



**MUNICIPAL NOTICE No.: 185 OF 2022
TENDER NO: 8/2/RNM0398**

**CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND-WARD 17
CIDB CLASSIFICATION 6CE OR HIGHER**

Name of Tenderer:

.....

This tender closes at 12h00 on 22 November 2022 at the offices of the Ray Nkonyeni Municipality located at 10 Connor Street, Port Shepstone

NO LATE SUBMISSIONS WILL BE CONSIDERED

BID AMOUNT R _____

Issued by:

RAY NKONYENI MUNICIPALITY

No.10 Conner Street
Marburg
Port Shepstone
4240
Tel: 039 688 2000
Fax: 039 682 0327
Email: bonisile.ngcobo@rnm.gov.za

Prepared By:

MNTOMNYAMA CONSULTING MANAGERS

Unit 306 Redfern
No.27 Bohmer Road
New Germany
3610
Tel: 084 818 9508
Fax: 086 5677 615
Email: mava@mntomnyama.co.za

PART A INVITATION TO BID

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE RAY NKONYENI MUNICIPALITY					
BID NUMBER:	8/2/RNM0398	CLOSING DATE:	22 November 2022	CLOSING TIME:	12H00
DESCRIPTION	CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND-WARD 17				
THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (MBD7).					
BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)					
10 Connor Street					
Port Shepstone					
4240					
SUPPLIER INFORMATION					
NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE		NUMBER		
CELLPHONE NUMBER					
FACSIMILE NUMBER	CODE		NUMBER		
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
TAX COMPLIANCE STATUS	TCS PIN:		OR	CSD No:	
B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE [TICK APPLICABLE BOX]	<input type="checkbox"/> Yes <input type="checkbox"/> No		B-BBEE STATUS LEVEL SWORN AFFIDAVIT		<input type="checkbox"/> Yes <input type="checkbox"/> No
[A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE/ SWORN AFFIDAVIT (FOR EMES & QSEs) MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR B-BBEE]					
ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES ENCLOSE PROOF]		ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES, ANSWER PART B:3]	
TOTAL NUMBER OF ITEMS OFFERED			TOTAL BID PRICE	R	
SIGNATURE OF BIDDER	.....		DATE		
CAPACITY UNDER WHICH THIS BID IS SIGNED					
BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO:			TECHNICAL INFORMATION MAY BE DIRECTED TO:		
DEPARTMENT	SUPPLYCHAIN MANAGEMENT		CONTACT PERSON	TECHNICAL SERVICES	
CONTACT PERSON	BONGANI MFENQA		TELEPHONE NUMBER	BONISILE NGCOBO	
TELEPHONE NUMBER	039 312 8304		FACSIMILE NUMBER	039 688 2156	
E-MAIL ADDRESS	bongani.mfenqa@rnm.gov.za		E-MAIL ADDRESS	bonisile.ngcobo@rnm.gov.za	

PART B TERMS AND CONDITIONS FOR BIDDING

1. BID SUBMISSION:										
<p>1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.</p> <p>1.2. ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED–(NOT TO BE RE-TYPED) OR ONLINE</p> <p>1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.</p>										
2. TAX COMPLIANCE REQUIREMENTS										
<p>2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.</p> <p>2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VIEW THE TAXPAYER'S PROFILE AND TAX STATUS.</p> <p>2.3 APPLICATION FOR THE TAX COMPLIANCE STATUS (TCS) CERTIFICATE OR PIN MAY ALSO BE MADE VIA E-FILING. IN ORDER TO USE THIS PROVISION, TAXPAYERS WILL NEED TO REGISTER WITH SARS AS E-FILERS THROUGH THE WEBSITE WWW.SARS.GOV.ZA.</p> <p>2.4 FOREIGN SUPPLIERS MUST COMPLETE THE PRE-AWARD QUESTIONNAIRE IN PART B:3.</p> <p>2.5 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.</p> <p>2.6 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.</p> <p>2.7 WHERE NO TCS IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.</p>										
3. QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS										
<table style="width: 100%; border: none;"> <tr> <td style="width: 70%;">3.1. IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)</td> <td style="text-align: right;"><input type="checkbox"/> YES <input type="checkbox"/> NO</td> </tr> <tr> <td>3.2. DOES THE ENTITY HAVE A BRANCH IN THE RSA?</td> <td style="text-align: right;"><input type="checkbox"/> YES <input type="checkbox"/> NO</td> </tr> <tr> <td>3.3. DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?</td> <td style="text-align: right;"><input type="checkbox"/> YES <input type="checkbox"/> NO</td> </tr> <tr> <td>3.4. DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?</td> <td style="text-align: right;"><input type="checkbox"/> YES <input type="checkbox"/> NO</td> </tr> <tr> <td>3.5. IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?</td> <td style="text-align: right;"><input type="checkbox"/> YES <input type="checkbox"/> NO</td> </tr> </table> <p>IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 ABOVE.</p>	3.1. IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)	<input type="checkbox"/> YES <input type="checkbox"/> NO	3.2. DOES THE ENTITY HAVE A BRANCH IN THE RSA?	<input type="checkbox"/> YES <input type="checkbox"/> NO	3.3. DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?	<input type="checkbox"/> YES <input type="checkbox"/> NO	3.4. DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?	<input type="checkbox"/> YES <input type="checkbox"/> NO	3.5. IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?	<input type="checkbox"/> YES <input type="checkbox"/> NO
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3.5. IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?	<input type="checkbox"/> YES <input type="checkbox"/> NO									

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

SIGNATURE OF BIDDER:.....

CAPACITY UNDER WHICH THIS BID IS SIGNED:.....

DATE:.....

RAY NKONYENI MUNICIPALITY

NOTICE NO: 185 OF 2022

TENDER NO: 8/2/RNM0398

GENERAL TENDER INFORMATION

TENDER ADVERTISED	:	Thursday, 20 October 2022
ESTIMATED CIDB CONTRACTOR GRADING	:	6CE or Higher
VIRTUAL CLARIFICATION MEETING	:	Tuesday 01 November 2022 @ 09h00 (Non Compulsory) Emails for clarification to be sent not later than 28 th October on Friday
CLOSING DATE	:	Tuesday, 22 November 2022
CLOSING TIME	:	12H00
CLOSING VENUE	:	Bid Box at Municipal Offices at 10 Connor Street, Port Shepstone
INSTRUCTIONS	:	Fully completed Bid Documents, with two (2) copies of the original document in a sealed envelope clearly marked "Bid name and Bid number" containing the Tender Documents (completed in all respects including C.1.1 Form of Offer) plus any additional supporting documentation, must be deposited into the bid box.

Tender
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RAY NKONYENI MUNICIPALITY

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RAY NKONYENI MUNICIPALITY

NOTICE NO: 185 OF 2022

TENDER NO: 8/2/RNM0398

T1.1 TENDER NOTICE AND INVITATION TO TENDER

Bids are hereby invited to tender for the **Construction of The Municipal Vehicle Pound in Ward 17** within Ray Nkonyeni Municipality as specified in the under-mentioned bid document. Tenderers who are registered with the Construction Industry Development Board (CIDB) with a classification grading of 6CE or higher, are eligible to submit a tender and will be considered for award.

Bid documents can be downloaded for free from the e-tenders portal <https://www.etenders.gov.za/> or downloaded from Ray Nkonyeni Municipality website <http://www.rnm.gov.za/> , as from **Friday 21 October 2022**.

A non-compulsory virtual clarification meeting will be held by the Department of Technical Services on Tuesday 01 November 2022 at 09h00. Bidders willing to participate in the meeting must send their email addresses to Bonisile Ngcobo at Bonisile.Ngcobo@rnm.gov.za or Bridget Turrel at Bridget.Turrel@rnm.gov.za no later than Friday 28 October 2022.

Fully completed Bid documents, with two (2) copies of the original document in a sealed envelope, must be clearly marked with the relevant Bid Number as follows: - **Tender No: 8/2/RNM0398– CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND IN WARD 17**

The completed Bids (**Original and 2 copies**) must be deposited in the bid box, situated in the foyer of the Municipal Offices at 10 Connor Street, Port Shepstone, no later than **Tuesday 22nd November 2022 at 12h00**. After closure, the tender will be opened in public.

Stage 1: Pre-qualifying criteria

LOCAL CONTENT

- Bidder will be disqualified if the Declaration Certificate and Annex C (Local Content Declaration Summary Schedule) are not submitted as part of the Bid.

Description of services, works or goods	Stipulated minimum threshold
Valve Products	70%
Office Furniture	85%
Reinforcement steel bars	100%
Steel Frames	100%
Electric Cables	100%
Gabions	100%
Cement	100%

For the stipulated minimum threshold for local production and content, refer to MBD 6.2.

Stage 2 : Functionality

The Functionality will comprise of the following based on the criteria indicated in the respective tender returnable: Attach all supporting documentation for the following table.

Criterion	Possible Full Points
Experience of the Bidder	30
Ownership of Plant and Equipment	10
Qualifications and experience of Site Agent	20
Experience of Foreman	20
Construction Methodology	20
Total Possible Points	100

Bidders must score a minimum of 60% to pass functionality evaluation.

Stage 3: Financial Offer and Preference

The evaluation will be 80/20 Preference Point System for Financial Offer and Preference. The Preferential Procurement Policy Framework Act, 2000, (PPPFA) (Act No.5 of 2000) applies to this tender.

BBBEE Status Level Contributor	Number of Points (80/20 Principle)
1	20
2	18
3	14
4	12
5	8
6	6
7	4
8	2
Non-Compliant Contributor	0

Technical enquiries may be addressed to Mr. Mava Mngadi of Mntomnyama Consulting Engineers by no later than three days before tender closure on Cell.: 084 181 9508 and Email Address: mava@mntomnyama.co.za. Procurement enquiries may be addressed to Bongani Mfenqa of Ray Nkonyeni Municipality by no later than three days before tender closure on Tel No.: 039 312 8304 or Email: bongani.mfenqa@rm.gov.za

NOTE TO BIDDERS ON BID CONDITIONS:

- The Supply Chain Management Policy of Ray Nkonyeni Municipality will apply. The Council reserves the right not to accept the lowest bid or any bid and reserves the right to accept the whole or part of the bid, or to reject all bids and cancel the notice to tender.
- Bids that are submitted late, incomplete, unsigned or by facsimile, electronically or not completed in black ink will be rejected and not accepted for further evaluation.
- Members or Directors of Companies or Service Providers who are state employees are not allowed to bid or quote.

-
- The bidder who will be awarded the contract may be expected sub-contract a portion of works to the local Small, Medium and Micro-sized Enterprises (SMMEs) in accordance with approved Ray Nkonyeni SCM Policy
 - Unsuccessful bidders will be informed of the tender outcome through Municipal website. Aggrieved unsuccessful bidders will be allowed to lodge, within fourteen (14) days of the decision or action, a written objection or complaint to the Office of the Municipal Manager through email, mm@rnm.gov.za or fax number 086 529 7195. Complaints or objections received after fourteen (14) days of the date of the notice **will not** be entertained.
 - Bidders must be registered on Central Supply Database (CSD) and the CSD number must be provided.
 - “Your attention is specifically drawn to the provisions of Regulation 14 of the PPPFA Regulations of 2017 which Ray Nkonyeni Municipality will use as it remedy should the need arise”.
 - Bids submitted are to be valid for a period of **240 days**.

NB: FAILURE TO SUBMIT TWO (2) COPIES WILL RESULT IN DISQUALIFICATION.

Ray Nkonyeni Municipality
Mr. KJ Zulu-Acting Municipal Manager
P O Box 5
Port Shepstone
4240

RAY NKONYENI MUNICIPALITY

NOTICE NO: 185 OF 2022

TENDER NO: 8/2/RNM0398

T1.2 TENDER DATA

T1.2.1 Standard Conditions of Tender

The conditions of tender are the Standard Conditions of Tender as contained in of Board Notice 136 of 2016 in Government Gazette No 38960 of 10 July 2016, Construction Industry Development Board (CIDB) Standard for Uniformity in Construction Procurement. (see www.cidb.org.za). Annexure F and Table G1 of that notice are reproduced without amendment or alteration for the convenience of tenderers in the following pages:

Standard Conditions of Tender

- Note: 1 These Standard Conditions of Tender are identical to that contained in Annex F of SANS 294: 2004, Construction Procurement Processes, Procedures and Methods.
2. Annex E of SANS 294, Construction Procurement Processes, Procedures and Methods, and SAICE's Practice Manual #1, The use of South African National Standards in Construction Procurement, provides guidance on referencing these Standard Conditions of Tender in procurement documents.

F.1 GENERAL

F.1.1. Actions

F.1.1.1. The employer and each tenderer submitting a tender offer shall comply with these conditions of tender. In their dealings with each other, they shall discharge their duties and obligations as set out in F.2 and F.3, timeously and with integrity, and behave equitably, honestly and transparently, comply with all legal obligations and not engage in anticompetitive practices.

F.1.1.2. The employer and the tenderer and all their agents and employees involved in the tender process shall avoid conflicts of interest and where a conflict of interest is perceived or known, declare any such conflict of interest, indicating the nature of such conflict. Tenderers shall declare any potential conflict of interest in their tender submissions. Employees, agents and advisors of the employer shall declare any conflict of interest to whoever is responsible for overseeing the procurement process at the start of any deliberations relating to the procurement process or as soon as they become aware of such conflict, and abstain from any decisions where such conflict exists or recuse themselves from the procurement process, as appropriate.

Note:

- 1) A conflict of interest may arise due to a conflict of roles which might provide an incentive for improper acts in some circumstances. A conflict of interest can create an appearance of impropriety that can undermine confidence in the ability of that person to act properly in his or her position even if no improper acts result.
- 2) Conflicts of interest in respect of those engaged in the procurement process include direct, indirect or family interests in the tender or outcome of the procurement process and any personal bias, inclination, obligation, allegiance or loyalty which would in any way affect any decisions taken.

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

F.1.2. Tender Documents

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

F.1.3. Interpretation

F.1.3.1. The tender data and additional requirements contained in the tender schedules that are included in the returnable documents are deemed to be part of these conditions of tender.

F.1.3.2. These conditions of tender, the tender data and tender schedules which are only required for tender evaluation purposes, shall not form part of any contract arising from the invitation to tender.

F.1.3.3. For the purposes of these conditions of tender, the following definitions apply:

- a) **conflict of interest** means any situation in which :

- i) *someone in a position of trust has competing professional or personal interests which make it difficult to fulfil his or her duties impartially;*
 - ii) *an individual or organisation is in a position to exploit a professional or official capacity in some way for their personal or corporate benefit; or*
 - iii) *incompatibility or contradictory interests exist between an employee and the organisation which employs that employee.*
- b) **comparative offer** means the tenderer's financial offer after all tendered parameters that will affect the value of the financial offer have been taken into consideration in order to enable comparisons to be made between offers on a comparative basis
- c) **corrupt practice** means the offering, giving, receiving or soliciting of anything of value to influence the action of the employer or his staff or agents in the tender process; and
- d) **fraudulent practice** means the misrepresentation of the facts in order to influence the tender process or the award of a contract arising from a tender offer to the detriment of the employer, including collusive practices intended to establish prices at artificial levels
- e) **organization** means a company, firm, enterprise, association or other legal entity, whether incorporated or not, or a public body
- f) **quality (functionality)** means the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs.

F.1.4. Communication and Employer's Agent

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

F.1.5. The Employer's Right to Accept or Reject Any Tender Offer

F.1.5.1. *The employer may accept or reject any variation, deviation, tender offer, or alternative tender offer, and may cancel the tender process and reject all tender offers at any time before the formation of a contract. The employer shall not accept or incur any liability to a tenderer for such cancellation and rejection, but will give written reasons for such action upon written request to do so.*

F.1.5.2. *The employer may not subsequent to the cancellation or abandonment of a tender process or the rejection of all responsive tender offers re-issue a tender covering substantially the same scope of work within a period of six months unless only one tender was received and such tender was returned unopened to the tenderer.*

F.1.6. Procurement Procedures

F.1.6.1. General

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

F.1.6.2. Competitive Negotiation Procedure

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

F.1.6.2.2. *All responsive tenderers, or not less than three responsive tenderers that are highest ranked in terms of the evaluation method and evaluation criteria stated in the tender data, shall be invited in each round to enter into competitive negotiations, based on the principle of equal treatment and keeping confidential the proposed solutions and associated information. Notwithstanding the provisions of F.2.17, the employer may request that tenders be clarified, specified and fine-tuned in order to improve a tenderer's competitive position provided that such clarification, specification, fine-tuning or additional information does not alter any fundamental aspects of the offers or impose substantial new requirements which restrict or distort competition or have a discriminatory effect.*

F.1.6.2.3. *At the conclusion of each round of negotiations, tenderers shall be invited by the employer to make a fresh tender offer, based on the same evaluation criteria, with or without adjusted weightings. Tenderers shall be advised when they are to submit their best and final offer.*

F.1.6.2.4. *The contract shall be awarded in accordance with the provisions of F.3.11 and F.3.13 after tenderers have been requested to submit their best and final offer.*

F.1.6.3. Proposal Procedure Using The Two-Stage System

F.1.6.3.1. Option 1

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

F.1.6.3.2. Option 2

F.1.6.3.2.1. *Tenderers shall submit in the first stage only technical proposals. The employer shall invite all responsive tenderers to submit tender offers in the second stage, following the issuing of procurement documents.*

F.1.6.3.2.2. *The employer shall evaluate tenders received during the second stage in terms of the method of evaluation stated in the tender data, and award the contract in terms of these conditions of tender.*

F.2 TENDERER'S OBLIGATIONS

F.2.1. Eligibility

F.2.1.1. *Submit a tender offer only if the tenderer satisfies the criteria stated in the tender data and the tenderer, or any of his principals, is not under any restriction to do business with the employer.*

F.2.1.2. *Notify the employer of any proposed material change in the capabilities or formation of the tendering entity (or both) or any other criteria which formed part of the qualifying requirements used by the employer as the basis in a prior process to invite the tenderer to submit a tender offer and obtain the employer's written approval to do so prior to the closing time for tenders.*

F.2.2. Cost of Tendering

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

F.2.3. Check Documents

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

F.2.4. Confidentiality and Copyright of Documents

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

F.2.5. Reference Documents

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

F.2.6. Acknowledge Addenda

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

F.2.7. Clarification Meeting

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

F.2.8. Seek Clarification

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

F.2.9. Insurance

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

F.2.10. Pricing the Tender Offer

F.2.10.1. *Include in the rates, prices, and the tendered total of the prices (if any) all duties, taxes (except Value Added Tax (VAT), and other levies payable by the successful tenderer, such duties, taxes and levies being those applicable 14 days before the closing time stated in the tender data.*

F.2.10.2. *Show VAT payable by the employer separately as an addition to the tendered total of the prices.*

F.2.10.3. *Provide rates and prices that are fixed for the duration of the contract and not subject to adjustment except as provided for in the conditions of contract identified in the Contract Data.*

F.2.10.4. *State the rates and prices in Rand unless instructed otherwise in the tender data. The conditions of contract identified in the Contract Data may provide for part payment in other currencies.*

F.2.11. Alterations to Documents

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

F.2.12. Alternative Tender Offers

F.2.12.1. *Unless otherwise stated in the tender data, submit alternative tender offers only if a main tender offer, strictly in accordance with all the requirements of the tender documents, is also submitted as well as a schedule that compares the requirements of the tender documents with the alternative requirements that are proposed.*

F.2.12.2. *Accept that an alternative tender offer may be based only on the criteria stated in the tender data or criteria otherwise acceptable to the employer.*

F.2.13. Submitting a Tender Offer

F.2.13.1. *Submit one tender offer only, either as a single tendering entity or as a member in a joint venture to provide the whole of the works, services or supply identified in the Contract Data and described in the Scope of Works, unless stated otherwise in the tender data.*

F.2.13.2. *Return all returnable documents to the employer after completing them in their entirety, either electronically (if they were issued in electronic format) or by writing legibly in non-erasable ink.*

F.2.13.3. *Submit the parts of the tender offer communicated on paper as an original plus the number of copies stated in the tender data, with an English translation of any documentation in a language other than English, and the parts communicated electronically in the same format as they were issued by the employer.*

F.2.13.4. *Sign the original and all copies of the tender offer where required in terms of the tender data. The employer will hold all authorized signatories liable on behalf of the tenderer. Signatories for tenderers proposing to contract as joint ventures shall state which of the signatories is the lead partner whom the employer shall hold liable for the purpose of the tender offer.*

F.2.13.5. *Seal the original and each copy of the tender offer as separate packages marking the packages as "ORIGINAL" and "COPY". Each package shall state on the outside the employer's address and identification details stated in the tender data, as well as the tenderer's name and contact address.*

F.2.13.6. *Where a two-envelope system is required in terms of the tender data, place and seal the returnable documents listed in the tender data in an envelope marked "financial proposal" and place the remaining returnable documents in an envelope marked "technical proposal". Each envelope shall state on the outside the employer's address and identification details stated in the tender data, as well as the tenderer's name and contact address.*

F.2.13.7. *Seal the original tender offer and copy packages together in an outer package that states on the outside only the employer's address and identification details as stated in the tender data.*

F.2.13.8. *Accept that the employer shall not assume any responsibility for the misplacement or premature opening of the tender offer if the outer package is not sealed and marked as stated.*

F.2.13.9. *Accept that tender offers submitted by facsimile or e-mail will be rejected by the employer, unless stated otherwise in the tender data.*

F.2.14. Information and Data to be Completed in all Respects

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

F.2.15. Closing Time

F.2.15.1. *Ensure that the employer receives the tender offer at the address specified in the tender data not later than the closing time stated in the tender data. Accept that proof of posting shall not be accepted as proof of delivery.*

F.2.15.2. *Accept that, if the employer extends the closing time stated in the tender data for any reason, the requirements of these conditions of tender apply equally to the extended deadline.*

F.2.16. Tender Offer Validity

F.2.16.1. *Hold the tender offer(s) valid for acceptance by the employer at any time during the validity period stated in the tender data after the closing time stated in the tender data.*

F.2.16.2. *If requested by the employer, consider extending the validity period stated in the tender data for an agreed additional period, with or without any conditions attached to such extension.*

F.2.16.3. *Accept that a tender submission that has been submitted to the employer may only be withdrawn or substituted by giving the employer's agent written notice before the closing time for tenders that a tender is to be withdrawn or substituted.*

F.2.16.4. *Where a tender submission is to be substituted, submit a substitute tender in accordance with the requirements of F.2.13 with the packages clearly marked as "SUBSTITUTE".*

F.2.17. Clarification of Tender Offer after Submission

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

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

F.2.18. Provide other Material

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

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

F.2.19. Inspections, Tests and Analysis

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

F.2.20. Submit Securities, Bonds, Policies, etc.

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

F.2.21. Check Final Draft

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

F.2.22. Return of Other Tender Documents

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

F.2.23. Certificates

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

F.3 THE EMPLOYER'S UNDERTAKINGS

F.3.1. Respond to Requests from the Tenderer

F.3.1.1. *Unless otherwise stated in the Tender Data, respond to a request for clarification received up to five working days before the tender closing time stated in the Tender Data and notify all tenderers who drew procurement documents.*

F.3.1.2. *Consider any request to make a material change in the capabilities or formation of the tendering entity (or both) or any other criteria which formed part of the qualifying requirements used to pre-qualify a tenderer to submit a tender offer in terms of a previous procurement process and deny any such request if as a consequence:*

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

F.3.2. Issue Addenda

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

F.3.3. Return Late Tender Offers

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

F.3.4. Opening of Tender Submissions

F.3.4.1. *Unless the two-envelope system is to be followed, open valid tender submissions in the presence of tenderers' agents who choose to attend at the time and place stated in the tender data. Tender submissions for which acceptable reasons for withdrawal have been submitted will not be opened.*

F.3.4.2. *Announce at the meeting held immediately after the opening of tender submissions, at a venue indicated in the tender data, the name of each tenderer whose tender offer is opened and, where applicable, the total of his prices, preferences claimed and time for completion for the main tender offer only.*

F.3.4.3. *Make available the record outlined in F.3.4.2 to all interested persons upon request.*

F.3.5. Two-envelope system

F.3.5.1. *Where stated in the tender data that a two-envelope system is to be followed, open only the technical proposal of valid tenders in the presence of tenderers' agents who choose to attend at the time and place stated in the tender data and announce the name of each tenderer whose technical proposal is opened.*

F.3.5.2. *Evaluate the quality of the technical proposals offered by tenderers, then advise tenderers who remain in contention for the award of the contract of the time and place when the financial proposals will be opened. Open only the financial proposals of tenderers, who score in the quality evaluation more than the minimum number of points for quality stated in the tender data, and announce the score obtained for the technical proposals and the total price and any preferences claimed. Return unopened financial proposals to tenderers whose technical proposals failed to achieve the minimum number of points for quality.*

F.3.6. Non-disclosure

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

F.3.7. Grounds for Rejection and Disqualification

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

F.3.8. Test for Responsiveness

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

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

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

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

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

F.3.9. Arithmetical Errors, Omissions and Discrepancies

F.3.9.1. Check 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 in words shall govern.

F.3.9.2. Check the highest ranked tender or tenderer with the highest number of tender evaluation points after the evaluation of tender offers in accordance with F.3.11 for:

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

F.3.9.3. Notify the tenderer of all errors or omissions that are identified in the tender offer and either confirm the tender offer as tendered or accept the corrected total of prices.

F.3.9.4. Where the tenderer elects to confirm the tender offer as tendered, correct the errors as follows:

- 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 line item total shall govern and the rate shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line item total as quoted shall govern, and the unit rate shall be corrected.
- 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 govern and the tenderer will be asked to revise selected item prices (and their rates if bills of quantities apply) to achieve the tendered total of the prices.

F.3.10. Clarification of a Tender Offer

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

F.3.11. Evaluation of Tender Offers

F.3.11.1. General

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

F.3.11.2. Method 1: Financial Offer

In the case of a financial offer:

- a) Rank tender offers from the most favourable to the least favourable comparative offer.
- b) Recommend the highest ranked tenderer for the award of the contract, unless there are compelling and justifiable reasons not to do so.

