the health and safety committee shall be to hold meetings at regular intervals, but at least once every three months, to review the health and safety measures on the contract, to discuss incidents related to health and safety with the Contractor and the inspector, and to make recommendations regarding health and safety to the Contractor and to keep record of recommendations and reports made by the committee.

7.5 Competent persons

In accordance with the Construction Regulations the Contractor has to appoint in writing **competent persons** responsible for supervising construction work on each of the following work situations that may be expected on the site of the works.

- (a) Risk assessment and induction training as described in Regulation 9 of the Construction Regulations;
- (b) Fall protection as described in Regulation 10;
- (c) Structures described in Regulation 11;
- (d) Temporary works described in Regulation 12;
- (e) Excavation described in Regulation 13;
- (f) Demolition work described in Regulation 14;
- (g) Tunneling as described in Regulation 15;
- (h) Scaffolding as described in Regulation 16;
- (i) Suspended platforms as described in Regulation 17;
- (j) Rope Access Work as described in Regulation 18;
- (k) Material hoists as described in Regulation 19;
- (l) Bulk mixing plant as described in Regulation 20;
- (m) Explosive actuated fastening device as described in Regulation 21;
- (n) Cranes as described in Regulation 22;
- (o) Construction vehicle and mobile as described in Regulation 23;
- (p) Electrical installations and machinery of construction sites as described in Regulation 24;
- (q) Use and temporary storage of flammable liquids on construction sites as described in Regulation 25;
- (r) Water environments as described in Regulation 26;
- (s) Housekeeping and general safeguarding on construction sites as described in Regulation 27;
- (t) Stacking and storage on construction sites as described in Regulation 28;
- (u) Fire precautions on construction sites as described in Regulation 29, and
- (s) Construction employees' facilities as described in Regulation 30.

A competent person may be appointed for more than one part of the construction work with the understanding that the person must be suitably qualified and able to supervise at the same time the construction work on all the work situations for which he has been appointed.

The appointment of competent persons to supervise parts of the construction work does not relieve the Contractor from any of his responsibilities to comply with **all** requirements of the Construction Regulations.

OHS 8 RECORDS AND REGISTERS

In accordance with the Construction Regulations the Contractor is bound to keep records and registers related to health and safety on site for periodic inspection by inspectors, the Engineer, the Employer, trade union officials and subcontractors and employees. The following records and registers must be kept on site and shall be available for inspection at all times.

- (a) A copy of the OHSA 1993 Construction Regulations 2014;
- (b) A copy of this Health and Safety Specification;
- (c) A copy of the Contractor's Health and Safety Plan (Regulation 7);
- (d) A copy of the Notification of Construction Work (Regulation 4);
- (e) A health and safety file in terms of Regulation 5(1)(b) with inputs by the Construction Safety Officer (Regulation 7(1));
- (f) A copy of the risk assessment described in Regulation 9;
- (g) A full protection plan and the corresponding records of evaluation and training of employees working from elevated positions as described in Regulation 10;
- (h) Drawings pertaining to the design of structures (Regulation 11(1)(c)) and formwork and support work structures (Regulation 12) must be kept on site;
- (i) Pronouncement of the safety of excavations must be recorded in a register to be kept on site (Regulation 13);
- (j) A copy of the certificate of the system design for suspended platforms (Regulation 17(2)(b));
- (k) A notice must be affixed around the base towers of material hoists to indicate the maximum mass load, which may be carried at any one time by material hoists (Regulation 19(5));
- (l) Maintenance records of material hoists and inspection results must be kept in a record book to be kept on site (Regulation 19(8));
- (m) A record of any repairs to or maintenance of a batch plant must be kept on site (Regulations 20(8));
- (n) A warning notice must be displayed in a conspicuous manner when and wherever an explosive powered tool is used (Regulation 19(2));
- (o) A register for recording of findings by the competent person appointed to inspect construction vehicles and mobile plant (Regulation 23(1)(k)).

OHS 9 CONTRACTORS RESPONSIBILITIES

For this contract the Contractor will be the mandatory of the Employer (Client), as defined in the Act (OHSA 1993), which means that the Contractor has the status of employer in his own right in respect of the contract. The Contractor is therefore responsible for all the duties and obligations of an employer as set out in the Act (OHSA 1993) and the Construction Regulations 2014.

Before commencement of work under the contract, the Contractor shall enter into an agreement with the Employer (Client) to confirm his status as mandatory (employer) for the contract under consideration.