-
- c) *Re-rank all tenderers should there be compelling and justifiable reasons not to recommend the highest ranked tenderer and recommend the highest ranked tenderer, unless there are compelling and justifiable reasons not to do so and the process set out in this sub clause is repeated.*

F.3.11.3. Method 2: Financial Offer and Preference

In the case of a financial offer and preferences:

- a) *Score each tender in respect of the financial offer made and preferences claimed, if any, in accordance with the provisions of F.3.11.7 and F.3.11.8.*
b) *Calculate the total number of tender evaluation points (T_{EV}) in accordance with the following formula:*

$$T_{EV} = N_{FO} + N_P$$

where:

- *N_{FO} is the number of tender evaluation points awarded for the financial offer made in accordance with F.3.11.7*
- *N_P is the number of tender evaluation points awarded for preferences claimed in accordance with F.3.11.8*

- c) *Rank tender offers from the highest number of tender evaluation points to the lowest.*
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.*
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.*

F.3.11.4. Method 3: Financial Offer and Quality

In the case of a financial offer and quality:

- a) *Score each tender in respect of the financial offer made and the quality offered in accordance with the provisions of F.3.11.7 and F.3.11.9 rejecting all tender offers that fail to score the minimum number of points for quality stated in the tender data, if any.*
b) *Calculate the total number of tender evaluation points (T_{EV}) in accordance with the following formula:*

$$T_{EV} = N_{FO} + N_Q$$

where:

- *N_{FO} is the number of tender evaluation points awarded for the financial offer made in accordance with F.3.11.7*
- *N_Q is the number of tender evaluation points awarded for quality offered in accordance with F.3.11.9.*

- c) *Rank tender offers from the highest number of tender evaluation points to the lowest.*
d) *Recommend 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.*
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.*

F.3.11.5. Method 4: Financial Offer, Quality and Preferences

In the case of a financial offer, quality and preferences:

- a) Score each tender in respect of the financial offer made, preference claimed, if any, and the quality offered in accordance with the provisions of F.3.11.7 to F.3.11.9, rejecting all tender offers that fail to score the minimum number of points for quality stated in the tender data, if any.
- b) Calculate the total number of tender evaluation points (T_{EV}) in accordance with the following formula, unless otherwise stated in the Tender Data:

$$T_{EV} = N_{FO} + N_P + N_Q$$

where:

- N_{FO} is the number of tender evaluation points awarded for the financial offer made in accordance with F.3.11.7
 - N_P is the number of tender evaluation points awarded for preferences claimed in accordance with F.3.11.8.
 - N_Q is the number of tender evaluation points awarded for quality offered in accordance with F.3.11.9.
- c) Rank tender offers from the highest number of tender evaluation points to the lowest.
 - 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.
 - 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.

F.3.11.6. Decimal Places

Score financial offers, preferences and quality, as relevant, to two decimal places.

F.3.11.7. Scoring Financial Offers

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

$$N_{FO} = W_1 \times A$$

where:

- N_{FO} is the number of tender evaluation points awarded for the financial offer.
- W_1 is the maximum possible number of tender evaluation points awarded for the financial offer as stated in the Tender Data.
- A is a number calculated using the formula and option described in Table F.1 as stated in the Tender Data.

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

Formula	Comparison aimed at achieving	Option 1 ^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	$A = (1 - \frac{(P - P_m)}{P_m})$	$A = P_m/P$
^a P_m is the comparative offer of the most favourable comparative offer P is the comparative offer of the tender offer under consideration			

F.3.11.8. Scoring Preferences

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

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

F.3.11.9. Scoring Quality

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

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

$$NQ = W_2 \times S_Q/M_S$$

where:

- S_o is the score for quality allocated to the submission under consideration;
- M_s is the maximum possible score for quality in respect of a submission; and
- W_2 is the maximum possible number of tender evaluation points awarded for the quality as stated in the tender data

F.3.12. Insurance Provided by the Employer

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

F.3.13. Acceptance of Tender Offer

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

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

F.3.14. Prepare Contract Documents

F.3.14.1. If necessary, revise documents that shall form part of the contract and that were issued by the employer as part of the tender documents to take account of:

- a) addenda issued during the tender period,
- b) inclusion of some of the returnable documents, and
- c) other revisions agreed between the employer and the successful tenderer.

F.3.14.2. Complete the Schedule of Deviations attached to the Form of Offer and Acceptance, if any.

F.3.15. Complete Adjudicator's Contract

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

F.3.16. Notice to Unsuccessful Tenderers

F.3.16.1. Notify the successful tenderer of the employer's acceptance of his tender offer by completing and returning one copy of the Form of Offer and Acceptance before the expiry of the validity period stated in the Tender Data, or agreed additional period.

F.3.16.2. After the successful tenderer has been notified of the employer's acceptance of the tender, notify other tenderers that their tender offers have not been accepted.

F.3.17. Provide Copies of the Contracts

Provide to the successful tenderer the number of copies stated in the Tender Data of the signed copy of the contract as soon as possible after completion and signing of the Form of Offer and Acceptance.

F.3.18. Provide Written Reasons for Actions Taken

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

Alpha-numeric associated with the Contractor Grading Designations

TABLE G1: CONTRACTOR GRADING DESIGNATIONS AND ASSOCIATED PARAMETERS

Contractor Grading Designation	Tender Value Range designation	Maximum Value of Contract that a Contractor is considered capable of performing (R)
<i>1 (class of construction works)</i>	<i>1</i>	<i>200 000</i>
<i>2 (class of construction works)</i>	<i>2</i>	<i>650 000</i>
<i>3 (class of construction works)</i>	<i>3</i>	<i>2 000 000</i>
<i>4 (class of construction works)</i>	<i>4</i>	<i>4 000 000</i>
<i>5 (class of construction works)</i>	<i>5</i>	<i>6 500 000</i>
<i>6 (class of construction works)</i>	<i>6</i>	<i>13 000 000</i>
<i>7 (class of construction works)</i>	<i>7</i>	<i>40 000 000</i>
<i>8 (class of construction works)</i>	<i>8</i>	<i>130 000 000</i>
<i>9 (class of construction works)</i>	<i>9</i>	<i>No limit</i>

TABLE G2: CLASSES OF CONSTRUCTION WORK, sets out detailed description of the various Designations (types) of construction work.

T1.2.2 Variations to the Standard Conditions of Tender

The Standard Conditions of Tender make several references to the Tender Data for details that apply specifically to this tender. The Tender Data shall take 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.

The following variations, amendments and additions to the Standard Conditions of Tender shall apply to this tender.

Clause No. Variation, Amendment or Addition

F.1 General

F.1.1 Actions

Add the following:

The Employer is RAY NKONYENI MUNICIPALITY, represented by Ms. Bonisile Ngcobo (email: bonisile.ngcobo@rnm.gov.za).

F.1.2 Tender Documents

Add the following:

The following documents form part of this tender and not issued to Tenderer's, but available from the issuing bodies as applicable:

1. CIDB, "The Standard for Uniformity in Construction Procurement Annex F, Standard Conditions of Tender", Board Notice 136 of 2016 of Government Gazette 38960 of 10 July 2016.
2. GCC 2015 "General Conditions of Contract for Construction Works", Third Edition 2015 published by the South African Institute of Civil Engineering (SAICE)
3. COLTO Standard Specifications for Road and Bridge Works for State Authorities 1998 (Green Book)
4. The Occupational Health and Safety Act No 85 and Amendment Act No 181 of 1993, and the Construction Regulations (2014).
5. SANS 1921 (2004) Construction and Management Requirements for Works Contracts: Part 6.
6. SANS 1914 (2002): Targeted Construction Procurement: Parts 1 – 6.
7. The Preferential Procurement Policy Framework Act No 5 of 2000, and the Preferential Procurement Policy Framework Act Regulations (June 2011).

The tender documents issued by the Employer comprise:

VOLUME 1: The Tender Document (this document), in which is bound:

The Tender

Part T1: Tendering Procedures

T1.1 Tender Notice And Invitation To Tender

T1.2 Tender Data

Part T2: Returnable Documents

T2.1 List Of Returnable Documents

T2.2 Returnable Schedules

The Contract

Part C1: Agreements and Contract Data

C1.1 Form of Offer and Acceptance

C1.2 Contract Data

C1.3 Performance Guarantee

C1.4 Occupational Health And Safety Agreement

Part C2: Pricing Data

C2.1 Pricing Instructions

C2.2 Bill Of Quantities

Part C3: Scope Of Work

C3.1 Description Of The Works

C3.2 Engineering

C3.3 Procurement

C3.4 Construction

C3.5 Management

C3.6 Annexes

Part C4: Site Information
C4.1 Geotechnical Investigation

VOLUME 2: Drawings (listed in C3.2 Engineering)

Volume 1 is deemed the "Returnable Documents" which must be returned to the Employer in terms of submitting a tender offer.

F.1.4 Communication and Employer's Agent

Add the following:

Attention is drawn to the fact that verbal information, given by the Employer's Agent during site visits/clarification meetings or at any other time prior to the award of the Contract, will not be regarded as binding on the Employer. Only information issued formally by the Employer in writing to tenderers will be regarded as amending the Tender Documents.

The Employer's Agent is:

Name : Mntomnyama Consulting Managers
Address : Unit 306 Redfern
 : N0.27 Bohmer Road
 : New Germany
 : 3610
Telephone No. : 084 818 9508
Fax No. : 086 567 7165
Email : mava@mntomnyama.co.za
Contact Person : Mava Mngadi

F.2 Tenderer's obligations

F.2.1 Eligibility

Add the following after F.2.1.2:

Only those tenderers who satisfy the following criteria are eligible to submit tenders:

A. Construction Industry Development Board (CIDB) Registration

Only those tenderers who are registered with the CIDB, or are capable of being so prior to the evaluation of submissions, in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25(1B) or 25(7A) of the Construction Industry Development Regulations, for a **6CE or higher** class of construction work, are eligible to have their tenders evaluated.

B. Joint ventures are eligible to submit tenders provided that:

1. Every member of the joint venture is registered with the CIDB;
2. The lead partner has a contractor grading designation in the 6CE class of construction work;
3. The combined contractor grading designation calculated in accordance with the Construction Industry Development Board Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a 6CE class of construction work or a value determined in accordance with Regulation 25(1B) or 25(7A) of the Construction Industry Development Regulations; and
4. Tenders submitted by joint ventures of two or more firms must be accompanied by the document of formation of the joint venture, authenticated by a notary public or other official deputed to witness sworn statements, in which is defines precisely the conditions under which the joint venture will function, its period of duration, the persons authorised to represent and obligate it, the participation of the several firms forming the joint venture, and any other information necessary to permit a full appraisal of its functioning.
5. The Tenderer, if a Joint Venture, must submit a signed JV Agreement with the tender specific to the tendered Contract and showing clearly the percentage contribution of each partner to the Joint Venture. The value of work to be undertaken by each partner must be within their CIDB grading limit.

C. National Treasury Central Supplier Database Registration

Only Tenderers who are eligible to be registered on the National Treasury Central Supplier (CSD) Database and have provided proof of their registration will be eligible to submit a tender offer. Proof of registration must be in the form of the Tenderers CSD registration number. Tenderers who are not registered are not precluded from submitting bids, but must be registered prior to Contract Award.

In the case of Joint Venture partnerships this requirement will apply individually to each party to the Joint Venture.

Tenderers who wish to register as service providers on the CSD can register online at <https://secure.csd.gov.za/Account/Register>.

F.2.7 Clarification Meeting

Add the following:

The arrangement for a the non compulsory virtual clarification meeting is as stated in the Tender Notice and Invitation to Tender is as follows:

Date : 01 November 2022 (Virtual)
Time : 09h00

Tenderers should be represented at the clarification meeting by a person who is suitably qualified and experienced to comprehend the implications of the work involved.

The briefing will be virtual there will be no site visits, however location will be shared for bidders to view the site.

F.2.10.3 This tender is **NOT** subject to contract price adjustments.

F.2.12 Alternative Tender Offers

*Delete the contents of **Clause F.2.12** and replace with the following:*

Alternative tender do not apply

F.2.13 Submitting a Tender Offer

A. *Add the following at the end of F.2.13.3:*

Parts of each tender offer communicated on paper shall be submitted as an **original, plus two (2) copies**.

B. *Add the following after the first sentence of F.2.13.4:*

The tender shall be signed by a person duly authorised to do so. Tenders submitted by joint ventures of two or more firms shall be accompanied by the document of formation of the joint venture, authenticated by a notary public or other official deputed to witness sworn statements, in which is defined precisely the conditions under which the joint venture will function, its period of duration, the persons authorised to represent and obligate it, the participation of the several firms forming the joint venture, and any other information necessary to permit a full appraisal of its functioning.

C. *Add the following after the first sentence of F.2.13.5:*

The employer's address for delivery of tender offers and identification details to be shown on each tender offer package are:

Location of tender box : **Foyer of Ray Nkonyeni Local Municipality Offices**
Physical address : **10 Connor Street, Port Shepstone**
Identification details : **Tender Number - 8/2/RNM0398**
Notice No. 185 OF 2022

Sealed tenders with the Tenderer's name and address and the endorsement "**TENDER NO 8/2/RNM0398 for Notice No 185 of 2022 of the Municipal Vehicle Pound – Ward 17**" on the envelope, must be placed in the appropriate official tender box at the abovementioned address.

F.2.15 Closing Time

- F.2.15.1** *Add the following:*
The closing time for submission of tender offers is **22 November 2022 at 12h00**, as stated in the Tender Notice and Invitation to Tender. Telephonic, telegraphic, telex, facsimile or e-mailed tender offers will not be accepted.

F.2.16 Tender Offer Validity

- F.2.16.1** *Add the following:*
The tender offer validity period is **240 days**.

F.2.17 Clarification of Tender Offer after Submission

Add the following:

A tender may be rejected as non-responsive if the tenderer fails to provide any clarification requested by the employer, or confirmation of registration with CIDB within the time for submission stated in the employer's written request for such clarification or confirmation. A tender may be rejected if the unit rates or lump sums for some of the items in the bills/schedules of quantities are, in the opinion of the Employer, unreasonable or out of proportion, and the tenderer fails, within the time stated in writing by the Employer to justify any specific rates or lump sums (i.e. to provide a financial breakdown of how such rates or sums were obtained) or to adjust the unit rates or lump sums for such items while retaining the total of the prices unchanged.

F.2.23 Certificates

Add the following:

The tenderer is required to submit the following certificates with the tender:

A. Certificate of Contractor Registration (CIDB)

Either certified copy of the Certificate of Contractor Registration issued by the Construction Industry Development Board or of the Application Form for registration in terms of the Construction Industry Development Board Act (Form F006).

Where a tenderer satisfies CIDB contractor grading designation requirements through joint venture formation, such tenderers must submit the Certificates of Contractor Registration in respect of each partner.

B. Tax compliance pin

Tenderers shall be registered and in good standing with the South African Revenue Services (SARS) and shall submit/append documentary evidence/proof in the form of an original or certified copy of valid Tax compliance pin issued by SARS. Failure to provide a valid Tax compliance pin will result in the tender being rejected.

Each party to a Consortium/Joint Venture shall submit a separate Tax compliance pin.

C. Company Registration

Certified Copies of company registration documents.

Each party to a Consortium/Joint Venture shall submit separate company registration documents.

D. Ownership

Proof of Preference Points Claimed

Each party to a Consortium/Joint Venture shall submit separate certified copies in the above regard.

E. BBBEE Certificate

Certified Copies of ID documents of Shareholders/Members/Directors of the business enterprises.

Joint Venture shall submit a consolidated BBBEE Certificate of the new Legal Entity.

F.3 The Employer's Undertakings

F.3.1 Respond to Requests from the Tenderer

- F.3.1.1** Respond to a request for clarification received up to five (5) working days before the tender closing time stated in the Tender Data and notify all tenderers who drew procurement documents.

F.3.4 Opening of Tender Submissions

F.3.4.1 Add the following:

The time and location for opening of the tender offers is:

Time : 12H00, Tuesday 22 November 2022

Location : **Tender Box, Foyer of Ray Nkonyeni Local Municipality Offices, 10 Connor Street, Port Shepstone**

Tenders will be opened immediately after the closing time for tenders at 12H00.

F.3.8 Test for Responsiveness

Add the following after F.3.8.2:

Tenders will be considered non-responsive if:

- the tenderer has not completed and/or signed the Offer portion of C1.1 Form of Offer and Acceptance.
- the tenderer does not comply with the Contractor's CIDB grading designation specified in F.2.1.1 above.
- The tenderer has failed to clarify or submit any supporting documentation within the time for submission stated in the employer's written request.

F.3.11 Evaluation of Tender Offers

F.3.11.1 General

Add the following:

The procedure for the evaluation of responsive tenders is Method 4, where the total number (T_{EV}) of adjudication points achieved = $N_{FO} + N_P + N_Q$ as detailed below.

where:

- N_{FO} is the number of tender evaluation points awarded for the financial offer made in accordance with F.3.11.7
- N_P is the number of tender evaluation points awarded for preferences claimed in accordance with F.3.11.8.
- N_Q is the number of tender evaluation points awarded for quality offered in accordance with F.3.11.9.

F.3.11.3 Method 2: Financial Offer and Preference

Method 4, only, shall apply.

F.3.11.7 Scoring Financial Offers

Add the following:

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

$$N_{FO} = W_1 \times A$$

where:

- N_{FO} is the number of tender evaluation points awarded for the financial offer.
- W_1 is the maximum possible number of tender evaluation points awarded for the financial offer as stated in the Tender Data.
- A is a number calculated using the formula and option described in Table F.1 as stated in the Tender Data.

F.3.11.8. Scoring Preferences

Up to **20 points** (for financial values up to R50 000 000) or 10 points (for financial values over R50 000 000) will be awarded to tenderers who are found to be eligible for the preference claimed.

Points will be awarded to Tenderers for attaining the BBBEE status level of contribution as per the Preferential Procurement Policy Framework Act, 2000: Preferential Procurement Regulations, 2011 as detailed below.

BBBEE Status Level Contributor	Number of Points (80/20 Principle)
1	20
2	18
3	14
4	12
5	8

6	6
7	4
8	2
Non-Compliant Contributor	0

F.3.11.9 Scoring Quality

Score each of the criteria and sub criteria for quality in accordance with the provisions of the Tender Data. Calculate the total number of tender evaluation points for quality using the following formula:

$$NQ = W_2 \times S_o/M_s$$

where:

- S_o is the score for quality allocated to the submission under consideration;
- M_s is the maximum possible score for quality in respect of a submission; and
- W_2 is the maximum possible number of tender evaluation points awarded for the quality as stated in the tender data

QUALITY SCORING CRITERIA

Tenderers are to submit information in respect of the following criteria upon which they will be scored for Quality. Failure to submit the relevant information will/or may result in zero scores.

The quality will comprise scores for the following based on criteria indicated in the respective tender returnable:

- A maximum of **20 points** will be awarded for relevant qualifications and demonstrated experience of the proposed Site Agent.
- A maximum of **20 points** will be awarded for qualifications and demonstrated experience of the proposed Site Foreman.
- A maximum of **30 points** will be awarded for demonstrated experience with respect to undertaking construction of roads projects including concrete, stormwater works and minor building works.
- A maximum of **10 points** will be awarded for ownership of construction plant and equipment.
- A maximum of **20 points** will be awarded for Construction Methodology

Score quality, rejecting all tender offers that fail to score the minimum number of **60% (60 out of 100)** of the points for quality stated in the tender data. Point system for functionality will be as per the table below:

DETAILED BREAKDOWN OF QUALITY POINTS

Details	Score	Max. Points
Criteria 1: Approach		
1.1 Project Method Statement		20
Project Method Statement must include:		
a) The demonstration of the applicant's approach and allocation of resources to achieve task within timeframes		
b) Programme which clearly indicate critical paths and time frame		
c) Construction administration and site management approach		
d) Quality and Time Management		
Points will be scored as follows:		
• Project Approach Method	4	
• Time Frames and Critical Paths	4	
• Activities	4	
• Construction Administration	4	
• Quality Management	4	
• No Response	0	
Note: Verification method will be based on Construction Methodology, Programme Work Quality Plan Health and Safety Plan and Traffic accommodation Plan		

Details	Score	Max. Points
Criteria 2: Applicant's Expertise		
2.1 Site Agent (SA) personnel with at least a minimum qualification of a National Diploma (NQF6) or equivalent in Civil Engineering or built environment		20
If SA has NQF level 6 (National Diploma) or Higher with 10 years' or more experience and has completed similar projects	20	
If SA has NQF level 6 (National Diploma) or Higher with less than 10 years experience but more than 6 years' experience and has completed similar projects	10	
If SA has NQF level 6 (National Diploma) or Higher with less than 6 years experience but more than 4 years' experience in construction of similar projects	5	
If SA does NOT have NQF level 6 (National Diploma) or Higher or does NOT have experience in construction of similar projects regardless of other experience or No response	0	
Note: Verification method will be based on attached CV with Certified Copy of Qualification, with traceable reference. Qualifications obtained from outside South Africa to be accompanied by SAQA certification.		
2.2 Site Foreman (SF) personnel with at least a minimum experience in Civil Project		20
If SF has 10 years or more experience and has completed similar projects	20	
If SF has less than 10 years' experience but more than 6 years experience and has completed similar projects	10	
If SF has less than 6 years' experience but more than 4 years' experience and has completed similar projects	5	
If SF has NOT completed similar projects in past 3 years , regardless of other experience and NO response	0	
Note: Verification method will be based on attached CV With Certified traceable Documents		
Criteria 3: Relevant Experience - The company has successfully completed other projects of similar nature in past five years.		
5 or more Projects in roads projects and Civil works.	30	30
4 Projects in roads projects and Civil works.	24	
3 Projects in roads projects and Civil works.	18	
2 Projects in roads projects and Civil works.	12	
1 Projects in roads projects and Civil works.	6	
0 or No Projects in roads projects and Civil works.	0	
Note: Verification method will be based on attached Appointment letters and Completion Certificates for the same projects		
Criteria 4: Construction Plant - Ownership of construction plant and equipment (Tipper Trucks, Water tankers, Graders, Rollers etc.)		
Grader	3	10
TLB	3	
Tipper Truck	3	
Water Tanker	1	
No response	0	
Note: Verification method will be based on attached Finance Asset Register/Proof of Purchase (Excavator). Natis Documents for TLB, Water Tanker and Tipper Trucks.		
NB: Hired Plant will not be awarded points		

Details	Score	Max. Points
TOTAL EVALUATION POINTS SCORE FOR QUALITY		100

F.3.13 Acceptance of Tender Offer

A. Add the following:

Tender offers will only be accepted if:

- a) the tenderer has in his or her possession an original valid Tax compliance pin issued by the South African Revenue Services or has made arrangements to meet outstanding tax obligations;
- b) the tenderer is registered with the CIDB with an appropriate category of registration; by the tender closing date
- c) the tenderer or any of its directors 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;
- d) the tenderer has not:
 - i) abused the Employer's Supply Chain Management System; or
 - ii) failed to pay municipal rates and taxes or service charges and such rates, taxes and charges are in arrears for more than three months;
 - iii) failed to perform on any previous contract and has been given a written notice to this effect;
- e) the tenderer has completed the Compulsory Enterprise Questionnaire 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.
- f) the tenderer is not in arrears for more than 3 months with the municipal rates and taxes and municipal services charges;

F.3.17 Provide Copies of the Contracts

Add the following:

The number of paper copies of the signed contract to be provided by the employer is one (1) original plus one (1) original duplicate.

T1.2.3 Additional Conditions of Tender

The additional conditions of tender are:

T.1.2.3.1 Compliance with Occupational Health and Safety Act 1993 and Construction Regulations (as amended 2014)

Tenderers are to note the requirements of the Occupational Health and Safety Act No. 85 of 1993 and the Construction Regulations 2014 issued in terms of Section 43 of the Act. The tenderer shall be deemed to have read and fully understood the requirements of the above Act and Regulations and to have allowed for all costs in compliance therewith.

Tenderers are to note that the Contractor is required to ensure that all sub-contractors or others engaged in the performance of the contract also comply with the above requirements.

The Contractor shall prepare and maintain a Health and Safety File in respect of the project, which shall be available for inspection on Site at all times and handed over to the Employer on Final Completion of the project.

The Contractor is required to submit to the Employer the Occupational Health and Safety Agreement (included in C1.4 of the Contract Document) and a letter of good standing from the Compensation Commissioner, or a licensed compensation insurer, within 14 days after the Commencement Date of the contract.

T.1.2.3.2 Eligibility with Respect to Expanded Public Works Programme

This Contract does not qualify for consideration as an Expanded Public Works Programme project.

T.1.2.3.3 Claims Arising after Submission of Tender

No claim for any extras arising out of any doubt or obscurity as to the true intent and meaning of anything shown on the Contract Drawings or contained in the Conditions of Contract, Scope of Work and Pricing Data, will be admitted by the Employer/Employer's Agent after the submission of any tender and the Tenderer shall be deemed to have:

- 1) Inspected the Contract Drawings and read and fully understood the Conditions of Contract.
- 2) Read and fully understood the whole text of the Scope of Work and Pricing Data and thoroughly acquainted himself with the nature of the works proposed and generally of all matters which may influence the Contract.
- 3) Visited the site of the proposed works, carefully examined existing conditions, the means of access to the site, the conditions under which the work is to be done, and acquainted himself with any limitations or restrictions that may be imposed by the Municipal or other Authorities in regard to access and transport of materials and plant to and from the site and made the necessary provisions for any additional costs involved thereby.
- 4) Requested the Employer or his duly authorised agent to make clear the actual requirements of anything shown on the Contract Drawings or anything contained in the Scope of Work and Pricing Data, the exact meaning or interpretation of which is not clearly intelligible to the Tenderer.

Before submission of any tender, the Tenderer should check the number of pages, and if any are found to be missing or duplicated, or the figures or writing indistinct, or if the Pricing Data contain any obvious errors, the tenderer must apply to the Employer/Employer's Agent at once to have the same rectified, as no liability will be admitted by the Employer/Employer's Agent in respect of errors in any tender due to the foregoing.

T.1.2.3.4 Imbalance in Tendered Rates

In the event of tendered rates or lump sums being declared by the Employer to be unacceptable to it because they are either excessively low or high or not in proper balance with other rates or lump sums, the Tenderer may be required to produce evidence and advance arguments in support of the tendered rates or lump sums objected to. If, after submission of such evidence and any further evidence requested, the Employer is still not satisfied with the tendered rates or lump sums objected to, it may request the tenderer to amend these rates and lump sums along the lines indicated by it.

The Tenderer will then have the option to alter and/or amend the rates and lump sums objected to and such other related amounts as are agreed on by the Employer, but this shall be done without altering the Contract Price.

Should the Tenderer fail to amend the Tender in a manner acceptable to the Employer, the Employer may reject the Tender.

T.1.2.3.5 Community Liaison Officer

Democratically elected village members who in turn have representation on the overall Project Steering Committee (PSC) represents the residents being served by the project. The Contractor will be required to liaise through the CLO for any matters to do with the community. The CLO shall be paid an amount of **R270.04 per day** and an additional **R200** per month airtime allowance throughout the contract.

T.1.2.3.6 Labour Intensive Construction/Use of Local Labour

This project does not qualify as EPWP. The contractor is encouraged to make use of local labour in order to promote labour intensive construction, the labour intensive works to be done under the contract is as stated below:

- Packing of gabion stone for gabion walls and mattresses
- Construction of concrete lined drains
- Construction of masonry storm water inlet and outlet structures
- Traffic accommodation
- Installation of road signs
- Installation of guardrails
- General cleaning.

The latest gazetted government labour rate for the Construction industry or the Municipality stipulated rate will to be used in the contract for remuneration of local labour. Currently the Municipality stipulated rates as follows:

- Unskilled Labour : R196.00 per day or R24.50 per hour
- Skilled Labour : R262.48 per day or R32.81 per hour

The Contractor shall be required to fill in all posts for unskilled labourers, from the Ray Nkonyeni and Ugu District Jurisdiction respectively. The target beneficiaries are, but not limited to:

- Unemployed people, of whom, in aggregate, at least 54% women, and 4% should be people with disabilities
- People who have recently been the victims of natural or social disasters
- Retrenched workers
- Young people

T.1.2.3.1 Invalid Tenders

Tenders shall be considered invalid and shall be endorsed and recorded as such in the tender opening record, by the responsible official who opened the tender, in the following circumstances:

- a) if the tender offer is not submitted on the Form of Offer and Acceptance bound into this tender document (form C1.1 Form of Offer and Acceptance);
- b) if the tender is not completed in non-erasable ink;
- c) if the offer has not been signed;
- d) if the offer is signed, but the name of the tenderer is not stated or is indecipherable;

T.1.2.3.2 Negotiations with Preferred Tenderers

The Employer may negotiate the final terms of a contract with tenderers identified through a competitive tendering process as preferred tenderers provided that such negotiation:

- a) does not allow any preferred tenderer a second or unfair opportunity;
- b) is not to the detriment of any other tenderer; and
- c) does not lead to a higher price than the tender as submitted.

Minutes of any such negotiations shall be kept for record purposes.

T.1.2.3.3 Subcontracting

The successful bidder may be expected to subcontract 20% of the works to local sub-contractors as per Ray Nkonyeni Municipality SCM policy.

- a) For contract with a contract value of between R2 million up to R5 million 10%.
- b) For contract with a contract value above 5 million and below R8 million 15%
- c) For contract with a contract value above R8 million and below R15 million 20%
- d) For contract with a contract value above R15 million 30 %

Part T2: Returnable Documents

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T2.1 List Of Returnable Documents	28
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RAY NKONYENI MUNICIPALITY

NOTICE NO: 185 OF 2022

TENDER NO: 8/2/RNM0398

T2.1 LIST OF RETURNABLE DOCUMENTS

The tenderer must complete and return documents A1 to A23; B1 to B3; C1.1 and C2 as listed below as part of his/her tender submission:

SCHEDULE	DESCRIPTION	PAGE
	Returnable documents required for tender evaluation purposes	
Schedule A	Documents incorporated in this tender document that must be completed and signed by all tenderers	
A1	Authority To Sign Documents	31
A2	Letter Of Good Standing With Workmen's Compensation Commissioner	32
A3	Certificate Of Authority For Joint Ventures (only if Tenderer is a JV)	33
A4	Schedule Of Work Carried Out By The Of Tenderer	34
A5	Current And Recent Projects For Ray Nkonyeni Municipality (RNM/MBD5.2)	36
A6	Schedule Of Construction Plant	37
A7	Schedule Of Estimated Monthly Expenditure	39
A78	Schedule Of Estimated Monthly Expenditure	39
A9	Details Of Key Personnel	41
A10	Bbbee Compliance Certificate	43
A11	Pricing Schedule – Firm Prices (Purchases) (RNM/MBD3.1)	42
A12	Pricing Adjustments (Rnm/Mbd3.2)	45
A13	Schedule Of Daywork Rates	46
A14	Record Of Addenda To Tender Documents	48
A15	Company Registration Documents	4
A16	Identity Documents of Shareholders/Directors/Members	48
A17	Joint Venture Disclosure Form	51
A18	Declaration Of Interest (Rnm/Mbd 4)(RNM/MBD4)	59
A19	Declaration Of Bidder's Past Supply Chain Management Practices (Rnm/Mbd 8)	61
A20	Certificate Of Independent Tender Determination (Rnm/Mbd 9)	63
A21	Form Concerning Fulfilment Of The Construction Regulations	66
A22	Declaration Certificate For Local Production And Content For Designated Sectors (Mbd 6.2)	68
A23	Preference Points Claim Form In Terms Of The Preferential Procurement Regulations 2017 (Rnm/Mbd 6.1) (RNM/MBD6.1)	76
Schedule B	Additional Documents to be provided by the Tenderer and attached to his/her tender	
B1	Cidb Contractor Registration Certificate	80
B2	Tax Pin (RNM/MBD2)	81
B3	Preliminary Programme	82
Schedule C	Other Documents that will form part of The Contract	
C1.1	Form Of Offer And Acceptance	84
C1.2	Contract Data	90
C1.3	Performance Guarantee	96
C1.4	Occupational Health And Safety Agreement	99
C2	Pricing Data and Bill of Quantities	101
C3	Scope of Work	179
C4	Site Information	265

**NB: TENDERERS MUST COMPLETE THESE DOCUMENTS / DATA SHEETS / FORMS IN
BLACK INK**

T2.2 RETURNABLE SCHEDULES

RAY NKONYENI MUNICIPALITY
NOTICE NO: 185 OF 2022
TENDER NO: 8/2/RNM0398

A1. AUTHORITY TO SIGN DOCUMENTS

Signatories for firms must establish their authority thereto by attaching a duly signed and dated copy of the relevant resolution of the ⁽¹⁾ Directors/Partners/Members to this form, or by the completion of this form.

RESOLUTION

By resolution of the ⁽¹⁾ Board of Directors / Partners / Members passed at a meeting held on..... (Date),

at (Place)

..... (Name of signatory)

whose signature appears below, has been duly authorised to sign all documents in connection with the Tender for;

TENDER NO: 8/2/RNM0398 and any contract which may arise therefrom on behalf of :-

.....
(Name Of Tenderer In Block Capitals)

SIGNED ON BEHALF OF THE FIRM (Director/Partner/Member):-

1.	<div style="border: 1px solid black; height: 60px; width: 100%;"></div> <p style="text-align: center;">NAME</p>	<div style="border: 1px solid black; height: 60px; width: 100%;"></div> <p style="text-align: center;">SIGNATURE</p>	<div style="border: 1px solid black; height: 60px; width: 100%;"></div> <p style="text-align: center;">DATE</p>
2.	<div style="border: 1px solid black; height: 60px; width: 100%;"></div> <p style="text-align: center;">NAME</p>	<div style="border: 1px solid black; height: 60px; width: 100%;"></div> <p style="text-align: center;">SIGNATURE</p>	<div style="border: 1px solid black; height: 60px; width: 100%;"></div> <p style="text-align: center;">DATE</p>
3.	<div style="border: 1px solid black; height: 60px; width: 100%;"></div> <p style="text-align: center;">NAME</p>	<div style="border: 1px solid black; height: 60px; width: 100%;"></div> <p style="text-align: center;">SIGNATURE</p>	<div style="border: 1px solid black; height: 60px; width: 100%;"></div> <p style="text-align: center;">DATE</p>

SIGNATURE OF AUTHORISED SIGNATORY:

<div style="border: 1px solid black; height: 60px; width: 100%;"></div> <p style="text-align: center;">NAME</p>	<div style="border: 1px solid black; height: 60px; width: 100%;"></div> <p style="text-align: center;">SIGNATURE</p>	<div style="border: 1px solid black; height: 60px; width: 100%;"></div> <p style="text-align: center;">DATE</p>
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Tenderers are to note that failure to comply with this requirement will render their tender invalid.

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**A2. LETTER OF GOOD STANDING WITH WORKMEN'S COMPENSATION
COMMISSIONER**

RAY NKONYENI MUNICIPALITY
NOTICE NO: 185 OF 2022
TENDER NO: 8/2/RNM0398

A3. CERTIFICATE OF AUTHORITY FOR JOINT VENTURES

This Returnable Schedule is to be completed only if Tenderer is a joint venture.

We, the undersigned, are submitting this tender offer in joint venture and hereby authorise

Mr/Ms, authorised signatory of the company, close corporation or partnership..... 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
Lead partner		Signature :..... Name :..... Designation :.....
		Signature :..... Name :..... Designation :.....
		Signature :..... Name :..... Designation :.....
		Signature :..... Name :..... Designation :.....

Note:

A copy of the Joint Venture Agreement showing clearly the percentage contribution of each partner to the Joint Venture shall be appended to this Schedule.

RAY NKONYENI MUNICIPALITY

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A4. SCHEDULE OF WORK CARRIED OUT BY THE OF TENDERER

Tenderers shall insert in the Schedule hereunder details of work successfully carried out by them of a similar nature to that for which their tender is submitted. The tenderer's relevant experience must be supported by appointment letters and completion certificates for at least five (5) projects.

Failure to complete this Schedule and submit both appointment letters and completion certificates will result into tenderer scoring zero (0). It will be taken to indicate that the Tenderer has no experience in this class of work.

COMPLETED CONTRACTS				
Employer (Name, Tel, Fax, Email)	Consulting Engineer (Name, Tel, Fax, Email)	Nature Of Work	Value of Work R(M)	Date Completed
Name:				
Tel :				
Fax :				
Email :				
Name:				
Tel :				
Fax :				
Email :				
Name:				
Tel :				
Fax :				
Email :				
Name:				
Tel :				
Fax :				
Email :				
Name:				
Tel :				
Fax :				
Email :				

SIGNED BY/ON BEHALF OF TENDERER:

NAME

SIGNATURE

DATE

CURRENT CONTRACTS				
Employer (Name, Tel, Fax, Email)	Consulting Engineer (Name, Tel, Fax, Email)	Nature Of Work	Value of Work R(M)	Anticipated Completion Date
Name:				
Tel :				
Fax :				
Email :				
Name:				
Tel :				
Fax :				
Email :				
Name:				
Tel :				
Fax :				
Email :				
Name:				
Tel :				
Fax :				
Email :				
Name:				
Tel :				
Fax :				
Email :				
Name:				
Tel :				
Fax :				
Email :				

If there is insufficient space above, the tenderer may append additional sheets.

Number of additional sheets appended by the tenderer to this Schedule (If nil, enter NIL)

SIGNED BY/ON BEHALF OF TENDERER:

NAME

SIGNATURE

DATE

RAY NKONYENI MUNICIPALITY
NOTICE NO: 185 OF 2022
TENDER NO: 8/2/RNM0398

A5. CURRENT AND RECENT PROJECTS FOR RAY NKONYENI MUNICIPALITY (RNM/MBD5.2)

Tenderers must furnish hereunder details of similar works/service, which they have satisfactorily completed in the past. The information shall include a description of the Works, the Contract value and name of Employer.

CURRENT PROJECTS			
PROJECT NAME	AWARDED AMOUNT	CONTRACT START DATE	ANTICIPATED / ACTUAL COMPLETION DATE
TOTAL AMOUNT OF PROJECTS CURRENTLY UNDERTAKEN FOR RAY NKONYENI MUNICIPALITY			R

SIGNED BY/ON BEHALF OF TENDERER:

NAME

SIGNATURE

DATE

RAY NKONYENI MUNICIPALITY

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A6. SCHEDULE OF CONSTRUCTION PLANT

Tenderers shall state below what construction plant will be available for this Contract. The tenderer shall differentiate, if applicable, between construction plant immediately available and construction plant which will become available by virtue of outstanding orders, and indicate what further construction plant will be acquired or hired for the work should the tenderer be awarded the Contract.

CONSTRUCTION PLANT AVAILABLE				
Description	Size	Capacity	Number	When Available

CONSTRUCTION PLANT THAT WILL BE ACQUIRED / HIRED					
Description	Arrangements Made	Delivery Date	Size	Capacity	Number

If there is insufficient space above, the tenderer may append additional sheets.

Number of additional sheets appended by the tenderer to this Schedule (If nil, enter NIL)

SIGNED BY/ON BEHALF OF TENDERER:

NAME

SIGNATURE

DATE

RAY NKONYENI MUNICIPALITY

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A7. SCHEDULE OF ESTIMATED MONTHLY EXPENDITURE

The tenderer shall state his estimated expenditure indicating the values of each monthly claim in terms of Clause 6.10 of the General Conditions of Contract, which he/she estimates will arise based on his/her preliminary programme and tendered rates, in the table below. ***The total of the monthly amounts shall be equal to the tender sum.***

MONTH	VALUE
1	R
2	R
3	R
4	R
5	R
6	R
7	R
8	R
9	R
10	R
11	R
12	R
SUBTOTAL	R
CONTINGENCIES (10%)	R
SUBTOTAL	R
VAT (15%)	R
TOTAL (INCLUDING VAT @ 15%)	R

SIGNED BY/ON BEHALF OF TENDERER:

NAME

SIGNATURE

DATE

RAY NKONYENI MUNICIPALITY
NOTICE NO: 185 OF 2022
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**A8. SCHEDULE CONTRACT FORM – PAST EXPERIENCE
(RNM/MBD5.1)**

Bidders must furnish hereunder details of similar works / service, which they have satisfactorily completed in the past. The information shall include a description of the works, the contract value and the name of the employer

Employer	Nature of Works	Value of Work	Duration and Completion Date	Employer's Contract No

If there is insufficient space above, the tenderer may append additional sheets.

Number of additional sheets appended by the tenderer to this Schedule (If nil, enter NIL)

SIGNED BY/ON BEHALF OF TENDERER:

NAME

SIGNATURE

DATE

RAY NKONYENI MUNICIPALITY
NOTICE NO: 185 OF 2022
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A9. DETAILS OF KEY PERSONNEL

Tenderers shall set out in the Schedule hereunder details of the experience of the Site Agent and Site Foreman in work of a similar nature to that for which this Tender is submitted.

Failure to complete this Schedule may result in the Tender not being considered.

CONTRACT MANAGER				
NAME:			NQF LEVEL:	
Contract and Client	Nature Of Work	Position Held	Value Of Work	Year Completed

SITE AGENT				
NAME:			NQF LEVEL:	
Contract and Client	Nature Of Work	Position Held	Value Of Work	Year Completed

SITE FOREMAN				
NAME:			NQF LEVEL:	
Contract and Client	Nature Of Work	Position Held	Value Of Work	Year Completed

If there is insufficient space above, the tenderer may append additional sheets.

Number of additional sheets appended by the tenderer to this Schedule (If nil, enter NIL)

Tenderers are to attach (to this page) CV and certified copies of Qualifications and the relevant NQF Qualifications for the following personnel:

- Site Agent
- Site Foreman

SIGNED BY/ON BEHALF OF TENDERER:

NAME

SIGNATURE

DATE

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A10. BBBEE COMPLIANCE CERTIFICATE

Tenderers are required to attach an original or certified copy of their BBBEE compliance certificate on this page or in the case of a joint venture, a joint certificate for the individual firms making up the joint venture, should they wish to claim for scores for BBBEE Compliance.

SIGNED/ON BEHALF OF TENDERER:

NAME

SIGNATURE

DATE

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**A11. PRICING SCHEDULE – FIRM PRICES (PURCHASES)
(RNM/MBD3.1)**

NOTE: ONLY FIRM PRICES WILL BE ACCEPTED. NON-FIRM PRICES (INCLUDING PRICES SUBJECT TO RATES OF EXCHANGE VARIATIONS) WILL NOT BE CONSIDERED

IN CASES WHERE DIFFERENT DELIVERY POINTS INFLUENCE THE PRICING, A SEPARATE PRICING SCHEDULE MUST BE SUBMITTED FOR EACH DELIVERY POINT

Name of Bidder.....	Bid Number.....
Closing Time	Closing Date

SIGNED BY/ON BEHALF OF TENDERER:

NAME

SIGNATURE

DATE

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A12. PRICING ADJUSTMENTS (RNM/MBD3.2)

A NON-FIRM PRICES SUBJECT TO ESCALATION

1. As per GCC 2015 Clause 6.8.2 and detailed on page 92 of the GCC

B PRICES SUBJECT TO RATE OF EXCHANGE VARIATIONS

1. Please furnish full particulars of your financial institution, state the currencies used in the conversion of the prices of the items to South African currency, which portion of the price is subject to rate of exchange variations and the amounts remitted abroad.

PARTICULARS OF FINANCIAL INSTITUTION	ITEM NO	PRICE	CURRENCY	RATE	PORTION OF PRICE SUBJECT TO ROE	AMOUNT IN FOREIGN CURRENCY REMITTED ABROAD
				ZAR=		
				ZAR=		
				ZAR=		
				ZAR=		
				ZAR=		
				ZAR=		

2. Adjustments for rate of exchange variations during the contract period will be calculated by using the average monthly exchange rates as issued by your commercial bank for the periods indicated hereunder: (Proof from bank required)

AVERAGE MONTHLY EXCHANGE RATES FOR THE PERIOD:	DATE DOCUMENTATION MUST BE SUBMITTED TO THIS OFFICE	DATE FROM WHICH NEW CALCULATED PRICES WILL BECOME EFFECTIVE	DATE UNTIL WHICH NEW CALCULATED PRICE WILL BE EFFECTIVE

SIGNED BY/ON BEHALF OF TENDERER:

NAME

SIGNATURE

DATE

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A13. SCHEDULE OF DAYWORK RATES

This Daywork Schedule will be used at the discretion of the Engineer for valuation of extra work which cannot conveniently be valued at rates submitted in the Bill of Quantities. All price rates shall be exclusive of VAT.

The rates entered for labour and materials shall be exclusive of overhead charges and profit, site supervision of staff, insurance, holidays with pay and use and maintenance of small hand tools and non-mechanical plant, travelling allowances, other emoluments and allowances. Provision will be made for the insertion of percentages to cover all these items which are henceforth termed "on-costs", consumable stores, maintenance, etc.

In the case of plant no "on-costs" item is provided. The rate entered shall include any of the above "on-costs" which are pertinent and shall include profit, operator's costs, consumable stores, maintenance, depreciation, etc.

Failure to complete this Schedule may result in the Tender not being considered.

A. LABOUR

Normal Working Time:

1	Labourers	R.....	per hour plus	..... %	"On-Cost"
2	Gangers	R.....	per hour plus	..... %	"On-Cost"
3	Tradesmen	R.....	per hour plus	..... %	"On-Cost"
4	Other				
	(a).....	R.....	per hour plus	.....%	"On-Cost"
	(b).....	R.....	per hour plus	..... %	"On-Cost"
				

Overtime

1	Labourers	R.....	per hour plus	..... %	"On-Cost"
2	Gangers	R.....	per hour plus	..... %	"On-Cost"
3	Tradesmen	R.....	per hour plus	..... %	"On-Cost"
4	Other				
	(a).....	R.....	per hour plus	.....%	"On-Cost"
	(b).....	R.....	per hour plus	..... %	"On-Cost"
				

B. PLANT

DESCRIPTION	TYPE	ESTABLISHMENT AND DISESTABLISHMENT COST	RATE PER HOUR	
			WORKING	STANDING
Trucks and ADTs				
Bulldozers				
Excavators				
Tractor & Trailer				
Loaders				
Graders				
Tractor – Loader – Backhoe				
Water Pumps and Leadings				
Compressor including Hammers and Hoses				
Other				

C. MATERIAL

The Tenderer shall state here the percentage “On-costs” that should be added to the nett cost of materials:

..... %

SIGNED BY/ON BEHALF OF TENDERER:

NAME

SIGNATURE

DATE

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A14. RECORD OF ADDENDA TO TENDER DOCUMENTS

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:

No.	Date	Title or Details
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		

If there is insufficient space above, the tenderer may append additional sheets.

Number of additional sheets appended by the tenderer to this Schedule (If nil, enter NIL)

SIGNED BY/ON BEHALF OF TENDERER:

NAME

SIGNATURE

DATE

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A15. COMPANY REGISTRATION DOCUMENTS

Tenderers are to attach certified copies of company registration documents (eg CK Documents) to this page.

SIGNED BY/ON BEHALF OF TENDERER:

NAME

SIGNATURE

DATE

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A16. IDENTITY DOCUMENTS OF SHAREHOLDERS/DIRECTORS/ MEMBERS

Tenderers are to attach certified copies of ID Documents of Members/Directors to this page.

SIGNED BY/ON BEHALF OF TENDERER:

NAME

SIGNATURE

DATE

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A17. JOINT VENTURE DISCLOSURE FORM

GENERAL

- i) All the information requested must be filled in the spaces provided. If additional space is required, additional sheets may be used and attached to the original documents.
- ii) A copy of the joint venture agreement must be attached to this form, in order to demonstrate the Affirmable, Joint Venture Partner's share in the ownership, control, management responsibilities, risks and profits of the joint venture, the proposed joint venture agreement must include specific details relating to:
 - a. the contributions of capital and equipment
 - b. work items to be performed by the Affirmable Joint Venture Partner's own forces
 - c. work items to be performed under the supervision of the Affirmable Joint Venture Partner.
- iii) Copies of all written agreements between partners concerning the contract must be attached to this form including those, which relate to ownership options and to restrictions/limits regarding ownership and control.
- iv) ABE partners must complete ABE Declaration Affidavits.
- v) The joint venture must be formalised. All pages of the joint venture agreement must be signed by all the parties concerned. A letter/ notice of intention to formalise a joint venture once the contract has been awarded will not be considered.
- vi) Should any of the above not be complied with, the joint venture will be deemed null and void and will be considered non-responsive.

1. JOINT VENTURE PARTICULARS

- a) Name.....
- b) Postal address.....
.....
.....
- c) Physical address
- d) Telephone
- e) Fax

2. IDENTITY OF EACH NON-AFFIRMABLE JOINT VENTURE PARTNER

- 2.1(a) Name of Firm
- Postal Address.....
- Physical Address
- Telephone.....
- Fax.....

Contact person for matters pertaining to Joint Venture Participation Goal requirements:

.....

2.2(a) Name of Firm

Postal Address.....

Physical Address

Telephone.....

Fax.....

Contact person for matters pertaining to Joint Venture Participation Goal requirements:

.....

(Continue as required for further non-Affirmable Joint Venture Partners)

3. IDENTITY OF EACH AFFIRMABLE JOINT VENTURE PARTNER

3.1(a) Name of Firm

Postal Address.....

Physical Address

Telephone.....

Fax.....

Contact person for matters pertaining to Joint Venture Participation Goal requirements:

.....

3.2(a) Name of Firm

Postal Address.....

Physical Address

Telephone.....

Fax.....

Contact person for matters pertaining to Joint Venture Participation Goal requirements:

.....

3.3(a) Name of Firm

Postal Address.....

Physical Address

Telephone

Fax.....

Contact person for matters pertaining to Joint Venture Participation Goal requirements:

.....

4. **BRIEF DESCRIPTION OF THE ROLES OF THE AFFIRMABLE JOINT VENTURE PARTNERS IN THE JOINT VENTURE**

.....

5. **OWNERSHIP OF THE JOINT VENTURE**

a) Affirmable Joint Venture Partner ownership percentage(s)%

b) Non-Affirmable Joint Venture Partner ownership percentage(s)%

c) Affirmable Joint Venture Partner percentages in respect of : *

i) Profit and loss sharing

ii) Initial capital contribution in Rands

(*Brief descriptions and further particulars should be provided to clarify percentages).

iii) Anticipated on-going capital contributions in Rands

iv) Contributions of equipment (specify types, quality, and quantities of equipment) to be provided by each partner.

.....

6. **RECENT CONTRACTS EXECUTED BY PARTNERS IN THEIR OWN RIGHT AS PRIME CONTRACTORS OR AS PARTNERS IN OTHER JOINT VENTURES**

	NON-AFFIRMABLE JOINT VENTURE PARTNERS	PARTNER NAME
a)		
b)		
c)		
d)		
e)		

	AFFIRMABLE JOINT VENTURE PARTNERS	PARTNER NAME
a)		
b)		
c)		
d)		
e)		

7. **CONTROL AND PARTICIPATION IN THE JOINT VENTURE**

(Identify by name and firm those individuals who are, or will be, responsible for, and have authority to engage in the relevant management functions and policy and decision making, indicating any limitations in their authority e.g. co-signature requirements and Rand limits).

a) Joint Venture cheque signing

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

b) Authority to enter into contracts on behalf of the Joint Venture

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

c) Signing, co-signing and/or collateralising of loans

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

d) Acquisition of lines of credit

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

e) Acquisition of performance bonds

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

f) Negotiating and signing labour agreements

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

8. **MANAGEMENT OF CONTRACT PERFORMANCE**

(Fill in the name and firm of the responsible person).

a) Supervision of field operations

.....

b) Major purchasing

.....

c) Estimating

.....

d) Technical management

.....

9. MANAGEMENT AND CONTROL OF JOINT VENTURE

a) Identify the “managing partner”, if any,

.....

b) What authority does each partner have to commit or obligate the other to financial institutions, insurance companies, suppliers, subcontractors and/or other parties participating in the execution of the contemplated works?