The Contractor's duties and responsibilities are clearly set out in the Construction Regulations 2014 and are not repeated in detail but some important aspects are highlighted hereafter, without relieving the Contractor of any of his duties and responsibilities in terms of the Construction Regulations.

(a) Contractor's position in relation to the Employer (Client) (Regulation 5)

In accordance with Section 4 of the Regulations, the Contractor shall liaise closely with the Employer or the Engineer on behalf of the Employer, to ensure that all requirements of the Act and the Regulations are met and complied with.

(b) The Principal Contractor and Contractor (Regulation 7)

The Contractor is in terms of the definition in Regulation 1 the equivalent of Principle Contractor as defined in the Construction Regulations, and he shall comply with all the provisions of Regulation 7.

Any subcontractors employed by the Contractor must be appointed in writing, setting out the terms of the appointment in respect of health and safety. An independent subcontractor shall however provide and demonstrate to the Contractor a suitable, acceptable and sufficiently documented health and safety plan before commencement of the subcontract. In the absence of such a health and safety plan the subcontractor shall undertake in writing that he will comply with the Contractor's safety plan, the health and safety specifications of the Employer and the Construction Regulations 2014.

(c) Supervision of construction work (Regulation 8)

The Contractor shall appoint the safety and other personnel and employees as required in terms of Regulation 7 and as set out in OHS 7 above. Appointment of those personnel and employees does not relieve the Contractor from any of the obligations under Regulation 7.

(d) Risk assessment (Regulation 9)

The Contractor shall have the risk assessment made as set out in paragraph 7 above before commencement of the work and it must be available on site for inspection at all times. The Contractor shall consult with the health and safety committee or health and safety representative(s) etc. on a regular basis to ensure that all employees, including subcontractors under his control, are informed and trained by a competent person regarding health hazards and related work procedures.

No subcontractor, employee or visitor shall be allowed to enter the site of works without prior health and safety induction training, all as specified in Regulation 7.

(e) Fall protection (Regulation 10)

Fall protection, if applicable to this contract shall comply in all respects with Regulation 8 of the Construction Regulations.

(f) Structures (Regulation 11)

The Contractor will be liable for all claims arising from collapse or failure of structures if he failed to comply with all the specifications, project specifications and drawings related to the structures, unless it can be proved that such collapse or failure can be attributed to faulty design or insufficient design standards on which the specifications and the drawings are based.

In addition, the Contractor shall comply with all aspects of Regulation 11 of the Construction Regulations.

(g) Temporary works (Regulation 12)

The Contractor will be responsible for the adequate design of all formwork and support structures by a competent person.

All drawings pertaining to formwork shall be kept on site and all equipment and materials used in formwork, shall be carefully examined and checked for suitability by a competent person.

The provisions of Regulation 12 of the Construction Regulations shall be followed in every detail.

(h) Excavation work (Regulation 13)

It is essential that the Contractor shall follow the instructions and precautions in the Standard Specifications and Project Specifications as well as the provisions of the Construction Regulations to the letter as unsafe excavations can be a major hazard on any construction site. The Contractor shall therefore ensure that all excavation work is carried out under the supervision of a competent person, that inspections are carried out by a Professional Engineer or Technologist, and that all work is done in such a manner that no hazards are created by unsafe excavations and working conditions.

Supervision by a competent person will not relieve the Contractor from any of his duties and responsibilities under Regulation 13 of the Construction Regulations.

(i) Demolition work (Regulation 14)

Whenever demolition work is included in a contract, the Contractor shall comply with all the requirements of Regulation 14 of the Construction Regulations. The fact that a competent person has to be appointed by the Contractor does not relieve the Contractor from any of his responsibilities in respect of safety of demolition work.

(j) Tunneling (Regulation 15)

The Contractor shall comply with Regulation 15 wherever tunneling of any kind is involved.

(k) Scaffolding (Regulation 16)

The Contractor shall ensure that all the provisions of Regulation 16 of the Construction Regulations are complied with. [Note: Reference in the Regulations to “Section 44 of the Act” should read “Section 43 of the Act”].

(l) Suspended platforms (Regulation 17)

Wherever suspended platforms will be necessary on any contract, the Contractor shall ensure that copies of the system design issued by a Professional Engineer are submitted to the Engineer for inspection and approval. The Contractor shall appoint competent persons as supervisors and competent scaffold erectors, operators and inspectors and ensure that all work related to suspended platforms are done in accordance with Regulation 17 of the Construction Regulations.

(m) Rope Access Work (Regulation 18)

Where rope access work is required on the construction site, the Contractor shall comply with Regulation 18.

(n) Material Hoists (Regulation 19)

Wherever applicable, the Contractor shall comply with the provisions of Regulation 19 to the letter.

(o) Batch plants (Regulation 20)

Wherever applicable, the Contractor shall ensure that all lifting machines, lifting tackle, conveyors, etc. used in the operation of a batch plant shall comply with, and that all operators, supervisors and employees are strictly held to the provisions of Regulation

20. The Contractor shall ensure that the General Safety Regulations (2003), the Driven Machinery Regulations (Government Notice R295 of 26/2/1988) and the Electrical Installation Regulations (Government Notice R2271 of 11/10/1995) are adhered to by all involved.

In terms of the Regulations, records of repairs and maintenance shall be kept on site.

(p) Explosive powered tools (Regulation 21)

The Contractor shall ensure that, wherever explosive-powered tools are required to be used, all safety provisions of Regulation 21 are complied with.

It is especially important that warning notices are displayed and that the issue and return of cartridges and spent cartridges be recorded in a register to be kept on site.

(q) Cranes (Regulation 22)

Wherever the use of tower cranes becomes necessary, the provisions of Regulation 20 shall be complied with.

(r) Construction vehicles and mobile plant (Regulation 23)

The Contractor shall ensure that all construction vehicles and plant are in good working condition and safe for use, and that they are used in accordance with their design and intended use. The vehicles and plant shall only be operated by workers or operators who have received appropriate training, all in accordance with all the requirements of Regulation 23.

All vehicles and plant must be inspected on a daily basis, prior to use, by a competent person and the findings must be recorded in a register to be kept on site.

(s) Electrical installation and machinery on construction sites (Regulation 24)

The Contractor shall comply with the Electrical Installation Regulations (Government Notice R2920 of 23 October 1992) and the Electrical Machinery Regulations (Government Notice R1953 of 12 August 1993). Before commencement of construction, the Contractor shall take adequate steps to ascertain the presence of, and guard against dangers and hazards due to electrical cables and apparatus under, over or on the site.

All temporary electrical installations on the site shall be under the control of a competent person, without relieving the Contractor of his responsibility for the health and safety of all workers and persons on site in terms of Regulation 24.

(t) Use of temporary storage of flammable liquids on construction sites (Regulation 25)

The Contractor shall comply with the provisions of the General Safety Regulations (2003) and all the provisions of Regulation 25 of the Construction Regulations to ensure a safe and hazard-free environment to all workers and other persons on site.

(u) Water environments (Regulation 26)

Where construction work is done over or in close proximity to water, the provisions of Regulation 26 shall apply.

(v) Housekeeping on Construction sites (Regulation 27)

Housekeeping on all construction sites shall be in accordance with the provisions of the environment Regulations for workplaces (Government Notice R2281 of 16 October 1987) and all the provisions of Regulation 27 of the Construction Regulations.

(w) Stacking and storage on construction sites (Regulation 28)

The provisions for the stacking of articles contained in the General Safety Regulations (2003) as well as all the provisions Regulation 28 of the Construction Regulations shall apply.

(x) Fire precautions on construction sites (Regulation 29)

The provisions of the Environmental Regulations for Workplaces (Government Notice R2281 of 16 October 1987) shall apply.

In addition, the necessary precautions shall be taken to prevent the incidence of fires, to provide adequate and sufficient fire protection equipment, sirens, escape routes etc. all in accordance with Regulation 29 of the Construction Regulations.

(y) Construction employees' facilities (Regulation 30)

The Contractor shall comply with the construction site provisions as in the Facilities Regulations (2004), the provisions of Regulation 30 of the Construction Regulations and **the COVID-19 Occupational Health and Safety Measures in Workplaces COVID-19 (C19 OHS), 2020.**

(z) Non-compliance with the Construction Regulations 2014

The foregoing is a summary of parts of the Construction Regulations applicable to all construction projects.

The Contractor, as employer for the execution of the contract, shall ensure that all provisions of the Construction Regulations and **the COVID-19 Measures in Workplaces** applicable to the contract under consideration are complied with to the letter.

Should the Contractor fail to comply with the provisions of the Regulations 3 to 30 as listed in Regulation 33 and **COVID-19 (C19 OHS),2020**, he will be guilty of an offence and will be liable, upon conviction, to the fines or imprisonment as set out in Regulation 33.

The Contractor is advised in his own interest to make a careful study of the Act, the Construction Regulations and the COVID-19 (C19 OHS),2020 as ignorance of the Act and the Regulations will not be accepted in any proceedings related to non-conformance to the Act and the Regulations.