.....

c) Describe the management structure for the Joint Venture’s work under the contract

MANAGEMENT FUNCTION / DESIGNATION	NAME	PARTNER*

(Fill in “ex Affirmable Joint Venture Partner” or “ex non-Affirmable Joint Venture Partner”.)

10. PERSONNEL

- a) State the approximate number of operative personnel (by trade/function/discipline) needed to perform the Joint Venture work under the Contract.

TRADE/FUNCTION/ DISCIPLINE	NUMBER EX AFFIRMABLE JOINT VENTURE PARTNERS	NUMBER EX NON- AFFIRMABLE JOINT VENTURE PARTNERS

(Fill in “ex Affirmable Joint Venture Partner” or “ex non-Affirmable Joint Venture Partner”).

- b) Number of operative personnel to be employed on the Contract who are currently in the employ of partners.

(i) Number currently employed by Affirmable Joint Venture Partners

.....

(ii) Number currently employed by the Joint Venture

.....

- c) Number of operative personnel who are not currently in the employ of the respective partner and will be engaged on the project by the Joint Venture

.....

- d) Name of individual(s) who will be responsible for hiring Joint Venture employees

.....

.....

- e) Name of partner who will be responsible for the preparation of Joint Venture payrolls

.....

.....

11. CONTROL AND STRUCTURE OF THE JOINT VENTURE

Briefly describe the manner in which the Joint Venture is structured and controlled.

.....

.....

.....

.....

.....
The undersigned warrants that he/she is duly authorised to sign this Joint Venture Disclosure Form and affirms that the foregoing statements are true and correct and include all material information necessary to identify and explain the terms and operations of the Joint Venture and the intended participation of each partner in the undertaking.

The undersigned further covenants and agrees to provide the Employer with complete and accurate information regarding actual Joint Venture work and the payment therefore, and any proposed changes in any provisions of the Joint Venture agreement, and to permit the audit and examination of the books, records and files of the Joint Venture, or those of each partner relevant to the Joint Venture, by duly authorised representatives of the Employer.

Signature

Duly authorised to sign on behalf of

Name

Address

Telephone.....

Date

Signature

Duly authorised to sign on behalf of

Name

Address

Telephone.....

Date

Signature

Duly authorised to sign on behalf of

Name

Address

Telephone.....

Date

Signature

Duly authorised to sign on behalf of

Name

Address

Telephone

Date

(Continue as necessary)

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A18. DECLARATION OF INTEREST

(RNM/MBD 4)

(Please circle the applicable answer)

1. No bid will be accepted from persons in the service of the state*. Any person, having a kinship with persons in the service of the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid. In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to persons in service of the state, it is required that the bidder or their authorised representative declare their position in relation to the evaluating/adjudicating authority and/or take an oath declaring his/her interest.

2. **In order to give effect to the above, the following questionnaire must be completed and submitted with the tender.**

2.1. Full Name of Tenderer or his or her representative:

2.2. Identity Number:

2.3. Position occupied in the Company (director, trustee, shareholder², member):

2.4. Registration number of company, enterprise, close corporation, partnership agreement or trust:

.....

2.5. Tax Reference Number:

2.6. VAT Registration Number:

* SCM Regulations: "in the service of the state" means to be –

- (a) a member of –
 - (i) any municipal council;
 - (ii) any provincial legislature; or
 - (iii) the national Assembly or the national Council of provinces;
- (b) a member of the board of directors of any municipal entity;
- (c) an official of any municipality or municipal entity;
- (d) an employee of any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No.1 of 1999);
- (e) a member of the accounting authority of any national or provincial public entity; or
- (f) an employee of Parliament or a provincial legislature.

2.7. Do you, have any relationship (family, friend, other) with persons in the service of the state and who may be involved with the evaluation and or adjudication of this bid? **YES / NO**

2.7.1. If so, furnish particulars:

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

2.8. Are you, aware of any relationship (family, friend, other) between a bidder and any persons in the service of the state who may be involved with the evaluation and or adjudication of this bid? **YES / NO**

2.8.1. If so, furnish particulars:

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

2.9. Did Are any of the company's directors, managers, principle shareholders or stakeholders in service of the state? **YES / NO**

2.9.1. If so, furnish particulars:

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

Are any spouse, child or parent of the company's directors, managers, principle shareholders or stakeholders in service of the state? **YES / NO**

2.9.2. If so, furnish particulars:

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

3. CERTIFICATION

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

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

[Empty box for signature]

SIGNATURE

[Empty box for date]

DATE

[Empty box for position]

POSITION

[Empty box for name of bidder]

NAME OF BIDDER

RAY NKONYENI MUNICIPALITY
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TENDER NO: 8/2/RNM0398

A19. DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES (RNM/MBD 8)

- 1 This Municipal Bidding Document must form part of all bids invited.
- 2 It serves as a declaration to be used by municipalities and municipal entities in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.
- 3 The bid of any bidder may be rejected if that bidder, or any of its directors have:
 - a) abused the municipality's / municipal entity's supply chain management system or committed any improper conduct in relation to such system;
 - b) been convicted for fraud or corruption during the past five years;
 - c) willfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years; or
 - d) been listed in the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004).
- 4 In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

Item	Question	Yes	No
4.1	Is the bidder or any of its directors listed on the National Treasury's Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector? (Companies or persons who are listed on this Database were informed in writing of this restriction by the Accounting Officer/Authority of the institution that imposed the restriction after the <i>audi alteram partem</i> rule was applied). The Database of Restricted Suppliers now resides on the National Treasury's website (www.treasury.gov.za) and can be accessed by clicking on its link at the bottom of the home page.	<input type="checkbox"/>	<input type="checkbox"/>
4.1.1	If so, furnish particulars:		
4.2	Is the bidder or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)? The Register for Tender Defaulters can be accessed on the National Treasury's website (www.treasury.gov.za) by clicking on its link at the bottom of the home page.	<input type="checkbox"/>	<input type="checkbox"/>
4.2.1	If so, furnish particulars:		
4.3	Was the bidder or any of its directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years?	<input type="checkbox"/>	<input type="checkbox"/>
4.3.1	If so, furnish particulars:		

Item	Question	Yes	No
4.4	Does the bidder or any of its directors owe any municipal rates and taxes or municipal charges to the municipality / municipal entity, or to any other municipality / municipal entity, that is in arrears for more than three months?	<input type="checkbox"/>	<input type="checkbox"/>
4.4.1	If so, furnish particulars:		
4.5	Was any contract between the bidder and the municipality / municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	<input type="checkbox"/>	<input type="checkbox"/>
4.5.1	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

POSITION

NAME OF BIDDER

RAY NKONYENI MUNICIPALITY

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A20. CERTIFICATE OF INDEPENDENT TENDER DETERMINATION (RNM/MBD 9)

1. This Municipal Bidding Document (MBD) must form part of all bids¹ invited.
2. Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).² Collusive bidding is a *pe se* prohibition meaning that it cannot be justified under any grounds.
3. Municipal Supply Regulation 38 (1) prescribes that a supply chain management policy must provide measures for the combating of abuse of the supply chain management system, and must enable the accounting officer, among others, to:
 - (a) take all reasonable steps to prevent such abuse;
 - (b) reject the bid of any bidder if that bidder or any of its directors has abused the supply chain management system of the municipality or municipal entity or has committed any improper conduct in relation to such system; and
 - (c) cancel a contract awarded to a person if the person committed any corrupt or fraudulent act during the bidding process or the execution of the contract.
4. This MBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.
5. In order to give effect to the above, the attached Certificate of Bid Determination (MBD 9) must be completed and submitted with the bid:

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

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

CERTIFICATE OF INDEPENDENT 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/ Municipality Entity)

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

I certify, on behalf ofthat:
(Name of Bidder)

1. I have read and I understand the contents of this Certificate;
2. I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect;
3. I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;
4. Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign, the bid, on behalf of the bidder;
5. For the purposes of this Certificate and the accompanying bid, I understand that the word "competitor" shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:
 - (a) has been requested to submit a bid in response to this bid invitation;
 - (b) could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
 - (c) provides the same goods and services as the bidder and/or is in the same line of business as the bidder.
6. The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium³ will not be construed as collusive bidding.
7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
 - (a) prices;
 - (b) geographical area where product or service will be rendered (market allocation);
 - (c) methods, factors or formulas used to calculate prices;
 - (d) the intention or decision to submit or not to submit, a bid;
 - (e) the submission of a bid which does not meet the specifications and conditions of the bid; or

-
- (f) bidding with the intention not to win the bid.
8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.
9. The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
10. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No. 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No. 12 of 2004 or any other applicable legislation.

SIGNATURE

DATE

POSITION

NAME OF BIDDER

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

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A21. FORM CONCERNING FULFILMENT OF THE CONSTRUCTION REGULATIONS

In terms of regulation 4(3) of the Construction Regulations, 2014 (hereinafter referred to as the Regulations), promulgated 07 February 2014 in terms of Section 43 of the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) the Employer shall not appoint a contractor to perform construction work unless the Contractor can satisfy the Employer that his/her firm has the necessary competencies and resources to carry out the work safely and has allowed adequately in his/her tender for the due fulfilment of all the applicable requirements of the Act and the Regulations.

1. I confirm that I am fully conversant with the Regulations and that my company has (or will acquire/procure) the necessary competencies and resources to timeously, safely and successfully comply with all of the requirements of the Regulations. (Tick)

YES	<input type="checkbox"/>
NO	<input type="checkbox"/>

2. Proposed approach to achieve compliance with the Regulations (Tick)

Own resources, competent in terms of the Regulations (refer to 3 below)	<input type="checkbox"/>
Own resources, still to be hired and/or trained (until competency is achieved)	<input type="checkbox"/>
Specialist subcontract resources (competent) - specify:	<input type="checkbox"/>

3. Provide details of proposed key persons, competent in terms of the Regulations, who will form part of the Contract team as specified in the Regulations (CVs to be attached):

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

4. Provide details of proposed training (if any) that will be undergone:

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

5. Potential key risks identified and measures for addressing risks:

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

6. I have fully included in my tendered rates and prices (in the appropriate payment items provided in the Schedule of Quantities) for all resources, actions, training and any other costs required for the due fulfilment of the Regulations for the duration of the construction and defects repair period. (Tick)

YES	<input type="checkbox"/>
NO	<input type="checkbox"/>

SIGNED BY/ON BEHALF OF TENDERER:

NAME

SIGNATURE

DATE

RAY NKONYENI MUNICIPALITY

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A22. DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS (MBD 6.2)

This Municipal Tendering Document (MBD) must form part of all tenders invited. It contains general information and serves as a declaration form for local content (local production and local content are used interchangeably).

Before completing this declaration, bidders must study the General Conditions, Definitions, Directives applicable in respect of Local Content as prescribed in the Preferential Procurement Regulations, 2017 and the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:2011 (Edition 1) and the Guidance on the Calculation of Local Content together with the Local Content Declaration Templates [Annex C (Local Content Declaration: Summary Schedule), D (Imported Content Declaration: Supporting Schedule to Annex C) and E (Local Content Declaration: Supporting Schedule to Annex C)].

1. General Conditions

- 1.1. Preferential Procurement Regulations, 2017 (Regulation 9) make provision for the promotion of local production and content.
- 1.2. Regulation 9.(1) prescribes that in the case of designated sectors, where in the award of tenders local production and content is of critical importance, such tenders must be advertised with the specific tendering condition that only locally produced goods, services or works or locally manufactured goods, with a stipulated minimum threshold for local production and content will be considered.
- 1.3. Where necessary, for tenders referred to in paragraphs 1.2 above, a two stage tendering process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage price and B-BBEE.
- 1.4. A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.
- 1.5. The local content (LC) expressed as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 2011 as follows:

$$LC = [1 - x / y] * 100$$

Where

x imported content in Rand
y tender price in Rand excluding value added tax (VAT)

Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by the South African Reserve Bank (SARB) at 12:00 on the date of advertisement of the bid as required in paragraph 4.1 below.

- 1.6. A bid may be disqualified if this Declaration Certificate and the Annex C (Local Content Declaration: Summary Schedule) are not submitted as part of the bid documentation.

2. Definitions

- 2.1. **“bid”** includes written price quotations, advertised competitive bids or proposals;
- 2.2. **“bid price”** price offered by the bidder, excluding value added tax (VAT);
- 2.3. **“contract”** means the agreement that results from the acceptance of a bid by an organ of state;
- 2.4. **“designated sector”** means a sector, sub-sector or industry that has been designated by the Department of Trade and Industry in line with national development and industrial policies for local production, where only locally produced services, works or goods or locally manufactured goods meet the stipulated minimum threshold for local production and content;

- 2.5. **“duly sign”** means a Declaration Certificate for Local Content that has been signed by the Chief Financial Officer or other legally responsible person nominated in writing by the Chief Executive, or senior member / person with management responsibility(close corporation, partnership or individual).
- 2.6. **“imported content”** means that portion of the bid price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or its subcontractors) and which costs are inclusive of the costs abroad (this includes labour and intellectual property costs), plus freight and other direct importation costs, such as landing costs, dock duties, import duty, sales duty or other similar tax or duty at the South African port of entry;
- 2.7. **“local content”** means that portion of the bid price which is not included in the imported content, provided that local manufacture does take place;
- 2.8. **“stipulated minimum threshold”** means that portion of local production and content as determined by the Department of Trade and Industry; and
- 2.9. **“sub-contract”** means the primary contractor’s assigning, leasing, making out work to, or employing another person to support such primary contractor in the execution of part of a project in terms of the contract.
3. **The stipulated minimum threshold(s) for local production and content (refer to Annex A of SATS 1286:2011) for this bid is/are as follows:**

Description of services, works or goods	Stipulated minimum threshold
Valve Products	70%
Office Furniture	85%
Reinforcement steel bars	100%
Steel Frames	100%
Electric Cables	100%
Gabions	100%
Cement	100%

4. Does any portion of the services, works or goods offered have any imported content?
(Tick applicable box)

YES	<input type="checkbox"/>	NO	<input type="checkbox"/>
-----	--------------------------	----	--------------------------

- 4.1 If yes, the rate(s) of exchange to be used in this bid to calculate the local content as prescribed in paragraph 1.5 of the general conditions must be the rate(s) published by the SARB for the specific currency at 12:00 on the date of advertisement of the bid.

The relevant rates of exchange information is accessible on www.reservebank.co.za.

Indicate the rate(s) of exchange against the appropriate currency in the table below:

Currency	Rates of exchange
US Dollar	
Pound Sterling	
Euro	
Yen	
Other	

NB: Tenderers must submit proof of the SARB rate(s) of exchange used.

5. Where, after the award of a bid, challenges are experienced in meeting the stipulated minimum threshold for local content the Department of Trade and Industry (dti) must be informed accordingly in order for the dti to verify and in consultation with the Accounting Officer / Accounting Authority provide directives in this regard.

LOCAL CONTENT DECLARATION
(REFER TO ANNEX B OF SATS 1286:2011)

LOCAL CONTENT DECLARATION BY CHIEF FINANCIAL OFFICER OR OTHER LEGALLY RESPONSIBLE PERSON NOMINATED IN WRITING BY THE CHIEF EXECUTIVE OR SENIOR MEMBER/PERSON WITH MANAGEMENT RESPONSIBILITY (CLOSE CORPORATION, PARTNERSHIP OR INDIVIDUAL)

IN RESPECT OF TENDER No.

ISSUED BY: (Ray Nkonyeni Municipality):

NB

- 1 The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the bidder.
- 2 Guidance on the Calculation of Local Content together with Local Content Declaration Templates (Annex C, D and E) is accessible on http://www.thedti.gov.za/industrial_development/ip.jsp. Bidders should first complete Declaration D. After completing Declaration D, bidders should complete Declaration E and then consolidate the information on Declaration C. **Declaration C should be submitted with the bid documentation at the closing date and time of the bid in order to substantiate the declaration made in paragraph (c) below.** Declarations D and E should be kept by the bidders for verification purposes for a period of at least 5 years. The successful bidder is required to continuously update Declarations C, D and E with the actual values for the duration of the contract.

I, the undersigned, (full names),

do hereby declare, in my capacity as.....

of(name of Tenderer entity),
the following:

- (a) The facts contained herein are within my own personal knowledge.
- (b) I have satisfied myself that:
 - (i) the goods/services/works to be delivered in terms of the above-specified bid comply with the minimum local content requirements as specified in the bid, and as measured in terms of SATS 1286:2011;
- (c) The local content percentages (%) indicated below has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E which has been consolidated in Declaration C;

Bid price, excluding VAT (y)	R
Imported content (x), as calculated in terms of SATS 1286:2011	R
Stipulated minimum threshold for Local content (paragraph 3 above)	
Local content % as calculated in terms of SATS 1286:2011	

If the bid is for more than one product, the local content percentages for each product contained in Declaration C shall be used instead of the table above. The local content percentages for each product has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E.

- (d) I accept that the Ray Nkonyeni Municipality has the right to request that the local content be verified in terms of the requirements of SATS 1286:2011.

(e) I understand that the awarding of the bid is dependent on the accuracy of the information furnished in this application. I also understand that the submission of incorrect data, or data that are not verifiable as described in SATS 1286:2011, may result in the Ray Nkonyeni Municipality imposing any or all of the remedies as provided for in Regulation 13 of the Preferential Procurement Regulations, 2011 promulgated under the Preferential Policy Framework Act (PPPFA), 2000 (Act No. 5 of 2000).

SIGNATURE:

DATE:.....

WITNESS No. 1

DATE:

WITNESS No. 2

DATE:

Annex C

Local Content Declaration - Summary Schedule

Note: VAT to be excluded from all calculations

(C1) Tender No.
(C2) Tender description:
(C3) Designated product(s)
(C4) Tender Authority:
(C5) Tendering Entity name:
(C6) Tender Exchange Rate:
(C7) Specified local content %

Pula EU GBP

Calculation of local content

Tender summary

Tender item no's	List of items	Tender price - each (excl VAT)	Exempted imported value	Tender value net of exempted imported content	Imported value	Local value	Local content % (per item)	Tender Qty	Total tender value	Total exempted imported content	Total Imported content
(C8)	(C9)	(C10)	(C11)	(C12)	(C13)	(C14)	(C15)	(C16)	(C17)	(C18)	(C19)

(C20) Total tender value R -

(C21) Total Exempt imported content R -

(C22) Total Tender value net of exempt imported content R -

(C23) Total Imported content R -

(C24) Total local content R -

(C25) Average local content % of tender

Signature of tenderer from Annex B

Date:

Annex D											SATS 1286.2011	
Imported Content Declaration - Supporting Schedule to Annex C												
(D1) Tender No.						Note: VAT to be excluded from all calculations						
(D2) Tender description:												
(D3) Designated Products:												
(D4) Tender Authority:												
(D5) Tendering Entity name:												
(D6) Tender Exchange Rate:	Pula		EU		GBP							
A. Exempted imported content				Calculation of imported content						Summary		
Tender item no's	Description of imported content	Local supplier	Overseas Supplier	Forign currency value as per Commercial Invoice	Tender Exchange Rate	Local value of imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT	Tender Qty	Exempted imported value	
(D7)	(D8)	(D9)	(D10)	(D11)	(D12)	(D13)	(D14)	(D15)	(D16)	(D17)	(D18)	
										(D19) Total exempt imported value R -		
										This total must correspond with Annex C - C 21		
B. Imported directly by the Tenderer				Calculation of imported content						Summary		
Tender item no's	Description of imported content	Unit of measure	Overseas Supplier	Forign currency value as per Commercial Invoice	Tender Rate of Exchange	Local value of imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT	Tender Qty	Total imported value	
(D20)	(D21)	(D22)	(D23)	(D24)	(D25)	(D26)	(D27)	(D28)	(D29)	(D30)	(D31)	
										(D32) Total imported value by tenderer R -		
C. Imported by a 3rd party and supplied to the Tenderer				Calculation of imported content						Summary		
Description of imported content	Unit of measure	Local supplier	Overseas Supplier	Forign currency value as per Commercial Invoice	Tender Rate of Exchange	Local value of imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT	Quantity imported	Total imported value	
(D33)	(D34)	(D35)	(D36)	(D37)	(D38)	(D39)	(D40)	(D41)	(D42)	(D43)	(D44)	
										(D45) Total imported value by 3rd party R -		
D. Other foreign currency payments			Calculation of foreign currency payments					Summary of payments				
Type of payment	Local supplier making the payment	Overseas beneficiary	Foreign currency value paid	Tender Rate of Exchange								
(D46)	(D47)	(D48)	(D49)	(D50)								
										(D52) Total of foreign currency payments declared by tenderer and/or 3rd party		
Signature of tenderer from Annex B										(D53) Total of imported content & foreign currency payments - (D32), (D45) & (D52) above R -		
Date:										This total must correspond with Annex C - C 23		

				SATS 1286.2011
Annex E				
Local Content Declaration - Supporting Schedule to Annex C				
(E1)	Tender No.		Note: VAT to be excluded from all calculations	
(E2)	Tender description:			
(E3)	Designated products:			
(E4)	Tender Authority:			
(E5)	Tendering Entity name:			
	Local Products (Goods, Services and Works)	Description of items purchased (E6)	Local suppliers (E7)	Value (E8)
		(E9) Total local products (Goods, Services and Works)	R	-
(E10)	Manpower costs	(Tenderer's manpower cost)	R	-
(E11)	Factory overheads	(Rental, depreciation & amortisation, utility costs, consumables etc.)	R	-
(E12)	Administration overheads and mark-up	(Marketing, insurance, financing, interest etc.)	R	-
			(E13) Total local content	R -
			This total must correspond with Annex C - C24	
	<u>Signature of tenderer from Annex B</u>			
	Date:			

RAY NKONYENI MUNICIPALITY
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A23. PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2017 (RNM/MBD 6.1)

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

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

1. GENERAL CONDITIONS

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

- the 80/20 system for acquisition of goods or services for Rand value equal to or above R30 000 and up to R50 000 000 (all applicable taxes included); and
- the 90/10 system for acquisition of goods or services with a Rand value above R50 000 000 (all applicable taxes included).

1.2 The value of this tender is estimated to exceed R50 000 000 (all applicable taxes included) and therefore the 90/10 system shall be applicable.

1.3 Preference points for this tender shall be awarded for:

- (a) Price; and
- (b) B-BBEE Status Level of Contribution.

1.3.1 The maximum points for this tender are allocated as follows:

	POINTS
1.3.1.1 PRICE	90
1.3.1.2 B-BBEE STATUS LEVEL OF CONTRIBUTION	10
Total points for Price and B-BBEE must not exceed	100

1.4 Failure on the part of a Tenderer to fill in and/or to sign this form and submit a B-BBEE Verification Certificate from a Verification Agency accredited by the South African Accreditation System (SANAS) or a Registered Auditor approved by the Independent Regulatory Board of Auditors (IRBA) or an Accounting Officer as contemplated in the Close Corporation Act (CCA) together with the tender, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.

1.5. The purchaser 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 purchaser.

2. DEFINITIONS

- (a) **“B-BBEE”** means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;
- (b) **“B-BBEE status level of contributor”** means the B-BBEE status of an entity in terms of a code of good practice on black economic empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;
- (c) **“bid”** means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of goods or services, through price quotations, advertised

competitive bidding processes or proposals;

- (d) **“Broad-Based Black Economic Empowerment Act”** means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- (e) **“EME”** means an Exempted Micro Enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
- (f) **“functionality”** means the ability of a tenderer to provide goods or services in accordance with specifications as set out in the tender documents.
- (g) **“prices”** includes all applicable taxes less all unconditional discounts;
- (h) **“proof of B-BBEE status level of contributor”** means:
 - 1) B-BBEE Status level certificate issued by an authorized body or person;
 - 2) A sworn affidavit as prescribed by the B-BBEE Codes of Good Practice;
 - 3) Any other requirement prescribed in terms of the B-BBEE Act;
- (i) **“QSE”** means a qualifying small business enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
- (j) **“rand value”** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;

3. POINTS AWARDED FOR PRICE

3.1 THE 80/20 PREFERENCE POINT SYSTEMS

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

80/20 or 90/10

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

Where

- P_s = Points scored for comparative price of tender under consideration
- P_t = Comparative price of tender under consideration
- P_{min} = Comparative price of lowest acceptable tender

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

- 4.1 In terms of Regulation 5 (2) and 6 (2) of the Preferential Procurement Regulations, preference points must be awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the table below:

B-BBEE Status Level of Contributor	Number of points (90/10 system)	Number of points (80/20 system)
1	10	20
2	9	18

3	8	16
4	5	12
5	4	8
6	3	6
7	2	4
8	1	2
Non-compliant contributor	0	0

5. BID DECLARATION

5.1 Bidders who claim points in respect of B-BBEE Status Level of Contribution must complete the following:

6. B-BBEE STATUS LEVEL OF CONTRIBUTOR CLAIMED IN TERMS OF PARAGRAPHS 1.4 AND 4.1

6.1 B-BBEE Status Level of Contributor: . =(maximum of 10 or 20 points)
(Points claimed in respect of paragraph 7.1 must be in accordance with the table reflected in paragraph 4.1 and must be substantiated by relevant proof of B-BBEE status level of contributor.

7. SUB-CONTRACTING

7.1 The bidders shall make provision to subcontract at least 15% of the Works, in rand value of the Project, to local subcontractors from Ray Nkonyeni Municipality and or Ugu District Municipality Jurisdiction.

8. DECLARATION WITH REGARD TO COMPANY/FIRM

8.1 Name of company/firm:.....

8.2 VAT registration number:.....

8.3 Company registration number:.....

8.4 TYPE OF COMPANY/ FIRM

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

[TICK APPLICABLE BOX]

8.5 DESCRIBE PRINCIPAL BUSINESS ACTIVITIES

.....

8.6 COMPANY CLASSIFICATION

- Manufacturer
- Supplier
- Professional service provider
- Other service providers, e.g. transporter, etc.

[TICK APPLICABLE BOX]

- 8.7 Total number of years the company/firm has been in business:.....
- 8.8 I/we, the undersigned, who is / are duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBE status level of contributor indicated in paragraphs 1.4 and 6.1 of the foregoing certificate, qualifies the company/ firm for the preference(s) shown and I / we acknowledge that:
- i) The information furnished is true and correct;
 - ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
 - iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 6.1, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
 - iv) If the B-BBEE status level of contributor has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –
 - (a) disqualify the person from the bidding process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
 - (d) recommend that the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted by the National Treasury from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
 - (e) forward the matter for criminal prosecution.

WITNESSES
1.
2.

.....
SIGNATURE(S) OF BIDDERS(S)
DATE:
ADDRESS
.....
.....

RAY NKONYENI MUNICIPALITY
NOTICE NO: 185 OF 2022
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B1. CIDB CONTRACTOR REGISTRATION CERTIFICATE

A Certificate of Contractor's Registration issued by the Construction Industry Development Board (CIDB) shall be attached to this page.

Where a tenderer satisfies CIDB Contractor grading designation requirements through joint venture formation, such tenderers must submit the Certificates of Contractor Registration in respect of each partner.

Alternatively furnish the CIDB registration no. and details in the space provided. This information will be verified with the CIDB via the CIDB website. It is the tenderer/contractor's responsibility to ensure that their details are displayed on the CIDB website. If in joint venture, details of all members require to be furnished.

Name of Contractor or JV Member	CIDB registration No.	Category and class of registration, e.g. 6CE

My/Our failure to submit the certificate(s) or furnish the required details, with my / our tender document will lead to the conclusion that I am / we are not registered with the CIDB and therefore not eligible to tender.

SIGNED BY/ON BEHALF OF TENDERER:

NAME

SIGNATURE

DATE

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B2. TAX PIN REQUIREMENTS

(RNM/MBD2)

It is a condition of bid that the taxes of the successful bidder must be in order, or that satisfactory arrangements have been made with South Africa Revenue Services (SARS) to meet the bidder's tax obligation.

In order to meet the requirements bidders are required to complete in full the attached TCP1 "Application for a Tax compliance pin" and submit it to any SARS branch office nationally. The Tax compliance pin Requirements are also applicable to foreign bidders / individuals who wish to submit bids.

SARS will then furnish the bidder with a Tax compliance pin that will be valid for a period of 1 (one) year from date of approval / issue.

The Certified copy of a tax certificate with a pin number must be submitted together with the bid.

In the bids where consortia / joint ventures / sub-contractors are involved, each party must submit a separate Tax compliance pin.

Copies of the TCP "Application for a "Tax compliance pin" forms are available from any SARS branch office nationally or on the website www.sars.gov/za

Applications for the Tax compliance pin may also be made via eFiling. In order to use this provision, taxpayers will need to register with SARS as eFilers through the website www.sars.gov.za.

SIGNED BY/ON BEHALF OF TENDERER:

NAME

SIGNATURE

DATE

RAY NKONYENI MUNICIPALITY
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B3. PRELIMINARY PROGRAMME

The tenderer shall attach a preliminary programme, to this page.

This programme shall be in the form of a bar chart (Gantt chart) or similar acceptable time/activity form reflecting the proposed sequence and rate of progress of the various activities and the quantities that will be carried out every week under each of the elements, comprising the work for this contract. The programme shall also indicate the point where the tenderer intends to commence work operations and the direction in which the work will proceed. The working hours shall be indicated.

The tenderer shall also take into account the additional requirements stated in C3.5.1.3 Planning and Programming on page 248 when drawing up the programme.

Details of the preliminary programme shall be appended to this Schedule.

Number of sheets appended by the tenderer to this Schedule (If nil, enter NIL)

SIGNED BY/ON BEHALF OF TENDERER:

NAME

SIGNATURE

DATE

Part C1: Agreements and Contract Data

	<u>Page</u>
C1.1 Form Of Offer And Acceptance	84
C1.2 Contract Data	90
C1.3 Performance Guarantee	96
C1.4 Occupational Health And Safety Agreement	99

RAY NKONYENI MUNICIPALITY
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C1.1. Form of Offer and Acceptance

Offer

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract in respect of the following works:

TENDER NO:8/2/RNM0398 - CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND-WARD 17

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

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

The Contract shall be completed within Months of the Commencement Date.

THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VALUE ADDED TAX IS:

.....
..... RAND (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 the Conditions of Contract identified in the Contract Data.

SIGNED ON BEHALF OF/BY THE TENDERER:

<input type="text"/>	<input type="text"/>
NAME	SIGNATURE
<input type="text"/>	<input type="text"/>
CAPACITY	DATE

Name and address of Organisation:

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

SIGNED BY WITNESS:

<input type="text"/>	<input type="text"/>	<input type="text"/>
NAME	SIGNATURE	DATE

Acceptance

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

The terms of the contract are contained in:

- Part C1: Agreements and Contract Data (which includes this Agreement)
- Part C2: Pricing Data
- Part C3: Scope Of Work
- Part C4: Site Information

and drawings and documents or parts thereof, which may be incorporated by reference into 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 Returnable Documents 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 which must be duly signed by the authorised representative(s) of both parties.

The tenderer shall within two weeks of receiving a completed copy of this Agreement, including the Schedule of Deviations (if any), or when or just after this Agreement comes into effect, contact the employer's agent (whose details are given in the Contract Data) to arrange the delivery of any bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the Conditions of Contract identified in the Contract Data. Failure to fulfil any of 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 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.

SIGNED ON BEHALF OF/BY THE EMPLOYER:

NAME

SIGNATURE

CAPACITY

DATE

RAY NKONYENI MUNICIPALITY

No 10 Conner Street

Port Shepstone

4240

SIGNED BY WITNESS:

NAME

SIGNATURE

DATE

Schedule of Deviations

Notes:

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

1. Subject

Details

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2. Subject

Details

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3. Subject

Details

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4. Subject

Details

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By the duly authorised representatives signing this Schedule of Deviations, the Employer and the Tenderer agree to and accept the foregoing Schedule of Deviations as the only deviations from and amendments to the documents listed in the Tender Data and addenda thereto as listed in the Returnable Documents, 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.

SIGNED ON BEHALF OF/BY THE TENDERER:

NAME

SIGNATURE

CAPACITY

DATE

SIGNED BY WITNESS:

NAME

SIGNATURE

DATE

SIGNED ON BEHALF OF/BY RAY NKONYENI MUNICIPALITY:

NAME

SIGNATURE

CAPACITY

DATE

SIGNED BY WITNESS:

NAME

SIGNATURE

DATE

RAY NKONYENI MUNICIPALITY
NOTICE NO: 185 OF 2022
TENDER NO: 8/2/RNM0398

CONFIRMATION OF RECEIPT

The Tenderer, (now Contractor), identified in the Offer part of this Agreement hereby confirms receipt from the Employer, identified in the Acceptance part of this Agreement, of one fully completed original copy of this Agreement, including the Schedule of Deviations (if any) today:

the (day) of (month) (year)

at (place)

SIGNED ON BEHALF OF/BY THE CONTRACTOR:

NAME

SIGNATURE

CAPACITY

SIGNED BY WITNESS:

NAME

SIGNATURE

RAY NKONYENI MUNICIPALITY
NOTICE NO: 185 OF 2022
TENDER NO: 8/2/RNM0398

C1.2. Contract Data

Part 1: Contract Data Provided by the Employer

GENERAL CONDITIONS OF CONTRACT

The following standardised General Conditions of Contract:

General Conditions of Contract for Construction Works (Third Edition, 2015)

Prepared by the South African Institution of Civil Engineering (SAICE) shall apply to and form the General Conditions of Contract for this contract. Copies of these Conditions of Contract are obtainable from the South African Institution of Civil Engineering (SAICE), Private Bag X200, Halfway House 1685, Tel: (011) 805 5947, Fax: (011) 805 5971, email: civilinfo@saice.org.za.

Copies of the General Conditions of Contract are available for inspection and scrutiny at the offices of the Employer's Agent.

The General Conditions of Contract 2015 makes references to the Contract Data for specific data, which, together with these conditions, collectively describe the risks, liabilities and obligations of the contracting parties and the procedures for the administration of the Contract. The Contract Specific Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the General Conditions of Contract.

The General Conditions of Contract shall be read in conjunction with the variations, amendments and additions set out in the Contract Specific Data below. Each item of data given is cross-referenced to the Clause in the General Conditions of Contract to which it mainly applies.

CONTRACT SPECIFIC DATA

The following Contract specific data are applicable to this Contract:

Clause 1.1.1.13: Defects Liability Period

The defects liability period is a period of 12 months, measured from the date of the Certificate of Completion.

Clause 1.1.1.14: Due Completion Date

The date for achieving Practical Completion is a date seven (7) months after the Commencement Date.

Clause 1.1.1.15: Employer

The **Employer** is **RAY NKONYENI MUNICIPALITY**, represented by Ms. Bonisile Ngcobo and/or such person or persons duly authorised thereto by the Employer in writing, and the legal successors in title of this person and is referred to in this Contract Document as "Employer".

Clause 1.1.1.16: Engineer

The **Engineer**, referred to in the documents, is the firm of Consulting Engineers, MNTOMNYAMA CONSULTING ENGINEERS (Ltd acting through a Director, an Associate or an official authorised thereto in writing.

The name of the Engineer is: MNTOMNYAMA CONSULTING ENGINEERS or their successors duly appointed by the Employer.

Clause 1.1.1.26: Pricing Strategy

The Pricing Strategy is Re-measurement.

Clause 1.1.1.28: Scope of Work

Replace with the following:

“**Scope of Work**” means the document(s) containing the Standard Specifications, the Project Particular Specifications and the Drawings, that specify and describe the Works which are to be provided, and any other requirements and constraint relating to the manner in which the work is to be carried out.

Clause 1.1.1.34: Writing

Add the following Clause after Clause 1.1.1.34

1.1.1.35 “Drawings” means all drawings, calculations and technical information forming part of the Tender Documents (other than information contained in the Specifications) and any modifications thereof or additions thereto from time to time approved in writing by the Engineer or delivered to the Contractor by the Engineer.

Clause 1.2.1.2: Notices

The name of the Employer is : **RAY NKONYENI MUNICIPALITY**

The address of the Employer is : **10 Connor Street
Port Shepstone
4240**

The name of the Engineer is : **MNTOMNYAMA CONSULTING MANAGERS**

The address of the Engineer is : **Unit 306 Redfern
No.27 Bohmer Road
New Germany
3610**

Clause 1.3.5: Contractor’s Copyright

Add the following to Clause 1.3.5:

No part of any document or drawings issued with this enquiry may be copied, photographed or repeated in any manner or by any process without the written consent of the Engineer. Copyright is reserved on all designs, specifications, patents and patentable designs, systems and processes contained in the documents and drawings.

The person, firm, or body to whom these documents are issued or made available shall be held jointly and severally responsible in their personal and corporate capacities for any contravention of the requirements of Clause 1.3.5. The recipients of these documents shall treat the documents as well as the details contained herein as private and confidential.

Clause 3.1.3: Employer’s Approval Required

The Engineer is required to obtain the specific approval of the Employer before executing any of the following functions or duties:

1. Providing consent for subcontracting part of the contract in terms of Clause 4.4.
2. The issuing of an instruction to accelerate progress in terms of Clause 5.7.3.
3. Granting permission to work during non-working times in terms of Clause 5.8.1.
4. Suspend the progress of the works in terms of Clause 5.11.2.
5. The reduction of a penalty for delay in terms of Clause 5.13.2.
6. Issuing of instructions to carry out work on a daywork basis in terms of Clause 6.4.1.4.
7. The determination of additional or reduced costs arising from changes in legislation in terms of Clause 6.8.4.
8. The agreeing of the adjustment of the sums for general items in terms of Clause 6.11.
9. Authorizing the Contractor to repair and make good excepted risks in terms of Clause 8.2.2.2.

Clause 4.3: Legal Provisions

Add the following Clauses after Clause 4.3.2:

- 4.3.3 The Employer and the Contractor shall enter into an agreement to complete the work required for the construction of the works in terms of the provisions of Section 37(2) of the Occupational Health and Safety Act (No. 85 of 1993) and the Construction Regulations promulgated thereunder, as well as any further requirements stipulated in this contract document.

4.3.4 The Contractor shall provide proof to the Employer, within 14 days of the Commencement Date, that he/she has paid all contributions required in terms of the Compensation for Occupational Injuries and Diseases Act (Act No. 130 of 1993).

Clause 5.3: Commencement of Works

The Contractor shall commence executing the Works within 14 days from the Commencement Date.

Notwithstanding the above, the Contractor will not be permitted to commence executing the Works before the Form of Guarantee and required insurances and other specified items have been submitted and approved.

Clause 5.4: Access to the Site

Add the following clause after Clause 5.4.3:

5.4.4 The Contractor shall bear all costs and charges for special and temporary rights of way required by him in connection with access to the Site. The Contractor shall also provide at his/her own cost any additional facilities outside the Site required by him/her for the purposes of the Works.

Clause 5.5.1: Time for Practical Completion

The Works shall be completed within the time frame stipulated or tendered (as applicable) on the Summary of the Bill of Quantities, exclusive of the special non-working days and the year-end break and inclusive of the 14 day period referred to in Clause 5.3 above.

Clause 5.6.1: Programme of Works

The Contractor shall deliver the programme of work within 14 days of the Commencement Date. The programme shall clearly show the order in which the Contractor proposes to carry out the work, including the critical path, the proposed rate of progress and a linked cash flow forecast. The programme shall be updated monthly.

Clause 5.8: Non-Working Times

The special non-working days are the days falling in the year-end break and all gazetted public holidays falling outside the year end break.

The year-end break commences on 15 December 2022 and ends on 13 January 2023.

Clause 5.9: Instructions

Add the following Clauses after Clause 5.9.7:

5.9.8 Tender Drawings shall be used for tender purposes only and shall not be used for construction.

The Engineer shall have full power and authority to supply to the Contractor from time to time during the progress of the Works copies of such further drawings and such instructions as shall be necessary for the purpose of the proper and adequate execution and maintenance of the Works, which the Contractor shall carry out and be bound by.

Clause 5.12.2.2: Extension of Time

Regardless of the cause of any delay an extension of time will only be considered if it can be shown that the activity delayed is on the critical path indicated on the Programme of Works (Clause 5.6.1).

No extension of time will be granted in respect of any delays attributed to normal climatic conditions. Normal Climatic Conditions shall be deemed to include normal rainfall and associated wet conditions and materials, strong winds and extremes of temperature. However, in the event that delays to critical activities exceed the number of working days listed below for each month, then abnormal climatic conditions shall be deemed to exist, and an extension of time shall be granted in accordance with the provisions of that Clause.

The number of days quoted below shall be regarded as a fair estimate of the delays to be anticipated and allowed for under normal climatic conditions where inclement weather prevents or disrupts work on the critical path.

January	12 days	May	4 days	September	7 days
February	10 days	June	2 days	October	10 days
March	10 days	July	2 days	November	11 days
April	4 days	August	5 days	December	12 days

Claims for delays for abnormal climatic conditions shall be accompanied by substantiating facts and evidence, which shall be submitted timeously as each day or half-day delay is experienced. Should an extension of time be granted by the

Engineer such extension of time will be added to the Time for Completion or set against any over-provision that may have occurred in the abovementioned schedule.

It shall be further noted that where the critical path is not affected, no extension of time for abnormal climatic conditions or for any other reason will be entertained.

Clause 5.12.3: Adjustment to General Items

Add the following to Clause 5.12.3

The cost of time related general items will be calculated on the basis of the number of days in Clause 5.5.1.

Clause 5.13.1: Penalty for Delay

The penalty for failing to complete the Works on time is 0.05% of the total Tender Sum per calendar day.

Clause 6.2: Security

The Deed of Guarantee is to be delivered to the Employer within 14 days of the Commencement Date.
The Performance Guarantee shall be worded as set out in the document included in C1.3.
The liability of the guarantee shall be for 10% of the Contract Price.

Clause 6.8.2: Contract Price Adjustment

Add the following to Clause 6.8.2:

The Contract Price shall not be subject to contract price adjustment.

Clause 6.8.3: Variation in Cost of Special Materials

Price adjustments for variations in the costs of special materials are not allowed.

Clause 6.10.1.5: Interim Payments – Materials on Site

The percentage advance on materials on site but not yet built into the Permanent Works is 80% (eighty percent).

Clause 6.10.3: Retention Money

The percentage retention on the amounts due to the Contractor is 10% (ten percent). The limit of retention is 5% of the Contract Price, including allowances for contingencies.

Clause 6.10.5: Payment of Retention Money

In the second line, delete the words “ .. one half of the retention money shall become due and paid to the Contractor when the Engineer shall have issued a Certificate of Completion in terms of Clause 5.14.4 and the other half when the Engineer ..” and replace with the words “.. the full limit of retention money shall be held until the Engineer ..”

Clause 6.10.5.1

In the sixth line, delete the words “ .. of the second half ..”

Clause 6.10.6: Set-Off and Delayed Payments

A guarantee in lieu of retention is not permitted.

Clause 8.6.1: Insurances

Clause 8.6.1.1.2

The value of the materials supplied by the Employer to be included in the insurance sum is R0.00 -Nil.

Clause 8.6.1.1.3

The amount to cover professional fees for repairing damage and loss to be included in the insurance sum is R0.00 -Nil.

Clause 8.6.1.3

The limit of indemnity for liability insurance is R5 000 000.00 for any single claim – the number of claims to be unlimited during the construction.

Clause 8.6.1.5: Additional Insurance

Additional Insurance is required for the following:

- a) Insurance of Construction Plant and Equipment (including tools, offices and other temporary structures and contents) and all other items (except those intended for incorporation into the Works) brought onto the site for a sum sufficient to provide for their replacement.
- b) Insurance in terms of the provisions of the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993.
- c) Motor Vehicle Liability Insurance comprising (as a minimum) "Balance of Third Party" Risks including Passenger Liability Indemnity.
- d) Where the contract involves manufacturing and/or fabrication of the works or part thereof at premises other than the Site, the Contractor shall satisfy the Employer that all materials and equipment for incorporation in the works are adequately insured during manufacture and/or fabrication. In the event of the Employer having an insurable interest in such works during manufacture or fabrication then such interest shall be noted by endorsement to the Contractor's Policies of Insurance.
- e) The insurance policy held by the Contractor shall cover "wet risks" because a portion of the works will be in the confines of an existing river and stormwater channel.
- f) Professional Indemnity Insurance providing cover in an amount of not less than R5 000 000.00 in respect of each and every claim. This insurance shall remain in force after completion of this contract for a period of not less than 1 (one) year.

Clause 8.6.6: Proof of Payment

Add the following:

The contractor shall within 14 days of the Commencement Date provide the Employer/Engineer the relevant policy or policies of insurance.

Clause 9.2.1: Termination by the Employer

Add the following Clauses after Clause 9.2.1.3.7:

- 9.2.1.3.8 The Contractor fails to provide the required Guarantee and insurances within the prescribed time.
- 9.2.1.3.9 The Contractor committed a corrupt or fraudulent act during the procurement process or the execution of the contract.
- 9.2.1.3.10 An official or other role player committed any corrupt or fraudulent act during the procurement process or in the execution of the contract that benefited the Contractor.

Clause 10.5 and 10.6: Dispute Resolution

Dispute resolution shall be by standing adjudication panel or ad-hoc adjudication.

ADDITIONAL CONDITIONS OF CONTRACT

The additional Conditions of Contract are:

Clause 11: Contractor to Provide Everything Necessary

The Contractor is to provide all labour, material, workmanship, machinery and everything which is or may be necessary in and for the execution and entire completion of the Contract in accordance with the Conditions of Contract, Drawings and Scope of Work.

Clause 12: Details to be Confidential

The Contractor shall treat the details of the Works comprised in this Contract as private and confidential (save in so far as may be necessary for the purposes hereof) and shall not publish or disclose the same or any particulars thereof in any trade or technical paper elsewhere without prior written consent of the Engineer.

Part 2: Data Provided by the Contractor

Clause 1.2.1: Delivery of Notices

The name of the Contractor is

The address of the Contractor is

Physical Address

Postal Address

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

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

Telephone:

Fax:.....

Email:

SIGNED ON BEHALF OF/BY THE TENDERER:

NAME

SIGNATURE

CAPACITY

DATE

RAY NKONYENI MUNICIPALITY
NOTICE NO: 185 OF 2022
TENDER NO: 8/2/RNM0398

C1.3. Performance Guarantee

GUARANTOR DETAILS AND DEFINITIONS

“Guarantor: means:

Physical address:

“Employer” means: **RAY NKONYENI MUNICIPALITY**

“Contractor” means:”

“Engineer” means: **MNTOMNYAMA CONSULTING ENGINEERS**

“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

Engineer 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 Engineer of the Certificate of Completion of the Works or the date of payment in full of the Guaranteed Sum, whichever occurs first. The Engineer 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 Engineer 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/her affairs with the Contractor in any manner which the Employer may deem fit and the Guarantor shall not have the right to claim his/her 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 AT:.....

GUARANTOR (1)

SIGNATURE

DATE

CAPACITY

GUARANTOR (2)

SIGNATURE

DATE

CAPACITY

WITNESS (1)

SIGNATURE

WITNESS (2)

SIGNATURE

RAY NKONYENI MUNICIPALITY
NOTICE NO: 185 OF 2022
TENDER NO: 8/2/RNM0398

C1.4. Occupational Health and Safety Agreement

AGREEMENT MADE AND ENTERED INTO BETWEEN RAY NKONYENI MUNICIPALITY (HEREINAFTER CALLED THE "EMPLOYER") AND

.....
(Contractor/Mandatory/Company/CC Name)

IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, ACT No. 85 OF 1993 AS AMENDED.

I,

Representing....., as an employer in its own right, do hereby undertake to ensure, as far as is reasonably practicable, that all work will be performed, and all equipment, machinery or plant used in such a manner as to comply with the provisions of the Occupational Health and Safety Act (OHSA) and the Regulations promulgated thereunder.

I furthermore confirm that I am/we are registered with the Compensation Commissioner and that all registration and assessment monies due to the Compensation Commissioner have been fully paid or that I/We are insured with an approved licensed compensation insurer.

COID ACT Registration Number:

OR Compensation Insurer: Policy No.:

I undertake to appoint, where required, suitable competent persons, in writing, in terms of the requirements of OHSA and the Regulations and to charge him/them with the duty of ensuring that the provisions of OHSA and Regulations as well as the Council's Special Conditions of Contract, Way Leave, Lock-Out and Work Permit Procedures are adhered to as far as reasonably practicable.

I further undertake to ensure that any subcontractors employed by me will enter into an Occupational Health and Safety Agreement separately, and that such subcontractors comply with the conditions set.

I hereby declare that I have read and understand the appended Occupational Health and Safety Conditions and undertake to comply therewith at all times.

I hereby also undertake to comply with the Occupational Health and Safety Specification and Plan.

Signed at on the day of 20.....

SIGNED BY/ON BEHALF OF CONTRACTOR - MANDATORY

NAME

SIGNATURE

DATE

SIGNED BY WITNESS:

NAME

SIGNATURE

DATE

Signed at on the day of 20.....

SIGNED BY/ON BEHALF OF RAY NKONYENI MUNICIPALITY

NAME

SIGNATURE

DATE

SIGNED BY WITNESS:

NAME

SIGNATURE

DATE

Occupational Health and Safety Conditions

1. The Chief Executive Officer of the Contractor shall assume the responsibility in terms of Section 16(1) of the Occupational Health and Safety Act (as amended). Should the Contractor assign any duty in terms of Section 16(2), a copy of such assignment shall immediately be provided to the representative of the Employer as defined in the Contract.
2. All work performed on the Employer's premises shall be performed under the supervision of the construction supervisor who understand the hazards associated with any work that the Contractor performs on the site in terms of Construction Regulations 2014.
3. The Contractor shall appoint a Competent Person who shall be trained on any occupational health and safety aspect pertaining to them or to the work that is to be performed.
4. The Contractor shall ensure that he familiarises himself with the requirements of the Occupational Health and Safety Act and that he/she, his/her employees, and any sub-contractors, comply with them.
5. Discipline in the interests of occupational health and safety shall be strictly enforced.
6. Personal protective equipment shall be issued by the Contractor as required and shall be worn at all times where necessary.
7. Written safe work procedures and appropriate precautionary measures shall be available and enforced, and all employees shall be made conversant with the contents of these practices.
8. No substandard equipment/machinery/articles or substances shall be used on the site.
9. All incidents referred to in terms of Section 24 of the Occupational Health and Safety Act shall be reported by the Contractor to the Department of Labour and the Employer.
10. 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 and into any incident involving a Contractor and/or his/her employees and/or his/her sub-contractor/s.
11. No use shall be made of any of the Employer's machinery/plant/equipment/substance/personal protective equipment or any other article without prior arrangement and written approval.
12. No alcohol or any other intoxicating substance shall be allowed on the site. Any person suspected of being under the influence of alcohol or any other intoxicating substance shall not be permitted access to, or allowed to remain on the site.
13. Prior to commencement of any work, verified copies of all documents mentioned in the agreement, must be presented to the Employer.

Part C2: Pricing Data and Bill of Quantities

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C2.2 Bill Of Quantities	103

RAY NKONYENI MUNICIPALITY

NOTICE NO: 185 OF 2022

TENDER NO: 8/2/RNM0398

C2.1. Pricing Instructions

1. Measurement and payment shall be in accordance with the relevant provisions of the COLTO Standard Specifications (1998 edition).
2. The units of measurement described in the Bill of Quantities are metric units. Abbreviations used in the Bill of Quantities are as follows:

%	=	per cent	m ² .pass	=	square metre-pass
h	=	hour	m ³	=	cubic metre
ha	=	hectare	m ³ .km	=	cubic metre-kilometre
kg	=	kilogram	MN	=	meganewton
kℓ	=	kilolitre	MN.m	=	meganewton-metre
km	=	kilometre	MPa	=	megapascal
km-pass	=	kilometre-pass	No.	=	number
kPa	=	kilopascal	Prov sum	=	Provisional sum
kW	=	kilowatt	P C sum	=	Prime Cost sum
ℓ	=	litre	sum	=	lump sum
m	=	metre	t	=	ton (1 000 kg)
mm	=	millimetre	W/day	=	Work day
m ²	=	square metre			

3. Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance is made for waste.
4. The prices and rates to be inserted in the Bill of Quantities are to be the full inclusive prices for the work described under the items. Such prices and rates shall cover all costs and expenses that may be required in accordance with the provisions of the Scope of Work, and shall cover the cost of all general risks, liabilities, and obligations set forth or implied in the Contract Data, as well as overhead charges and profit. These prices shall be used as a basis for assessment of payment for additional work that may have to be carried out.
5. It will be assumed that prices included in the Bill of Quantities are based on Acts, Ordinances, Regulations, By-laws, International Standards and National Standards that were published 28 days before the closing date for tenders. (Refer to www.sabs.co.za or www.iso.org for information on standards).
6. Where the Scope of Work requires detailed drawings and designs or other information to be provided, all costs associated therewith are deemed to have been provided for and included in the unit rates and sum amount tendered for such items.
7. An item against which no price is entered will be considered to be covered by the other prices or rates in the Bill of Quantities. A single lump sum will apply should a number of items be grouped together for pricing purposes.
8. The quantities set out in the Bill of Quantities are approximate and do not necessarily represent the actual amount of work to be done. The quantities of work accepted and certified for payment will be used for determining payments due and not the quantities given in the Bills of Quantities.
9. Reasonable compensation will be received where no pay item appears in respect of work required in the Bills of Quantities in terms of the Contract and which is not covered in any other pay item.
10. The short descriptions of the items of payment given in the Bill of Quantities are only for the purposes of identifying the items. More details regarding the extent of the work entailed under each item appear in the Scope of Work.
11. Descriptions in the Bill of Quantities are abbreviated and comply generally with those in the SANS 1200 Standardised Specifications.