OHS 10 **MEASUREMENT AND PAYMENT**10.1 **Principles**

It is a condition of this contract that Contractors, who submit tenders for this contract, shall make provision in their tenders for the cost of all health and safety measures during the construction process. All associated activities and expenditure are deemed to be included in the Contractor's tendered rates and prices.

(a) **Safety personnel**

The Construction Supervisor, the Construction Safety Officer, Health and Safety Representatives, Health and Safety Committee and Competent Persons referred to in clauses 7.1 to 7.5 shall be members of the Contractor's personnel, and no additional payment will be made for the appointment of such safety personnel.

(b) **Records and Registers**

The keeping of health and safety-related records and registers as described in paragraph 8 is regarded as a normal duty of the Contractor for which no additional payment will be considered, and which is deemed to be included in the Contractor's tendered rates and prices.

AGREEMENT IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL HEALTH AND SAFETY ACT NO 85 OF 1993

THIS AGREEMENT is made between.....

(hereinafter called the EMPLOYER of the one part, herein represented by:

.....

in his capacity as:

.....

AND:

(hereinafter called the CONTRACTOR) of the other part, herein represented by

.....

in his capacity as:

..... duly authorised to
 sign on behalf of the Contractor.

WHEREAS the CONTRACTOR is the Mandatory of the EMPLOYER in consequence of an agreement between the CONTRACTOR and the EMPLOYER in respect of

CONTRACT:.....

AND WHEREAS the EMPLOYER and the CONTRACTOR have agreed to enter into an agreement in terms of the provisions of Section 37(2) of the Occupational Health and Safety Act No 85 of 1993, as amended by OHS Act Amendment Act No 181/1993 (hereinafter referred to as the ACT);

NOW THEREFORE the parties agree as follows:

1. **The CONTRACTOR undertakes to acquaint the appropriate officials and employees of the CONTRACTOR with all relevant provisions of the ACT and the regulations promulgated in terms thereof.**
2. The CONTRACTOR undertakes to fully comply with all relevant duties, obligations and prohibitions imposed in terms of the ACT and Regulations: Provided that should the EMPLOYER have prescribed certain arrangements and procedures that same shall be observed and adhered to by the CONTRACTOR, his officials and employees. The CONTRACTOR shall bear the onus of acquainting himself/herself/itself with such arrangements and procedures.
3. The CONTRACTOR hereby accepts sole liability for such due compliance with the relevant duties, obligations, prohibitions, arrangements and procedures, if any, imposed by the ACT and Regulations, and the CONTRACTOR expressly absolves the EMPLOYER and the Employer's CONSULTING ENGINEERS from being obliged to comply with any of the aforesaid duties, obligations, prohibitions, arrangements and procedures in respect of the work included in the contract.

4. The CONTRACTOR agrees that any duly authorised officials of the EMPLOYER shall be entitled, although not obliged, to take such steps as may be necessary to ensure that the CONTRACTOR has complied with his undertakings as more fully set out in paragraphs 1 and 2 above, which steps may include, but shall not be limited to, the right to inspect any appropriate site or premises occupied by the CONTRACTOR, or to take such steps it may deem necessary to remedy the default of the CONTRACTOR at the cost of the CONTRACTOR.
5. The CONTRACTOR shall be obliged to report forthwith to the EMPLOYER any investigation, complaint or criminal charge which may arise as a consequence of the provisions of the ACT and Regulations, pursuant to work performed in terms of this agreement, and shall, on written demand, provide full details in writing of such investigation, complaint or criminal charge.

Thus signed at for and on behalf of the **CONTRACTOR**

on this the day of 20.....

SIGNATURE:

NAME AND SURNAME:

CAPACITY:

WITNESSES: 1.

2.

Thus signed at for and on behalf of the **EMPLOYER** on this

the day of 20.....

SIGNATURE:

NAME AND SURNAME:

CAPACITY:

WITNESSES: 1.

2.

CONTRACTOR'S HEALTH AND SAFETY DECLARATION

In terms of Clause 4(4) of the OHS Act 1993 Construction Regulations 2014 (referred to as "the Regulations" hereafter), a Contractor may only be appointed to perform construction work if the Employer is satisfied that the Contractor has the necessary competencies and resources to carry out the work safely in accordance with the Occupational Health and Safety Act No 85 of 1993 and the OHS Act 1993 Construction Regulations 2014.

To that effect a person duly authorised by the tenderer must complete and sign the declaration hereafter in detail.