RAY NKONYENI MUNICIPALITY
NOTICE NO: 185 OF 2022
TENDER NO: 8/2/RNM0398

C2.2. Bill of Quantities

BID NO. : 8/2/RNM0398
CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
RAY NKONYENI MUNICIPALITY

BILL OF QUANTITIES

SECTION A BUILDINGS, ELECTRICAL & MECHANICAL WORKS

For further clarification : all activities for each item shall be as described in the relevant SANS 1200 pay items

BILL OF QUANTITIES PAGE NUMBER 1

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

BID NO. : 8/2/RNM0398
CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
 RAYNKONYENI MUNICIPALITY

Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents
SANS 1200		Schedule 1 Preliminary and general				
Preliminary financial implications						
1,1 Fixed charge items						
1.1.1	A8.3.1	Contractual requirements affecting the Contractor	sum	1		
	A8.3.2	The Contractor to provide the following items or as amended in the Tender Document :				
1.1.2	A8.3.2.1c	Name board (2 number) as specified in the Tender Document	sum	1		
1.1.3	A8.3.2.1a	Furnished office for the Engineer's use (see item PSAB3.2 in the document)	sum	1		
1.1.4	PSAB 5.5	Survey assistant as & when required by the Engineer	sum	1		
1.1.5	PSAB 5.6	Survey equipment as & when required by the Engineer	sum	1		
1.1.6	A8.3.2.1b	Telephone facilities for the Engineer	Prov	1	22 000,00	22 000,00
1.1.7	A8.3.2.2a	Offices & storage facilities for the Contractor	sum	1		
1.1.8	A8.3.2.2b	Workshops for the Contractor as required by The Contract	sum	1		
1.1.9	A8.3.2.2d	Living accommodations for the Contractor's personnel	sum	1		
1.1.10	A8.3.2.2e	Ablution & latrine facilities for the Contractor's personnel	sum	1		
1.1.11	A8.3.2.2f	Supply tools & equipment as required by The Contract	sum	1		
1.1.12	A8.3.2.2g	Water, electricity & communications as required by The Contract	sum	1		
		Other obligations by the Contractor :				
1.1.13	A8.3.2.2h	Deal with rain and/or ground water in all type of excavations on site as described in SANS 1200 A section 5.5 (All compensations are to be included only in this payment item)	sum	1		
1.1.14	A8.3.3	Other fixed charge obligations by the Contractor	sum	1		
1.1.15	A8.8.1	Establish access road to site where it is necessary & maintain	sum	1		
1.1.16	A8.3.3	Provision for traffic control as requested by the Engineer	sum	1		
1.1.17	A8.3.4	Removal of site establishment	sum	1		
1.2 Time related items						
1.2.1	A8.4.1	Contractual requirements on a monthly bases affecting the Contractor	sum	1		
		The Contractor to maintain the following items & other obligations for the duration of the Contract :				
1.2.2	A8.4.2.1	All facilities on the site for the Engineer	sum	1		
1.2.3	A8.4.2.2	All facilities on the site for the Contractor	sum	1		
1.2.4	A8.4.3	Full time supervision of the site as specified in the Tender Document	sum	1		
1.2.5	A8.4.4	Company & head office administration costs pertaining to the Contract	sum	1		
1.2.6	A8.4.5	Other time related obligations by the Contractor	sum	1		
1.3 Provisional sums by the Engineer						
1.3.1	A8.5a	Provisional sum for various tests requested by the Engineer - other than tests that are required to do by the Contractor under the various SANS 1200 pay items (refer to the relevant SANS 1200 testing requirements for the various work activities)	Prov	1	11 000,00	11 000,00
1.3.2	A8.5a	Provisional sum for supply of computers	Prov	1	22 000,00	22 000,00
1.3.3	PSA5.10.1	Provisional sum for community involvement/CLO payment	Prov	1	44 000,00	44 000,00
1.3.4	PSA5.10.3	Provisional sum for accredited training of local labour by specialist	Prov	1	11 000,00	11 000,00
1.3.5	A8.5b	Contractor's overhead and profit on Item 1.3.1 to 1.3.4	%		88 000,00	
(Note : provisional sums shall be authorized only by the Engineer)						
SCHEDULE 1 TOTAL CARRIED TO SUMMARY PAGE						

BILL OF QUANTITIES PAGE NUMBER 2

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

BID NO. : 8/2/RNM0398
CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
 RAYNKONYENI MUNICIPALITY

Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents														
SANS		Schedule 2																		
1 200		Occupational health and safety requirements																		
2,1 Notification of Construction work																				
<i>Quantities are re-measurable- proof shall be supplied by the Contractor of the quantities claimed</i>																				
2.1.1		Notification of Construction work to the Provincial Director as requested by the Engineer under the Construction Regulations of the Occupational health & Safety (<i>Regulation 3</i>) Act no. 85/1993	no	1																
2,2 Health and safety plan																				
2.2.1		Setting up a job and site specific Health and Safety Plan by the representative of the Contractor and approved by the Engineer as required under the Construction Regulations (<i>Regulation 5</i>) of the Occupational Health & Safety Act no. 85/1993	no	1																
2,3 Health and safety main file																				
2.3.1		Setting up a job and site specific Health & Safety Main file as requested by the Engineer under the Construction Regulations (<i>Regulation 5</i>) of the Occupational Health & Safety Act no. 85/1993 (<i>one off item</i>) <i>File to be a lever arch file with original colour document of acceptable standards including dividers. Emergency telephone numbers to be displayed on back of file. The file will be expanded during the project as and when required by the Client</i> <i>The file to include all sections as specified by the H&S Specifications attached to the bid document</i> <i>NOT TO BE REMOVED FROM SITE</i>	no	1																
2,4 Health & safety register file																				
2.4.1		Setting up a job and site specific Health & Safety Register File as requested by the Engineer under the Construction Regulations (<i>Regulation 5</i>) of the Occupational Health & Safety Act no. 85/1993 <i>File to be a lever arch file with original colour document of acceptable standards including dividers.</i> <i>NOT TO BE REMOVED FROM SITE</i>	no	1																
2,5 Health & Safety training file																				
2.5.1		Setting up a job and site specific Health & Safety Training File as requested by the Engineer under the Construction Regulations (<i>Regulation 5</i>) of the Occupational Health & Safety Act no. 85/1993 <i>File to be a lever arch file with original colour document of acceptable standards including dividers.</i> <i>NOT TO BE REMOVED FROM SITE</i>	no	1																
SCHEDULE SUB TOTAL CARRIED FORWARD TO PAGE 4																				
BILL OF QUANTITIES PAGE NUMBER 3																				
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Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2															

BID NO. : 8/2/RNM0398
CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
 RAYNKONYENI MUNICIPALITY

Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents	
SANS		Schedule 2 continued					
1 200		Occupational health and safety requirements					
-Schedule continued from page 3							
2,6		Service Provider appointments					
2.6.1		<u>One off lump sum</u> amount for the appointment of a competent person to perform risk assessment and training on site under Construction Regulations (<i>Regulation 7</i>) of the Occupational Health & Safety Act no. 85/1993	Lsum	1			
2,7		Training on site					
2.7.1		<u>One off lump sum</u> monetary allowance for the salary for the H&S representative as required by law for the duration of the project for training (<i>indicate the amount to be paid for the duration of the Contract - this is NOT a monthly repeatable amount</i>) The H&S Representative to perform the following : <i>H&S duties on site</i> <i>Appointee to be permanently on site and under supervision of Contractor's Site Supervisor. Appointment to be for the duration of the Contract. Induction training of all workers of Sub-Contractors.</i> <i>Public awareness training.</i> <i>Toolbox talks on environmental awareness</i> <i>First aid awareness</i> <i>Fire fighting awareness</i> <i>Tool box talks on hand tools and hand tool accidents</i> <i>Hold tool box talks on machine guarding</i> <i>Tool box talks on safe loading</i> <i>Tool box talks on safety signs</i> <i>Tool box talks on ten commandments of safety</i> <i>Community training</i>	Lsum	1			
2,8		First aid equipment					
		Supply, install/construct the following items :					
2.8.1		First aid box the Contractor	no	1			
2.8.2		First aid boxes for Sub-Contractors if applicable	no	1			
2.8.3		Stretcher by the Contractor	no	1			
2,9		Fire fighting equipment					
		Supply, install/construct the following items :					
2.9.1		Fire extinguishers by the Contractor	no	2			
2.9.2		Fire extinguishers for Sub-Contractors if applicable	no	2			
2.9.3		Fire extinguishers test certificate for the Contractor	no	4			
2.9.4		Fire extinguishers test certificate for Sub-Contractors	no	4			
SCHEDULE SUB TOTAL CARRIED FORWARD TO PAGE 5							
BILL OF QUANTITIES PAGE NUMBER 4							
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Contractor		Witness 1		Witness 2		Employer	
Witness 1		Witness 2		Witness 1		Witness 2	

BID NO. : 8/2/RNM0398
CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
 RAY NKONYENI MUNICIPALITY

Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents
SANS 1 200		Schedule 2 continued Occupational health and safety requirements				
-schedule continued from page 4						
2.10 Personal protective clothing						
2.10.1		<u>One off lump sum</u> allowance for the cost of the following PPE as required on site, for the contractor's permanent work force for the duration of the Contract <i>(number of each type of item to be determined by the Tenderer - applied for the duration of the whole Contract, inclusive of all items such as hard hats, safety shoes, dust masks, safety goggles, gum boots, overalls, hand gloves, etc.)</i> <i>(indicate the amount to be paid for the duration of the Contract - this is NOT a monthly repeatable amount)</i>	Lsum	1		
2.10.2		<u>One off lump sum</u> allowance for the cost of the following PPE as required on site, for the contractor temporary work force from the local population as recommended/requested by the Client/Engineer for the duration of the Contract :/in the region of up to ± 20, largely unskilled local employees:/ <i>(number of each type of item to be determined by the Tenderer - applied for the duration of the whole Contract, inclusive of all items such as hard hats, safety shoes, dust masks, safety goggles, gum boots, overalls, hand gloves, etc.)</i> <i>(indicate the amount to be paid for the duration of the Contract - this is NOT a monthly repeatable amount)</i>	Lsum	1		
2.11 Chemical toilets						
<i>Supply, install/construct the following items : required chemicals, paper etc. as required for the duration of the Contract. Separate toilets to be designated for male & female workers)</i>						
2.12 Eating facilities						
<i>Supply, install/construct the following items :</i>						
2.12.1		<u>One off allowance</u> for eating facilities on site in the form of a shaded net with table and chairs	Lsum	1		
2.13 Warning & Information Signs						
<i>Supply, install/construct the following items :</i>						
2.13.1		<u>Signboards to be displayed on site as required:</u> <i>(including signs such as SMI board, No Entry, First Aid, Fire Equipment, Various warnings, Traffic Control, Fire siren, Name boards on vehicles etc.)</i>	Lsum	1		
2.14 Medical tests						
<u>A medically qualified person to perform medical tests on all workers</u>						
2.14.1		<u>Once off allowance</u> for medical tests performed to all workers in all activities related to this project as stipulated in the prevailing Occupational Health & Safety Act no 85/1993 <i>(this item includes: a.) the work entry medical examination and b.) after contract termination's medical examination)</i>	Lsum	1		
SCHEDULE SUB TOTAL CARRIED FORWARD TO PAGE 6						

BILL OF QUANTITIES PAGE NUMBER 5

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

BID NO. : 8/2/RNM0398
CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
 RAY NKONYENI MUNICIPALITY

Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents
SANS		Schedule 2 continued				
1 200		Occupational health and safety requirements				
-schedule continued from page 5						
2,14		Medical tests				
		A medically qualified person to perform medical tests on all workers				
2.14.1		Once off allowance for medical tests performed to all workers in all activities related to this project as stipulated in the prevailing Occupational Health & Safety Act no 85/1993 (<i>this item includes:</i> <i>a.) the work entry medical examination and</i> <i>b.) after contract termination's medical examination)</i>	Lsum	1		
2,15		Barricading & demarcation				
		<i>Supply, install/construct the following items :</i>				
2.15.1		Barricading to protect open excavations on site for the duration of the <i>Contract (1.8 m high Y standards at 3.5 m intervals with Day-Glo mesh)</i>	m	0		
2,16		COVID-19 Health and Safety Requirements				
		<i>Supply, install/construct the following items :</i>				
		<i>Please note that the following items are only a guide and the Contractor should allow for the quantities he needs according to his risk assessment</i>				
		<i>Should the Contractor identify any other item required by Covid-19 regulation, can indicate the item with it's cost implication below</i>				
2.16.1		COVID-19 related notice boards and posters (<i>required : number & rate</i>)	no	1		
2.16.2		All Covid related items as per government regulations & law including but not limited to the following: Cloth face masks, face shields, non contact thermometers, bleach, hand sanitizer (70% alcohol content), hands-free sanitizer dispenser stand, paper towels, etc.	no	1		
SCHEDULE 2 TOTAL CARRIED TO SUMMARY PAGE						
BILL OF QUANTITIES PAGE NUMBER 6						
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Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2	

BID NO. : 8/2/RNM0398
CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
 RAY NKONYENI MUNICIPALITY

Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents
SANS Schedule 3						
1 200 Water pipe - earthworks						
Refer to drawings : 2312/11/C/2-4 Revision 0						
Water pipe trenches & related items						
3,1 Site clearance						
3.1.1	DB8.3.1a	General clearance, clearing of vegetation, rubble etc. <i>(including the spoiling and all haulage of material)</i> for the trench width along the trench lines	m	100		
3.1.2	DB8.3.1c	Remove 150 mm topsoil to the trench width, stock pile & replace it after completion of the pipe line <i>(rate includes the maintenance of the stock pile)</i>	m ³	15		
3.1.3	DB8.3.1b	Remove trees with girth of 0.5 m up to 1.0 m that interfere with the pipe line route <i>(rate shall include the removal of tree stump & all haulage)</i>	no	1		
3.1.4	DB8.3.1b	Remove trees with girth greater than 1.0 m that interfere with the pipe line route <i>(rate shall include the removal of tree stump & all haulage)</i>	no	1		
3,2 Trench excavations						
<i>Note : all excavations other than rock requiring blasting will be considered as soft excavation - all free haul = 10 km unless otherwise stated in the Tender Document</i>						
3.2.1	DB8.3.2.a	Trench excavation for 75 mm Ø pipes, 700 mm wide x 1,200 mm deep <i>(rate shall cover the cost of the excavation, backfill, compaction of the excavation base & the disposal of all surplus material)</i>	m	100		
3.2.2	DB8.3.2.b2	Extra over for excavation of hard rock material <i>(rate shall cover the cost of blasting, removal & replacement of all material with all haulage involved)</i>	m ³	5		
3.2.3	DB8.3.2.b2	Extra over for excavation in boulder type A & B material <i>(rate shall cover the cost of removal & replacement of all material with all haulage involved)</i>	m ³	3		
3.2.4	DB8.3.2.c	Extra over for trench excavation items for additional deeper excavations <i>(in any type of material only when requested by the Engineer in charge of the site - rate shall cover the cost of removal & replacement of all material with all haulage involved)</i>	m ³	1		
3.2.5	DB8.3.4a	Shoring of trenches if requested by the Engineer or the site Safety Agent <i>(Rate shall cover the cost of the supply, placing, maintenance & removal of any support measures together with any cost from the inconvenience of working in the supported trench and all the costs of the risks inherent in the operation)</i>	m	50		
3,3 Protection of existing under ground services						
<i>Supply & install all material as required</i>						
<i>Protection from damages during construction to existing services crossing the new trenches (whether or not their presence is known before they're uncovered)</i>						
<i>The following items are applicable to SANS DB8.3.5a & b - /-i), -ii), -iii), -iv)/</i>						
<i>Note : Exposing services to be made by hand excavation</i>						
3.3.1	DB8.3.5a	Electrical cables, pipes, sleeves, ducts etc.	no	1		
3.3.2	DB8.3.5a	Communication cables, pipes, sleeves, ducts etc.	no	1		
3.3.3	DB8.3.5a	Small Ø water & sewer pipes (20 - 63 mm Ø)	no	5		
3.3.4	DB8.3.5a	Large Ø water & sewer pipes (75 - 1200 mm Ø)	no	2		
SCHEDULE SUB TOTAL CARRIED FORWARD TO PAGE 8						

BILL OF QUANTITIES PAGE NUMBER 7

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

BID NO. : 8/2/RNM0398
CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
 RAY NKONYENI MUNICIPALITY

Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents
SANS		Schedule 3 continued				
1 200		Water pipe - earthworks				
Refer to drawings : 2312/11/C/2-4 Revision 0						
-schedule continued from page 7						
3.3.5	DB8.3.5a	Storm water pipes and culverts of any sizes, channels, drains etc.	no	5		
3.3.6	DB8.3.5a	Road side kerbing, edge beams etc.	m	5		
<i>Protection from damages during construction to existing services adjoining the new trenches (whether or not their presence is known before they're uncovered)</i>						
<i>The following items are applicable to SANS DB8.3.5a & b - /-i, -ii, -iii, -iv/</i>						
3.3.7	DB8.3.5b	Electrical cables, pipes, sleeves, ducts etc.	m	10		
3.3.8	DB8.3.5b	Communication cables, pipes, sleeves, ducts etc.	m	10		
3.3.9	DB8.3.5b	Small Ø water & sewer pipes (20 - 63 mm Ø)	m	10		
3.3.10	DB8.3.5b	Large Ø water & sewer pipes (75 - 1200 mm Ø)	m	10		
3.3.11	DB8.3.5b	Storm water pipes and culverts of any sizes, channels, drains etc.	m	5		
3,4		Reinstate road surfaces with all layer courses				
3.4.1	DB8.3.6.1b	Bitumen surfaced roads with all layers (base, sub base etc. with required compactions, cutting & replacing surfacing material)	m ²	50		
3.4.2	DB8.3.6.1d	Paving block surfaced roads with all layers (base, etc. with required compaction, remove paving blocks, stockpile & re-instate paving blocks)	m ²	50		
3.4.3	C8.2.5&6	Remove fences and store material, reinstate fences after completion of the pipe line using removed fence material (rate shall include all materials, labour & transport involved in these activities - only on instruction of the Engineer)	m	50		
3,5		Provision for bedding and covering				
<i>Note : all supply & haulage are inclusive for the following items</i>						
<i>Class B type of bedding & blanket using excavated material from trenches</i>						
3.5.1	LB8.2.1a	Bedding cradle with granular material compacted to 90 % MOD AASHTO density	m ³	8		
3.5.2	LB8.2.1b	Blanket with selected fill material, hand compacted to 90 % MOD AASHTO density over & around the pipes	m ³	20		
<i>Class B type of bedding & blanket using imported material from borrow pits</i>						
3.5.3	LB8.2.2.2a	Bedding cradle with granular material compacted to 90 % MOD AASHTO density	m ³	8		
3.5.4	LB8.2.2.2b	Blanket with selected fill material, hand compacted to 90 % MOD AASHTO density over & around the pipes	m ³	20		
<i>Class B type of bedding & blanket using material from commercial sources</i>						
3.5.5	LB8.2.2.3a	Bedding cradle with granular material compacted to 90 % MOD AASHTO density	m ³	8		
3.5.6	LB8.2.2.3b	Blanket with selected fill material, hand compacted to 90 % MOD AASHTO density over & around the pipes	m ³	20		
<i>Class B type of bedding & blanket using 19 mm crushed stone material.</i>						
3.5.7	LB8.2.2.3a	Bedding cradle with crushed stone material	m ³	3		
3.5.8	LB8.2.2.3b	Blanket with crushed stone material	m ³	5		
SCHEDULE SUB TOTAL CARRIED FORWARD TO PAGE 9						

BILL OF QUANTITIES PAGE NUMBER 8

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

BID NO. : 8/2/RNM0398
CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
 RAY NKONYENI MUNICIPALITY

Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents
	SANS	Schedule 3 continued				
	1 200	Water pipe - earthworks				
Refer to drawings : 2312/11/C/2-4 Revision 0						
-schedule continued from page 8						
3,6		Miscellaneous items				
	DB8.3.4b	Temporary works to control water inflow into the trenches:				
3.6.1	DB8.3.4b1	Provide equipment (<i>pump, pipes, etc..</i>)	sum	1		
3.6.2	DB8.3.4b2	Operate and maintain those equipment :	days	5		
3.6.3	DB8.3.4b3	Remove equipment (<i>pump, pipes, etc..</i>)	sum	1		
		Borrow pit				
3.6.4	DB8.3.3.2	Open up & close down a borrow pit when requested by the Engineer in charge of the site	sum	1		Rate only
		Road crossing with pipes				
3.6.5	DB8.3.3.3	Compaction in road reserves with 1:10 mix <i>soilcrete where instructed by the Engineer</i>	m ³	10		
3.6.6	L8.2.1	Supply & lay 300 mm Ø x 50D concrete "Interlocking Joint" sleeve pipes	m	50		
SCHEDULE 3 TOTAL CARRIED TO SUMMARY PAGE						

BILL OF QUANTITIES PAGE NUMBER 9

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

BID NO. : 8/2/RNM0398
CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
 RAY NKONYENI MUNICIPALITY

Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents
SANS Schedule 4 1 200 Water pipes and accessories Refer to drawings : 2312/11/C/2-4 Revision 0						
Water pipes & related items						
4,1 Water pipes						
<i>Supply, lay and bed the following water pipes complete with couplings on prepared bedding, joint, incl. cut pipes to length where required (bedding & blanket are measured elsewhere - testing & disinfection of pipes are included in the rates)</i>						
4.1.1	L8.2.1	75 mm Ø Class 9 u-PVC Z - lok pipes	m	100		
4,2 Water pipe specials and fittings						
<i>Supply & install the following pipe accessories as required, with connections as described by the manufacturer's specification (all parts & jointing materials are to be included in the rates)</i>						
4.2.1	L8.2.2	75 mm Ø pipe x 90° socket end PVC bend (PVC Class 9 fittings)	no	1		
4.2.2	L8.2.2	75 mm Ø pipe x 45° socket end PVC bend (PVC Class 9 fittings)	no	1		
4.2.3	L8.2.2	75 mm Ø pipe x 22.5° socket end PVC bend (PVC Class 9 fittings)	no	2		
4.2.4	L8.2.2	75 mm Ø pipe x 11.25° socket end PVC bend (PVC Class 9 fittings)	no	3		
4.2.5	L8.2.2	110 mm Ø pipe x 45° socket end PVC bend (PVC Class 9 fittings)	no	1		
4,3 Valves & valve chambers						
<i>Supply & install AVK PN10 gate valve, (or similar approved by the Engineer in charge), complete as described on the relevant drawings for the following diameters : (all parts & jointing materials are to be included in the rates)</i>						
4.3.1	L8.2.5	75 mm Ø socket end gate valve	no	2		
<i>Construct valve chamber as described on the relevant drawings</i>						
4.3.2	G8.4.3	400 mm x 400 mm x 200 mm block from 25 mPa concrete for valve box top	no	2		
4.3.3	G8.4.3	200 mm Ø Class 6 uPVC pipe for AVK valves, ±500 mm long, cut to suit on site (to enable to reach valves)	no	2		
4.3.4	G8.4.3	Valve box with blue PVC top pre-cast into 400 mm x 400 mm x 250 mm block with lockable lid	no	2		
4.3.5		Heavy duty lock with master key	no	2		
4,4 Fire hydrants & hydrant chambers						
<i>Construct fire hydrants together with hydrant chambers as described on the relevant drawings (all parts & jointing materials are to be included in the rates)</i>						
4.4.1	L8.2.5	75 mm Ø x 75 mm Ø flanged/socket end cast Iron hydrant tee	no	2		
4.4.2	L8.2.5	75 mm Ø flanged galvanized mild steel pipe - ±1,870 mm long (confirm on site) Pipe to be painted universal undercoat and 2 coats of red coloured oil based paint, connected to Cast Iron hydrant tee flange	no	2		
4.4.3	L8.2.5	80 mm Ø x 65 mm Ø tamper proof pillar post hydrant with instantaneous outlet	no	2		
4.4.4	G8.4.3	500 mm x 500 mm x 250 mm base from 25 Map concrete	no	2		
4.4.5	G8.4.3	300 mm x 300 mm x 1,150 mm pedestal from 25 Map concrete, to be painted universal undercoat and 2 coats of yellow coloured oil based paint	no	2		
4.4.6	L8.2.5	80mm Diameter flanged two port booster with pressure gauge	no	1		
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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

BID NO. : 8/2/RNM0398
CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
 RAY NKONYENI MUNICIPALITY

Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents
SANS		Schedule 4 continued				
1 200		Water pipes and accessories				
Refer to drawings : 2312/11/C/2-4 Revision 0						
-schedule continued from page 10						
4,5 Bulk water meter & meter chamber						
<i>Construct bulk water meter assembly together with meter chamber as described on the relevant drawings</i>						
4.5.1	LD8.2.3	750 mm Ø standard precast manhole rings - 250 mm deep <i>(exact number determined on site according to the depth of the pipe line)</i>	no	2		
4.5.2	LD8.2.3	860 mm Ø precast concrete adaptor slab complete with access opening	no	1		
4.5.3	LD8.2.3	560 mm Ø type 4 concrete lid, painted blue	no	1		
4.5.4		Locking device for manhole cover	no	1		
4.5.5	G8.4.3	± 1300 mm x 350 mm x 350 mm anchor block from 25 mPa concrete	no	1		
4.5.6	G8.2.6	Construct opening in manhole ring wall for pipes <i>(close and make water tight after pipe is installed)</i>	no	2		
Pipe specials for water meter connection						
<i>Supply & install the following galvanized (to SABS EN10240) pipe items :</i>						
<i>Pipe items to include complete installation kit, i.e.. bolts, nuts, washers, gaskets etc. (pipe protection as indicated on the drawing & in the Tender Document)</i>						
4.5.7	L8.2.2	75 mm Ø flanged long barrel flange adaptor between mild steel & uPVC pipe	no	2		
4.5.8	L8.2.3	80 mm Ø flanged AVK PN10 gate valve <i>(or similar approved by the Engineer)</i>	no	2		
4.5.9	L8.2.2	80 mm Ø x 90° flanged mild steel medium radius bend	no	4		
4.5.10	L8.2.2	80 mm Ø flanged mild steel pipe, 300 mm long	no	2		
4.5.11	L8.2.2	80 mm Ø flanged Thomas unfit dismantling joint	no	1		
4.5.12	L8.2.2	80 mm Ø flanged Elster Kent Helix H4000 Woltmann type water meter	no	1		
4.5.13		10 mm x 200 mm wide DENSOTAPE wrapping around under ground	m ²	2		
<i>Construct valve chamber as described on the relevant drawings</i>						
4.5.14	G8.4.3	400 mm x 400 mm x 200 mm block from 25 mPa concrete for valve box top	no	2		
4.5.15	G8.4.3	200 mm Ø Class 6 uPVC pipe for AVK valves, ±500 mm long, cut to suit on site <i>(to enable to reach valves)</i>	no	2		
4.5.16	G8.4.3	Valve box with blue PVC top pre-cast into 400 mm x 400 mm x 250 mm block with lockable lid	no	2		
4.5.17		Valve box lock with master key	no	2		
4,6 Ancillary items						
Connection to existing, functioning system						
4.6.1		Connection to existing water supply line as indicated on the relevant drawing <i>(item shall be inclusive of searching out the connection point, all excavation to allow adequate working space, the cutting into the existing pipe, placing the required connection items & fittings with the required couplings, the compaction & backfill of excavated material , making good any shortfall in filling material or disposal of any excess material if necessary and the placing of a marker to indicate the position of the connection)</i>	no	1		
Thrust block construction for pipe works						
4.6.2	L8.2.11a	Construct anchor thrust blocks and pedestals from 15 Map concrete <i>(rate shall cover the cost of all additional excavation, trimming, formwork, reinforcement and finishing of top surfaces as required)</i>	no	10		
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 RAYNKONYENI MUNICIPALITY

Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents
SANS Schedule 4 continued 1 200 Water pipes and accessories Refer to drawings : 2312/11/C/2-4 Revision 0 -\schedule continued from page 11						
4.6.3		Standard fire hose reel complete with fixing brackets, bolts, nuts etc and attach to steel column as per manufacturer's specifications	no	2		
4.6.4		30 m long standard fire hose with attachment to fire hose reel, complete	no	2		
4.6.5	L8.2.1	25 mm Ø galvanized mild steel pipes for fire appliances	m	30		
4.6.6	H8.3.1,3,5	Galvanized mild steel fixing brackets for 25 mm Ø pipes	no	4		
4.6.7	L8.2.1	40 mm Ø galvanized mild steel pipes for fire appliances	m	30		
4.6.8	H8.3.1,3,5	Galvanized mild steel fixing brackets for 40 mm Ø pipes	no	4		
4.6.9		10 mm x 200 mm wide DENSOTAPE wrapping around under ground galvanized ms pipes	m ²	2		
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CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
 RAY NKONYENI MUNICIPALITY

Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents
SANS Schedule 5						
1 200 Sewer pipe - earthworks						
Refer to drawings : 2312/11/C/2-4 REv0						
Sewer pipe trenches & related items						
5,1 Site clearance						
5.1.1	DB8.3.1a	General clearance, clearing of vegetation, rubble etc. <i>(including the spoiling and all haulage of material)</i> for the trench width along the trench lines	m	100		
5.1.2	DB8.3.1c	Remove 150 mm topsoil to the trench width, stock pile & replace it after completion of the pipe line <i>(rate includes the maintenance of the stock pile)</i>	m ³	15		
5.1.3	DB8.3.1b	Remove trees with girth of 0.5 m up to 1.0 m that interfere with the pipe line route <i>(rate shall include the removal of tree stump & all haulage)</i>	no	1		
5.1.4	DB8.3.1b	Remove trees with girth greater than 1.0 m that interfere with the pipe line route <i>(rate shall include the removal of tree stump & all haulage)</i>	no	1		
5,2 Trench excavations						
<i>Note : all excavations other than rock requiring blasting will be considered as soft excavation - all free haul = 10 km unless otherwise stated in the Tender Document</i>						
5.2.1	DB8.3.2.a	Trench excavation for 160 mm Ø pipes, 800 mm wide x up to a depth of 2.0 <i>(Rate shall cover the cost of excavation, backfill, compaction of the excavation base & the disposal of all surplus material)</i>	m	100		
5.2.2	DB8.3.2.b2	Extra over for excavation of hard rock material <i>(rate shall cover the cost of blasting, removal & replacement of all material with all haulage involved)</i>	m ³	8		
5.2.3	DB8.3.2.b2	Extra over for excavation in boulder type A & B material <i>(rate shall cover the cost of removal & replacement of all material with all haulage involved)</i>	m ³	6		
5.2.4	DB8.3.2.c	Extra over for trench excavation items for additional deeper excavations <i>(in any type of material only when requested by the Engineer in charge of the (Rate shall cover the cost of the supply, placing, maintenance & removal of any support measures together with any cost from the inconvenience</i>	m ³	4		
5.2.5	DB8.3.4a	Shoring of trenches as requested by the Engineer or the site Safety Agent <i>(Rate shall cover the cost of the supply, placing, maintenance & removal of any support measures together with any cost from the inconvenience of working in the supported trench and all the costs of the risks inherent in the operation)</i>	m	20		
5,3 Protection of existing under ground services						
<i>Supply & install all materials as required</i>						
<i>Protection from damages during construction to existing services crossing the new trenches (whether or not their presence is known before they're uncovered)</i>						
<i>The following items are applicable to SANS DB8.3.5a & b - /-i), -ii), -iii), -iv)/</i>						
5.3.1	DB8.3.5a	Electrical cables, pipes, sleeves, ducts etc.	no	1		
5.3.2	DB8.3.5a	Communication cables, pipes, sleeves, ducts etc.	no	1		
5.3.3	DB8.3.5a	Small Ø water & sewer pipes (20 - 63 mm Ø)	no	5		Rate only
5.3.4	DB8.3.5a	Large Ø water & sewer pipes (75 - 1200 mm Ø)	no	2		
5.3.5	DB8.3.5a	Storm water pipes and culverts of any sizes, channels, drains etc.	no	5		Rate only
5.3.6	DB8.3.5a	Road side kerbing, edge beams etc.	m	5		Rate only
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CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
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Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents
SANS		Schedule 5 continued				
1 200		Sewer pipe - earthworks				
Refer to drawings : 2312/11/C/2-4 REv0						
-\schedule continued from page 13						
5,5 Provision for bedding and covering						
<i>Note : all supply & haulage are inclusive for the following items</i>						
<i>Class B type of bedding & blanket using excavated material from trenches</i>						
5.5.1	LB8.2.1a	Bedding cradle with granular material compacted to 90 % MOD AASHTO density	m ³	14		Rate only
5.5.2	LB8.2.1b	Blanket with selected fill material, hand compacted to 90 % MOD AASHTO density over & around the pipes	m ³	28		Rate only
<i>Class B type of bedding & blanket using imported material from borrow pits</i>						
5.5.3	LB8.2.2.2a	Bedding cradle with granular material compacted to 90 % MOD AASHTO density	m ³	14		
5.5.4	LB8.2.2.2b	Blanket with selected fill material, hand compacted to 90 % MOD AASHTO density over & around the pipes	m ³	28		
<i>Class B type of bedding & blanket using material from commercial sources</i>						
5.5.5	LB8.2.2.3a	Bedding cradle with granular material compacted to 90 % MOD AASHTO density	m ³	14		Rate only
5.5.6	LB8.2.2.3b	Blanket with selected fill material, hand compacted to 90 % MOD AASHTO density over & around the pipes	m ³	28		Rate only
<i>Class B type of bedding & blanket using 19 mm crushed stone material</i>						
5.5.7	LB8.2.2.3a	Bedding cradle with crushed stone material	m ³	2		
5.5.8	LB8.2.2.3b	Blanket with crushed stone material	m ³	4		
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Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents
SANS		Schedule 6				
1 200		Sewer pipes and accessories				
Refer to drawings : 2312/11/C/2-4 REv0						
Sewer pipes & related items						
6,1 Sewer pipes						
<i>Supply, lay and bed the following sewer pipes complete with couplings on prepared bedding, joint, incl. cut pipes to length where required (bedding & blanket are measured elsewhere)</i>						
6.1.1	LD8.2.1	160 mm Ø Class 400 heavy duty under ground sewer pipe as per SANS 1601 (<i>one end socket end, other end integral joint</i>)	m	100		
6,2 Sewer manholes						
<i>Supply, install/construct the following items :</i>						
<i>1 000 mm Ø pre-cast concrete manholes complete with manhole base, manhole rings with step irons, 150 mm concrete cover slab and 560 mm Ø heavy duty concrete lid with steel band for the following depths : (rate shall cover any additional earthworks, benching, base channels, ring jointing etc.)</i>						
6.2.1	LD8.2.3	From 0.0 m up to and including 1.5 m	no	2		
6.2.2	LD8.2.3	From 0.0 m up to and including 2.0 m	no	2		
6,3 Sewer erf (yard) connections						
<i>Erf connection complete as described on the relevant drawings (all items are inclusive of all jointing materials)</i>						
6.3.1	LD8.2.6	160 mm Ø x 110 mm Ø x 45° reducing junction (<i>spigot/socket on main line Y junction</i>)	no	1		
6.3.2	LD8.2.6	110 mm Ø x 45° plain bend (<i>spigot/socket</i>)	no	1		
6.3.3	LD8.2.6	110 mm Ø x 22.5° plain bend (<i>spigot/socket</i>)	no	2		
6.3.4	LD8.2.6	110 mm Ø Class 400 heavy duty under ground sewer pipe	m	30		
6.3.5	DB8.3.2.a	Trenches for 110 mm Ø pipes, 700 mm wide x 1100 mm deep (<i>in yard laid - see schedule 5.2 for excavation specifications</i>)	m	30		
6.3.6	LD8.2.6	110 mm Ø x 90° plain bend for marker pipe (<i>spigot/socket</i>)	no	1		
6.3.7	LD8.2.6	110 mm Ø Class 400 heavy duty under ground sewer pipe, connected to the 90° bend & extending from the ground ±300 mm to serve as temporary markers (<i>approximately 1200 mm long each</i>)	no	1		
6.3.8	LD8.2.6	100 mm Ø cast iron end cap on top of marker pipe (<i>spigot/socket</i>)	no	1		
Rodding structure (brick built unit on concrete slab)						
6.3.9	GB.4.3	1130 mm x 1130 mm x 150 mm slab from 20 mPa concrete	no	3		
6.3.10		220 mm thick brick wall on concrete slab, height 2 courses	m ²	2		
6.3.11		Heavy duty cover & frame, polymer concrete with hinged ductile iron cover	no	3		
6.3.12		1:3 cement mortar bedding & surround on top of the brick wall	m ²	2		
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 RAY NKONYENI MUNICIPALITY

Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents
SANS Schedule 7 1 200 Foundations, columns etc. for main building Refer to drawings : 3942/S/1 Revision 0						
7,1 Earthworks						
<i>Supply, install & construct the following items :</i>						
7.1.1	D8.3.2a	Excavate in bulk, use material for backfill and spoil excess and unsuitable material for column foundations Base 1 - 1500 mm x 1500 mm x 3500 mm deep - 12 number Base 2 - 1750 mm x 1750 mm x 3500 mm deep - 13 number Base 3 - 2000 mm x 2000 mm x 3500 mm deep - 1 number	m ³	248		
7.1.2	D8.3.2a	Excavate in bulk, use material for backfill and spoil excess and unsuitable material for ground beams Note : all excavations other than rock requiring blasting will be considered as soft excavation - all free haul = 10 km unless otherwise stated in the Tender Document	m ³	24		
7.1.3	D8.3.2.(b)2	Extra over for excavation in hard rock material <i>(rate shall cover the cost of blasting, removal & replacement of all material with all haulage involved)</i>	m ³	87		
7.1.4	D8.3.2.(b)2	Extra over for excavation in boulder class A & B material <i>(rate shall cover the cost of removal & replacement of all material with all haulage involved)</i>	m ³	37		
7.1.5	D8.3.2(a)	Extra over for the removal of additional unsuitable material <i>(in any type of material only when requested by the Engineer in charge of the site - rate shall cover the cost of removal & replacement of all material with with all haulage involved)</i>	m ³	12		
7.1.6	D8.3.5	Extra over excavation for working space <i>(rate shall cover the excavation of an area wide enough for working space)</i>	m ²	753		
7.1.7	D8.3.4a	Shoring for excavation for up to 3.0 m depth <i>(Rate shall cover the cost of the supply, placing, maintenance & removal of any support measures together with any cost from the inconvenience of working in the supported excavations and all the costs of the risks inherent in the operation)</i>	m ²	279		
7.1.8	DM8.3.3.2	Rip excavated areas and compact to 93 % Mod AASHTO density	m ²	71		
7.1.9	D8.3.4(a)	Make up deficiency in backfill material by importation of suitable material approved by the Engineer	m ³	452		
7.1.10	D8.3.4(a)	2 x 150 mm thick layer of G5 imported selected gravel material with 95% Mod AASHTO density compaction under the 100 mm thick surface beds	m ³	52		
7.1.11	D8.3.6	Additional overhaul above the stipulated free haul distance	m ³ km	100		
7,2 Concrete & related items						
Note : The costs of making and testing of 150 mm x 150 mm x 150 mm test blocks are to be included in the various concrete rates						
<i>Supply, install & construct the following items :</i>						
7.2.1	G8.4.2	50 mm thick blinding layer under column foundations from 15 mPa concrete	m ²	71		
7.2.2	G8.4.3	300 mm thick column foundations from 25 mPa concrete	m ³	22		
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Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

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CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
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Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents
SANS Schedule 7 continued						
1 200 Foundations, columns etc. for main building						
Refer to drawings : 3942/S/1 Revision 0						
- \schedule continued from page 17						
7.2.3	G8.4.3	300 mm x 300 mm columns from 30 mPa concrete	m ³	7		
7.2.4	G8.4.3	300 mm wide x 510 mm deep ground beams from 25 mPa concrete	m ³	24		
7.2.5	G8.4.3	100 mm ground floor slab from 25 mPa concrete <i>(including slab thickening)</i>	m ³	19		
7.2.6	G8.2.1	Rough vertical form work to foundations and columns under ground	m ²	244		
7.2.7	G8.2.2	Smooth vertical form work to exposed concrete surfaces	m ²	52		
7.2.8	G8.4.4	Uniform wood float finish on concrete surfaces	m ²	275		
7.2.9	G8.3.1	High tensile steel reinforcement to columns, beams, floor thickenings etc.	t	5,48		
7.2.10	G8.1.2.2	Mild steel reinforcement to columns, beams, floor thickenings etc.	t	1,37		
7.2.11	G8.3.2	Type 245 fabric reinforcement in floor slabs in single layer <i>(including laps)</i>	m ²	269		
7.2.12	G8.5	Isolation joint between 100 mm thick concrete slab and brick wall to be filled 10 mm JOINTEX <i>(or similar approved by the Engineer)</i>	m	250		
7.2.13	G8.5	Expansion joint to be filled with 10 mm JOINTEX and capped with ABE DOW CORNING 890-SL joint sealant with backing rope <i>(or similar approved by the Engineer)</i>	m	50		
7.2.14	G8.5	Cut joint to be 3 mm wide x 25 mm deep filled with ABA DURACORD joint filler and ABE DOW CORNING 890-SL joint sealant with backing rope <i>(or similar approved by the Engineer)</i>	m	93		
7.2.15	G8.1.1.2	25 mm x 25 mm chamfers on exposed concrete edges	m	224		
7,3 Strong room details						
Supply, install & construct the following items :						
7.3.1	G8.4.3	230 mm thick walls from 25 mPa concrete	m ³	11		
7.3.2	G8.4.3	170 mm thick roof slab from 25 mPa concrete	m ³	2		
7.3.3	G8.2.2	Smooth vertical form work to exposed concrete surfaces	m ²	66		
7.3.4	G8.2.2	Smooth horizontal <i>(soffit)</i> form work to exposed concrete surfaces	m ²	8		
7.3.5	G8.4.4	Uniform wood float finish on concrete surfaces	m ²	11		
7.3.6	G8.3.1	High tensile steel reinforcement to walls, roof with corner bars etc.	t	0,40		
7.3.7	G8.1.2.2	Mild steel reinforcement to walls, roof with corner bars etc.	t	0,10		
7.3.8	G8.3.2	Type 617 fabric reinforcement in walls, 2 layers in the wall	m ²	73		
7.3.9	G8.1.1.2	25 mm x 25 mm chamfers on exposed concrete edges	m	13		
7.3.10		Strong room door by CHUBB safes or similar approved by the Engineer <i>(item includes the frame, hinges, lock, installation, etc.)</i>	no	1		
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Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

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CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
 RAYNKONYENI MUNICIPALITY

Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents
<p>SANS Schedule 8 1 200 Foundations for guard building Refer to drawings : 3942/S/1 Revision 0</p>						
8,1 Earthworks						
<i>Supply, install & construct the following items :</i>						
Earthworks-for general notes see 7.1						
8.1.1	D8.3.2a	Excavate in bulk 1000 mm, use material for backfill and spoil excess and unsuitable material for building base slab	m ³	48		
8.1.2	D8.3.2.(b)2	Extra over for excavation in hard rock material	m ³	7		
8.1.3	D8.3.2.(b)2	Extra over for excavation in boulder class A & B material	m ³	5		
8.1.4	D8.3.2(a)	Extra over for the removal of additional unsuitable material	m ³	2		
8.1.5	D8.3.5	Extra over excavation for working space	m ²	28		
8.1.6	DM8.3.3.2	Rip excavated floor area and compact to 93 % Mod AASHTO density	m ²	47		
8.1.7	D8.3.4(a)	Make up deficiency in backfill material by importation of suitable material approved by the Engineer	m ³	17		
8.1.8	D8.3.4(a)	Fill back with G5 imported selected gravel material and compact to 95% Mod AASHTO density under the 100 mm thick surface bed and ground beams	m ³	26		
8.1.9	D8.3.6	Additional overhaul above the stipulated free haul distance	m ³ km	50		
8,2 Concrete & related items						
<i>Note : The costs of making and testing of 150 mm x 150 mm x 150 mm test blocks are to be included in the various concrete rates</i>						
8.2.1	G8.4.2	50 mm thick blinding layer under ground beams from 15 mPa concrete	m ²	7		
8.2.2	G8.4.3	100 mm thick floor slab, including 300 mm wide ground beams from 25 mPa concrete	m ³	7		
8.2.3	G8.2.1	Rough vertical form work to ground beams under ground	m ²	32		
8.2.4	G8.2.2	Smooth vertical form work to exposed concrete surfaces	m ²	4		
8.2.5	G8.4.4	Uniform wood float finish on concrete surfaces	m ²	23		
8.2.6	G8.3.1	High tensile steel reinforcement to columns, beams, floor thickenings etc.	t	0,84		
8.2.7	G8.1.2.2	Mild steel reinforcement to columns, beams, floor thickenings etc.	t	0,13		
8.2.8	G8.3.2	Type 245 fabric reinforcement in floor slabs in single layer <i>(including overlap)</i>	m ²	24		
8.2.9	G8.1.1.2	25 mm x 25 mm chamfers on exposed concrete edges	m	19		
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Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents
	SANS 1 200	Schedule 9 Architectoral details - Masonry				
Supplementary preambles						
		Brickwork - sizes and descriptions				
		<i>Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick</i>				
		Hollow walls				
		<i>Description of hollow walls shall be deemed to include leaving every fifth perpend of the bottom course of the external skin open as a weep hole</i>				
		Face bricks				
		<i>Brick shall be ordered timorously to obtain uniformity in size and colour</i>				
		Pointing				
		<i>Description of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc</i>				
9,1		Brickwork in superstructure				
		<i>Brickwork of NFP bricks in class II mortar (burnt clay bricks with 14 MPa nominal strength)</i>				
9.1.1		One brick walls - use face brick	m ²	315		
9.1.2		Half brick walls - use face brick	m ²	9		
9.1.3		One brick walls above ceiling level - use stock brick	m ²	46		
9,2		Brickwork sundries				
		<i>2.5 mm brickwork reinforcement</i>				
9.2.1		75 mm wide reinforcement built in horizontally in superstructure	m	96		
9.2.2		150 mm wide reinforcement built in horizontally in superstructure	m	4 037		
9,3		Concrete prestressed fabricated lintels				
9.3.1		110 mm x 70 mm lintels in length not exceeding 3 m	no	3		
9.3.2		230 mm x 70 mm lintels in length not exceeding 3 m	no	10		
9.3.3		230 mm x 70 mm lintels in length not exceeding 4 m	no	7		
9.3.4		230 mm x 70 mm lintels in length not exceeding 5 m	no	3		
9.3.5		230 mm x 70 mm lintels in length not exceeding 7 m	no	1		
9,4		Face brickwork				
		<i>Brick-on-edge header course copings, sills etc of approved face bricks, pointed with recessed joints on all exposed faces</i>				
9.4.1		200 mm wide sills set sloping and slightly projecting	m	18		
9,5		Straight joints in brick wall				
9.5.1		5.6 mm Ø mild steel rods, 400 mm long positioned centrally in vertical joint at 340 mm c/c, painted with bond breaking liquid on one side, joint to be 10 mm wide filled with jointex and cover plates to be placed on both sides of joint over plaster	m	3		
SCHEDULE 9 TOTAL CARRIED TO SUMMARY PAGE						

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BID NO. : 8/2/RNM0398
CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
 RAYNKONYENI MUNICIPALITY

Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents
	SANS	Schedule 10				
	1 200	Waterproofing				
Supplementary preambles						
		Waterproofing				
		<i>Waterproofing of roofs, basements etc shall be laid under a ten year guarantee.</i>				
		<i>Waterproofing to roofs shall be laid to an even fall to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs</i>				
10,1		Dump profiling of walls and floors				
		<i>One layer of 375 micron "Consol Plastics Brikgrip DPC" embossed polyethylene damp proof course (SANS 952-1985-B or similar)</i>				
10.1.1		In walls	m ²	26		
		<i>One layer of 250 micron "Consol Plastics Gunplas USB Green" polyethylene waterproof sheeting (SANS 952-1985-C or similar) sealed at laps with "Gunplas Pressure Sensitive Tape"</i>				
10.1.2		Under surface beds	m ²	202		
SCHEDULE 10 TOTAL CARRIED TO SUMMARY PAGE						

BILL OF QUANTITIES PAGE NUMBER 2 1

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

BID NO. : 8/2/RNM0398
CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
 RAY NKONYENI MUNICIPALITY

Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents
	SANS 1 200	Schedule 12 Carpentry and joinery				
Supplementary preambles						
		Fixing				
		<i>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned to brickwork or concrete.</i>				
		<i>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500 mm centres, and where described as "bolted", the bolts have been given elsewhere</i>				
		Joinery				
		<i>Descriptions of frames shall be deemed to include frames, transoms, rails etc</i>				
		<i>Descriptions of hardwood joinery shall be deemed to include sinking and pelleting head and nuts of bolts</i>				
		Decorative thermosetting plastic laminate covering				
		<i>Laminate covering shall be glued under pressure and edge strips of same shall be butt jointed at junctions with adjacent similar finish</i>				
		Plate nailed timber roof truss construction etc				
		<i>Trusses are at maximum 1200 mm centres</i>				
		<i>Roof coverings are IBR on timber purlins</i>				
		<i>Ceilings are 6.4 mm sheeting on 38 mm x 38 mm brandering</i>				
		<i>Dimensions in descriptions of trusses are nominal and actual measurements are to be obtained from the Engineer and/or taken on site before design or fabrication commences</i>				
12,1		Sawn softwood grade 5				
12.1.1		38 mm x 114 mm wall plates	m	79		
12.1.2		76 mm x 50 mm wooden purlins	m	215		
12.1.3		38 mm x 38 mm purlins at guardhouse	m	24		
12.1.4		Mono truss 10152 mm x 2801 mm high overall with 600 mm eaves projection on side, high part against the brick wall & fastened to it	no	17		
12.1.5		Mono truss 6270 mm x 2801 mm high overall with 600 mm eaves projection on side, high part against the brick wall & fastened to it	no	13		
12.1.6		Mono truss 2710 mm x 2801 mm high overall with 600 mm eaves projection on side, high part against the brick wall & fastened to it	no	6		
12.1.7		Double pitch roof 4265 mm x 850 mm high overall with 600 mm eaves projection	no	2		
12,2		Sundries				
12.2.1		3 mm diameter galvanized wire tie 550 mm girth, wrapped around rafter and purlin with ends twisted together	no	76		
12,3		Wood preservative				
12.3.1		Two coats of wood preservative applied hot on sawn timbers before fixing	m ²	79		
12.3.2		Two coats of wood preservative applied hot on wrought exposed roof timbers	m ²	133		
SCHEDULE SUB TOTAL CARRIED FORWARD TO PAGE 24						