Declaration by Tenderer

1. I the undersigned hereby declare and confirm that I am fully conversant with the Occupational Health and Safety Act No 85 of 1993 (as amended by the Occupational Health and Safety Amendment Act No 181 of 1993), and the OHS Act 1993 Construction Regulations 2014.
2. I hereby declare that my company has the competence and the necessary resources to safely carry out the construction work under this contract in compliance with the Construction Regulations and the Employer's Health and Safety Specifications.
3. I propose to achieve compliance with the Regulations by one of the following:
 - (a) From my own competent resources as detailed in 4(a) hereafter:..... ***Yes / No**
 - (b) From my own resources still to be appointed or trained until competency is achieved, as detailed in 4(b) hereafter: ***Yes / No**
 - (c) From outside sources by appointment of competent specialist subcontractors as detailed in 4(c) hereafter:..... ***Yes / No**

(* = delete whatever is not applicable)

4. Details of resources I propose:

(Note: Competent resources shall include safety personnel such as a construction supervisor and construction safety officer as defined in Regulation 8, and competent persons as defined in Regulations 9-29, (all or individual regulations) as applicable to this contract)

- (a) Details of the competent and qualified key persons from my company's own resources, who will form part of the contract team:

NAMES OF COMPETENT PERSONS	POSITIONS TO BE FILLED BY COMPETENT PERSONS

- (b) Details of training of persons from my company's own resources (or to be hired) who still have to be trained to achieve the necessary competency:
- (i) By whom will training be provided?
 - (ii) When will training be undertaken?
 - (iii) List the positions to be filled by persons to be trained or hired:
.....
.....
- (c) Details of competent resources to be appointed as subcontractors if competent persons cannot be supplied from own company:
- Name of proposed subcontractor:
 - Qualifications or details of competency of the subcontractor:
5. I hereby undertake, if my tender is accepted, to provide, before commencement of the works under the contract, a suitable and sufficiently documented Health and Safety Plan in accordance with Regulation 7(1) of the Construction Regulations, which plan shall be subject to approval by the Employer.
6. I confirm that copies of my company's approved Health and Safety Plan, the Employer's Safety Specifications as well as the OHSA 1993 Construction Regulations 2014 will be provided on site and will at all times be available for inspection by the Contractor's personnel, the Employer's personnel, the Engineer, visitors, and officials and inspectors of the Department of Labour.
7. I hereby confirm that adequate provision has been made in my tendered rates and prices in the schedule of quantities to cover the cost of all resources, actions, training and all health and safety measures envisaged in the OHSA 1993 Construction Regulations 2014, and that I will be liable for any penalties that may be applied by the Employer in terms of the said Regulations (Regulation 33) for failure on the Contractor's part to comply with the provisions of the Act and the Regulations.
8. I agree that my failure to complete and execute this declaration to the satisfaction of the Employer will mean that I am unable to comply with the requirements of the OHSA 1993 Construction Regulations 2014, and accept that my tender will be prejudiced and may be rejected at the discretion of the Employer.

SIGNATURE:

DATE:

(of person authorised to sign on behalf of the Tenderer)

PRO FORMA NOTIFICATION FORM IN TERMS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT 1993, CONSTRUCTION REGULATIONS 2014

[This form must be completed and forwarded, prior to commencement of work on site, by all Contractors that qualify in terms of Regulation 3 of the Construction Regulations 2014, to the office of the Department of Labour]

NOTIFICATION OF CONSTRUCTION WORK

1. (a) Name and postal address of principal contractor.

- (b) Name and tel. pf principal contractor's contact person:

2. Principal contractor's compensation registration number:

3. (a) Name and postal address of client :

- (b) Name and tel. no of clients contact person or agent:

- 4 (a) Name and postal address of designer (s) for the project:

- (b) -----

5. Name and telephone number of principal contractor's sub- ordinate supervisor on site appointed in terms of Regulation 8 (1).

6. Name /s of principal contractor's sub- ordinate supervisor on sire appointed in terms of Regulation 8 (2)

7. Exact physical address of the construction site or site office:

8. Nature of the construction work:

9. Expected commencement date:

10. Expected completion date:

11. Estimated maximum number of persons on the construction site.

Total: _____ Male: _____ Female _____

12. Planned number of contractors on the construction:

13. Name (s) of contractors already selected.

Principal Contractor

Date

Client's Agent (where
applicable)

Date

Client

Date

ANNEXURE B: DRAWINGS FOR TENDER PURPOSES