BILL OF QUANTITIES PAGE NUMBER 23

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

BID NO. : 8/2/RNM0398
CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
 RAYNKONYENI MUNICIPALITY

Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents
SANS 1 200		Schedule 12 continued Carpentry and joinery				
-\schedule continued from page 23						
12,4		Fascia and barge boards				
		<i>Medium density plain fibre-cement fascia and barge boards</i>				
12.4.1		12 mm x 230 mm fascia, countersunk screwed to support and roof timber with one brass screw at maximum 750 mm centres including galvanized steel H-profile joiners and standard aluminium half round cover strips at all joints	m	44		
12.4.2		10 mm x 250 mm barge board countersunk screwed to support and roof timber with one brass screw at maximum 750 mm centres and jointed with and including standard aluminium half round cover strips at all joints with galvanized steel H-profile joiners	m	41		
12,5		Doors				
12.5.1		Door D1 (<i>internal</i>) - 40 mm thick x 813 mm wide x 2032 mm high framed, ledged and braced batten door formed of 40 mm x 110 mm styles and top rail, 20 mm x 225 mm bottom ledge, 20 mm x 150 mm middle ledge and 20 mm x 110 mm diagonal braces, filled in flush one side with 20 mm x 75 mm tongued, grooved and V-jointed both sides vertical boarding fixed in including grooves in styles and top rail (<i>5 left hand opening and 5 right hand opening doors</i>)	no	10		
12.5.2		Door D2 (<i>internal</i>) - 1813 mm wide x 2500 mm high framed door with natural anodized aluminium extrusion profile frame, 6 mm clear laminated, annealed safety glass windows in both sides - lock on right hand leaf	no	2		
12.5.3		Door D3 (<i>external</i>) - 1813 mm wide x 2500 mm high framed door with natural anodized aluminium extrusion profile frame, 6 mm clear laminated, annealed safety glass windows in both sides - lock on right hand leaf	no	3		
12.5.4		Door D4 (<i>internal - security</i>) 1920 mm x 1080 mm "Centurion" Chubb high security strong room safe door complete with steel frame built into concrete wall	no	1		
12.5.5		"Xpanda" sliding security gate, 1800 mm wide x 2100 mm high at external door	no	1		
12,6		Office furniture				
12.6.1		L-shaped office working table with laminated surface finishes	no	3		
12.6.2		Built up kitchen floor units 2 x 1200 mm x 900 mm high x 572 mm deep with double doors. On top additional cupboard space, (Hi-line range) with wall unit affixed to wall 1370 mm high x 3800 mm long	no	1		
12.6.3		Payment counter-desk (wall to wall) custom built - front is full wood panel from floor level to counter level - internal face with shelves and drawers to requirement	no	1		
12.6.4		Operation room custom built wall to wall table with laminated top, internal face with shelves and drawers to requirement	no	1		
12.6.5		Control room custom built wall to wall table with laminated top, internal face with shelves and drawers to requirement	no	1		
SCHEDULE 12 TOTAL CARRIED TO SUMMARY PAGE						

BILL OF QUANTITIES PAGE NUMBER 24

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

BID NO. : 8/2/RNM0398
CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
 RAY NKONYENI MUNICIPALITY

Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents
	SANS 1 200	Schedule 13 Ceiling partitions and access flooring				
Supplementary preambles						
		Fixing <i>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned to brickwork or concrete.</i> <i>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500 mm centres, and where described as "bolted", the bolts have been given elsewhere</i>				
		Ceilings <i>Unless otherwise described ceiling shall be deemed horizontal</i>				
		Steel components <i>All steel components for ceilings, partitions, etc are to be galvanized in accordance with SANS 121</i>				
13,1 Ceiling timbers, beads, insulation, etc						
		<i>Everite gypsum plasterboard cornice</i>				
13.1.1		75 mm x 75 mm "Coved" cornices	m	250		
13,2 Nailed up ceilings						
		<i>4 mm "Everite Nutec" fibre-cement boards with H-type pressed steel joining strips</i>				
13.2.1		Ceilings including 38 mm x 38 mm sawn softwood brander at 450 mm centres and cross brander at 450 mm centres, including steel frame	m ²	468		
13.2.2		Extra over ceiling for 600 mm x 600 mm trap door of 32 mm x 32 mm wrought softwood rebated framing with one cross brander, including necessary trimmers around	no	172		
SCHEDULE 13 TOTAL CARRIED TO SUMMARY PAGE						

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Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

BID NO. : 8/2/RNM0398
CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
 RAY NKONYENI MUNICIPALITY

Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents
	SANS 1 200	Schedule 15 Ironmongery				
Supplementary preambles						
		Ironmongery <i>Where ironmongery is described as plugged, prices are to include for screwing to and including approved patent plugs in concrete or brickwork with plaster or tiled finish</i>				
		Proprietary items <i>Where applicable the manufacturer's names or product catalogue titles are given in sub-headings preceding the item. Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specifications given with supporting brochures etc clarifying the features of the products/articles offered. On request returnable samples are to be provided to the principal agent for consideration.</i>				
		Finishes to ironmongery <i>Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered, CH Chromium plated, SC Satin chromium plated, SE Silver enamelled, GE Grey chromium enamelled, AN Anodised natural, AS Anodised silver, AB Anodized bronze, PB Polished brass, PL Polished and lacquered, PT Epoxy coated, SD Sanded</i>				
15,1 Hinges, bolts etc						
		<i>In accordance with DCLSA catalogue or similar approved</i>				
15.1.1		150 mm Chromium plated barrel bolts keep fixed to metal for all external doors	no	3		
15,2 Locks						
		<i>In accordance with DCLSA catalogue or similar approved</i>				
15.2.1		"ESCO NUTEK" four lever lockset CZ694243133CH, SC finish, or similar approved	no	4		
15.2.2		"ESCO NUTEK" two lever lockset CZ694243113CH, SC finish, or similar approved	no	11		
15,3 Sundries						
15.3.1		600 mm chromed grab bar plugged to ceramic tiled walls	no	2		
15.3.2		Approved "Nomad" extra dirt trapping doormat	no	1		
15.3.3		Ref 140/69/C00069 floor mounted door stop plugged to ceramic tiled/ granolithic finished floors	no	15		
15,4 Bathroom fittings						
		Conways				
15.4.1		CH"B 1682" toilet roll holder	no	3		
15.4.2		19 mm Stainless steel chromium plated towel rail, 600 mm long, with end brackets plugged to plastered or tiled wall	no	5		
15.4.3		Vanity cupboards with mirror affixed to wall in all bathrooms	no	3		
SCHEDULE 15 TOTAL CARRIED TO SUMMARY PAGE						
BILL OF QUANTITIES PAGE NUMBER 28						

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

BID NO. : 8/2/RNM0398
CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
 RAY NKONYENI MUNICIPALITY

Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents
	SANS	Schedule 16				
	1 200	Metalworks				
Supplementary preambles						
		Descriptions				
		<i>Description of bolts shall be deemed to include nuts and washers</i>				
		<i>Descriptions of expansion anchors and bolts and chemical anchors shall be deemed to include nuts, washers and mortises in brickwork or concrete</i>				
		<i>Metalwork described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described</i>				
		<i>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600 mm centres</i>				
16,1 Welded screen, gate etc						
		<i>Screens and gates to external door</i>				
16.1.1		Single security gate size 1813 mm wide x 2032 mm high formed of 25 mm x 25 mm x 2 mm mild steel hollow section frame filled with R10 vertical bars at 109 mm centres, two 25 mm x 25 mm x 2 mm thick hollow section horizontal bars, two 100 mm hinges welded to frame, the whole bolted to brickwork with three 8 mm x 50 mm long rawl bolts including barrel bolt	no	1		
16,2 Pressed steel door frames						
		<i>1.2 mm rebated, galvanized pressed steel door frames suitable for half brick walls</i>				
16.2.1		Frame for door 877 mm x 2064 mm high for door type D1	no	10		
		<i>1.2 mm double rebated, galvanized pressed steel door frames suitable for one brick walls</i>				
16.2.2		Frame for door 1813 mm x 2064 mm high for door type D2	no	2		
		<i>1.2 mm double rebated, galvanized pressed steel door frames suitable for one brick walls</i>				
16.2.3		Frame for door 1813 mm x 2064 mm high for door type D3	no	3		
16,3 Steel windows, doors etc						
		<i>Pressed aluminium windows with window frames built into brick work</i>				
16.3.1		Window type W1 - 533 mm wide x 654 mm high with burglar bars for ablution cubicles	no	4		
16.3.2		Window type W2 - 1022 mm wide x 654 mm high with burglar bars for ablution cubicle	no	1		
16.3.3		Window type W3 - 1022 mm wide x 1559 mm high with burglar bars for end of passage	no	1		
16.3.4		Window type W4 - 1511 mm wide x 1559 mm high with burglar bars for office rooms	no	3		
16.3.5		Window type W5 - 2000 mm wide x 1264 mm high with burglar bars for kitchen	no	1		
16.3.6		Window type W6 - 10620 mm wide x 2469 mm high shop front	no	1		
SCHEDULE SUB TOTAL CARRIED FORWARD TO PAGE 30						

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Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

BID NO. : 8/2/RNM0398
CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
 RAYNKONYENI MUNICIPALITY

Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents
	SANS 1 200	Schedule 17 Plastering				
Supplementary preambles						
		Method				
		<i>The method to be used shall be either the monolithic method or the bonded method</i>				
		Preparation				
		<i>For granolithic applied monolithically, the concrete floor shall be swept clean after bleeding of the concrete has ceased and the slab has begun to stiffen; any remaining bleed water shall be removed and the granolithic applied immediately thereafter. For granolithic to be bonded to the floor slab after it has hardened, the slab surface shall be hacked (preferably by mechanical means) until all laitance, dirt, oil, etc is dislodged and swept clean of all matter. The slab shall then be wetted and kept damp for at least six hours before applying the granolithic.</i>				
		Mix				
		<i>Granolithic shall attain a compressive strength of at least 41 MPa. The coarse aggregate shall comply with SANS 1083 and shall generally be capable of passing a 10 mm mesh sieve. Where the thickness of the granolithic exceeds 25 mm, the size of the coarse aggregate shall be increased to the maximum size compatible with the thickness of the granolithic.</i>				
		Panels				
		<i>Granolithic shall be laid in panels not exceeding 14 m² for monolithic finishes, not exceeding 9.5 m² for bonded finishes and not exceeding 6 m² for all external granolithic. Wherever possible, panels shall be square but at no time should the length of the panel exceed 1.5 times its width. Where possible joints between panels shall be positioned over joints in the floor slab and shall be at least 3 mm wide through the full thickness of the finish, separated by strips of wood or fibreboard and finished with V-joints.</i>				
		Laying				
		<i>Monolithic granolithic shall be applied to the partially set slab and thoroughly compacted and lightly wood floated to the required levels.</i>				
		<i>Boded granolithic shall be applied to the slab after applying a 1:1 sand-and-cement slurry brushed over the surface and allowed to partially set before applying the granolithic. The granolithic shall be thoroughly compacted and lightly wood floated to the required levels.</i>				
		<i>After wood floating, the monolithic and bonded granolithic shall remain undisturbed until bleeding has ceded and the surface has stiffened. Any remaining bleed water and laitance shall then be removed and the surface steel trowelled or power floated.</i>				
		Curing, seasoning and protection				
		<i>Granolithic shall be covered with clean hessian with waterproof building foil over and kept wet for at least seven days after laying.</i>				
		Colour				
		<i>Coloured granolithic shall be tinted with approved colouring pigment mixed into a true and even colour</i>				

SCHEDULE SUB TOTAL CARRIED FORWARD TO PAGE 32

BILL OF QUANTITIES PAGE NUMBER 31

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

BID NO. : 8/2/RNM0398
CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
 RAYNKONYENI MUNICIPALITY

Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents
	SANS	Schedule 17 continued				
	1 200	Plastering				
-\schedule continued from page 31						
17,1		Granolithic				
17.1.1		Average 35 mm thick on floors with upper surface to falls and currents at staff entrance	m ²	8		
17,2		Internal plaster				
		<i>Cement plaster on brickwork</i>				
17.2.1		On walls	m ²	645		
17.2.2		On narrow widths	m ²	18		
SCHEDULE 17 TOTAL CARRIED TO SUMMARY PAGE						

BILL OF QUANTITIES PAGE NUMBER 32

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

BID NO. : 8/2/RNM0398
CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
 RAYNKONYENI MUNICIPALITY

Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents
	SANS 1 200	Schedule 18 Tiling				
Supplementary preambles						
		Descriptions				
		<i>Unless described as "fixed with adhesive to plaster" description of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding</i>				
		<i>Tiles should comply with the minimum requirements of SANS 1449.</i>				
		<i>Wall tiling to comply with Part 7.2 of SANS 0107:1996.</i>				
		<i>Finished wall tile surfaces to comply with Part 7.2.6.1. of SANS 0107:1996.</i>				
		<i>Protection cleaning and maintenance of wall tiles to comply with part 9 of SANS 0107:1996.</i>				
		<i>Tiling rates to include appropriate plastic edge trims wherever required, to all external corners, jambs, sills, etc.</i>				
18,1		Wall tiling				
		<i>150 mm x 150 mm white matt ceramic tiles fixed with adhesives to plaster (plaster indicated elsewhere)</i>				
18.1.1		On walls	m ²	68		
18.1.2		On narrow width	m ²	13		
18.1.3		Cut 100 mm high wall skirting with same tiles as being used for floors	m ²	12		
18,2		Floor tiling				
		<i>350 mm x 350 mm matt non-slip ceramic floor tiles on cement screed</i>				
18.2.1		Glazed ceramic tiles fixed with an approved tile adhesive to cement plaster <i>(See item 14.1.1)</i>	m ³	254		
18,3		Sundries				
18.3.1		Glazed ceramic soap holders attached to wall tiles in ablution with adhesive as per manufacturer's recommendation and supply	no	5		
SCHEDULE 18 TOTAL CARRIED TO SUMMARY PAGE						
BILL OF QUANTITIES PAGE NUMBER 33						

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

BID NO. : 8/2/RNM0398
CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
 RAY NKONYENI MUNICIPALITY

Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents
	SANS 1 200	Schedule 19 Plumbing and drainage				
Supplementary preambles						
		Wire gratings <i>Descriptions of gutter outlets, etc. shall be deemed to include wire ballom gratings.</i>				
		Excavations <i>Trenches not exceeding 1m deep shall be taken of such width as to provide a clearance of 300mm on each side of the pipe, the width of the trench shall be increased by 100mm for each successive depth of 1m to a maximum width which provides a clearance of 500mm on each side of the pipe. No claim for rock excavation will be entertained unless the Contractor has timorously notified the quantity surveyor thereof prior to backfilling. 'Soft rock' and 'hard rock' shall be as defined in 'Earthworks'.</i>				
		Laying, backfilling, bedding, etc. of pipes: <i>Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions. Where no manufacturers instructions exist, pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SANS 1200 L : Medium pressure pipelines LD : Sewers LE : Storm water drainage Pipe trenches, etc. shall be backfilled in accordance with clause 3, 5.5, 5.6, 5.7 and 7 of SANS 1200 DB: Earthworks (Pipe trenches) Clause 5.7.2 will only be applicable if authorised by the Engineer in writing. Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SANS 1200LB: Bedding (Pipes). Unless otherwise described bedding of rigid pipes shall be class B bedding. If the material from the excavations is found to be unsuitable as backfilling for drain trenches and inspection chambers, etc. written approval must be obtained form the Engineer to use imported fill.</i>				
		Stainless steel basins, sinks, wash troughs, urinals, etc.: <i>Stainless steel for economy basins, domestic sinks, worktops and wash troughs shall by type 430 (17/0). Stainless steel for laboratory sinks, photographic equipment, etc. shall be type 316 (18/8). Stainless steel for urinals, basins, quality sinks, wash troughs, institutional equipment, etc. shall be type 304 (18/8).Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable.</i>				
		Waste unions: <i>Descriptions of waste unions shall be deemed to include rubber or vulcanite vulcanite plugs and chains fixed to fittings.</i>				
		Sealing of edges <i>Outer edges of sinks, basins, baths, urinals, etc are to be sealed against adjacent surfaces with approved silicone</i>				
		uPVC pipes and fittings <i>Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings. Soil, waste and vent pipes and fittings shall be solvent weld jointed or sealed with butyl rubber rings</i>				
		uPVC pressure pipes and fittings <i>Pipes of 50 mm diameter and smaller shall be plain ended with solvent welded uPVC sockets and fittings. Pipes of 63 mm diameter and greater shall have sockets and spigots with push-in type integral rubber ring joints. Bends shall</i>				
SCHEDULE SUB TOTAL CARRIED FORWARD TO PAGE 35						
BILL OF QUANTITIES PAGE NUMBER 34						
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Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2	

BID NO. : 8/2/RNM0398
CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
 RAYNKONYENI MUNICIPALITY

Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents
	SANS 1 200	Schedule 19 continued Plumbing and drainage				
-Schedule continued from page 34						
		<i>be uPVC and all other fittings shall be cast iron, all with similar push-in type joints.</i>				
		High density polyethylene (HDPE) pipes and fittings				
		<i>Pipes shall be type 4 and of the class specified with Plasson or Alprene compression fittings.</i>				
		Polypropylene pipes				
		<i>Polypropylene pipes 54 mm diameter and smaller shall be seamless copper coloured Class 16 pipes jointed with Fast-fuse heat welded thermoplastic or where so described Polylock compression fittings. Pipes shall be firmly fixed to walls, etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed in accordance with the manufacturer's instructions.</i>				
		Copper pipes				
		<i>Pipes shall be hard drawn and half-hard Maksimal pipes of the class described. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), Class 2 (half-hard) and Class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent antisiphon pipes, capillary solder fittings and compression fittings shall be Cobra Watertech type. Capillary solder fittings shall comply with ISO 2016</i>				
		<i>Copper pipes to be installed in accordance with the latest version of the Code of Practice for Copper Plumbing soldering techniques. Flux, solder, etc to be strictly in accordance with special attention to copper flux composition.</i>				
		Reducing fittings				
		<i>Where fittings have reducing ends or branches they are described as "reducing" and only the largest end or branch size is given. Should the Contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained.</i>				
		Fixing of pipes				
		<i>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls, etc, casting in, building in or suspending not exceeding 1 m below the suspension level.</i>				
		Paper wrapping to pipes				
		<i>Pipes chased into brickwork must be wrapped with two layers of stout brown paper tied with wire. Rates are to include for wrapping around joints and fittings.</i>				
		Disinfection of water pipework				
		<i>Water pipework is to be disinfected at completion in accordance with SANS 1200L.</i>				
		Denzil petrolatum anti-corrosion tape as manufactured by Denso SA				
		<i>Pipes to be taped shall be coated with the appropriate primer and the tape shall be applied in the appropriate widths and 10% overlaps. Couplings and fittings to pipes shall be taped in strict accordance with the manufacturers instructions including mastic, tape, Layflat sheeting, securing of same, etc.</i>				

SCHEDULE SUB TOTAL CARRIED FORWARD TO PAGE 36

BILL OF QUANTITIES PAGE NUMBER 35

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

BID NO. : 8/2/RNM0398
CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
RAY NKONYENI MUNICIPALITY

Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents
	SANS 1 200	Schedule 19 continued Plumbing and drainage				
-\schedule continued from page 35						
19,1		Soil drainage - external next to building				
		<i>Excavation, etc for soil drainage</i>				
19.1.1		Excavation in earth not exceeding 1 m deep for pipe trench	m ³	35		
19.1.2		Excavation in earth exceeding 1 m and not exceeding 2 m deep for pipe trenches	m ³	10		
19.1.3		Backfilling to pipe trenches compacted to 90% Mod AASHTO density	m ³	18		
19.1.4		Selected granular filling in bedding under and filling around the pipes compacted to 90% Mod AASHTO density	m ³	4		
19.1.5		Selected granular filling in blanket over and filling around the pipes compacted to 90% Mod AASHTO density	m ³	13		
		<i>Normal duty (Class 51) uPVC sewer & drain pipes</i>				
19.1.6		110 mm pipes vertically or ramped to cleaning eyes etc (no excavation)	m	3		
19.1.7		110 mm pipes laid in trenches (excavation elsewhere)	m	43		
		<i>Extra over for normal duty (Class 51) uPVC sewer & drain pipe fittings</i>				
19.1.8		110 mm x 90 degree bend	no	5		
19.1.9		110 mm x 110 mm x 45 degree junction with inspection eye	no	4		
19.1.10		110 mm access bend	no	11		
19.1.11		Rodding eye access junction	no	3		
		<i>uPVC galleys</i>				
19.1.12		110 mm dished gulley not exceeding 500 mm deep	no	5		
		<i>Testing</i>				
19.1.13		Test soil drain system	Item	1		
19,2		Sanitary fittings				
		<i>"Vaal" or other approved</i>				
19.2.1		Vaal Sanitaryware ceramic fireclay 895 mm x 455 mm "Cameo" oval self rimming vanity basin, with three semi-punched tap holes, (i.e. available in two tap hole configuration and chain stay hole through the semi-punched top-hole). Overflow attachments (Code 8784OZ), with flexible overflow tube, waste outlet and overflow tube adapter.	no	3		
19.2.2		WC suite comprising white vitreous china pan with P-trap, 9 litre high-level duranite vandal-proof induct type "Flush Master" (Cobra Code FM2-210) complete with pneumatic flushing mechanism and recessed chromium plated push button user control station in remote position with plastic conduit pipe and sleeve built into and including forming recess in brickwork, brackets and matching extended flush pipe and with heavy duty white single flap seat.	no	4		
19.2.3		Stainless steel sink type "DCB" with double central bowl, 1800 mm long on galvanized steel brackets in kitchen	no	1		
19.2.4		"Lavatera 70400" or similar approved wall urinal with spreader and waste union	no	1		
SCHEDULE SUB TOTAL CARRIED FORWARD TO PAGE 37						

BILL OF QUANTITIES PAGE NUMBER 36

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

BID NO. : 8/2/RNM0398
CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
 RAYNKONYENI MUNICIPALITY

Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents
	SANS 1 200	Schedule 19 continued Plumbing and drainage				
- \schedule continued from page 36						
19,3		Waste unions etc				
		<i>Cobra watertech</i>				
19.3.1		32 mm 301 CP basin waste union and floor waster water union	no	1		
19.3.2		40 mm 301 CP sink waste union	no	2		
19,4		Traps etc				
		<i>Rubber</i>				
19.4.1		50 mm P or S trap <i>"Cobra watertech" or other approved</i>	no	4		
19.4.2		40 mm 340 CP bottle trap	no	4		
19.4.3		Connection unit between 40 & 50 mm units and 110 mm waste pipes	no	5		
19,5		Taps, valves etc				
		<i>Cobra watertech</i>				
19.5.1		15 mm Code 139 "Copcl" capillary type Under-wall CP star pattern stop tap	no	5		
19.5.2		15 mm "Carina" CP single top-hole star pattern sink mixer	no	1		
19.5.3		PB1.10RB vacuum breaker	no	1		
19.5.4		Cobra no 481 CP basin set	no	4		
19.5.5		Code PA5.1 "Master box 1" house water station consisting of an isolating valve, strainer, combination pressure reducing valve (400 kPa) and expansion relief valve with discharge over a funnel	no	1		
19.5.6		15 mm 128-15CP Star under tile stopcock	no	10		
19.6		Sanitary plumbing				
		<i>PVC soil and vent pipes</i>				
19.6.1		50 mm pipes	m	10		
19.6.2		50 mm pipes chased into brick walls or under floor slabs	m	10		
		<i>Extra over uPVC soil and vent pipes for fittings</i>				
19.6.3		110 mm pan connector	No	5		
19.6.4		50 mm bend	No	5		
19.6.5		50 mm reducing junction	No	10		
19,7		Water supplies				
		<i>Class 9 uPVC pressure pipes with solvent welded joints</i>				
19.7.1		75 mm pipes laid in and including trenches not exceeding 1 m deep	m	10		
		<i>Extra over Class 9 uPVC pressure pipes for fittings with solvent welded joints</i>				
19.7.2		75 mm x 50 mm reducer	no	1		
19.7.3		75 mm x 75 mm equal tee	no	1		
		<i>PN10 HDPe PE100 pipes</i>				
19.7.4		63 mm pipes laid in and including trenches not exceeding 1 m deep	m	10		
		<i>Extra over PN10 HDPE PE100 pipes for Plasson fittings</i>				
19.7.5		63 mm x 25 mm reducing tee	no	1		
SCHEDULE SUB TOTAL CARRIED FORWARD TO PAGE 38						

BILL OF QUANTITIES PAGE NUMBER 37

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

BID NO. : 8/2/RNM0398
CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
 RAY NKONYENI MUNICIPALITY

Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents
SANS		Schedule 19 continued				
1 200		Plumbing and drainage				
-Schedule continued from page 37						
<i>Class 1 copper pipes with capillary couplings</i>						
19.7.6		15 mm pipes	m	30		
19.7.7		22 mm pipes	m	10		
19.7.8		15 mm pipes chased into brickwork including brown paper lagging	m	25		
19.7.9		22 mm pipes chased into brickwork including brown paper lagging	m	8		
<i>Extra over Class 1 copper pipes with capillary fittings</i>						
19.7.10		15 mm fittings	no	14		
19.7.11		22 mm fittings	no	4		
<i>Sundries</i>						
19.7.12		300 mm x 300 mm Cast iron stopcock box including brick chamber below 750 mm deep internally	no	1		
<i>Disinfecting</i>						
19.7.13		Disinfect water pipe system	Item	1		
<i>Testing</i>						
19.7.14		Test water pipe system	Item	1		
19,8		Electric water heater				
<i>Kwikot</i>						
19.8.1		150 Litre "Megaflow" wall mounted electric water heater	no	1		
19,9		Drip trays, etc				
<i>0.6 mm Galvanized sheet steel</i>						
19.9.1		1800 mm x 1000 mm Drip tray for water heater, with 100 mm high upstand all around with top edge bent over and with 20 mm threaded outlet union	no	1		
19.10		Pipe insulation				
<i>25 mm Thick polyurethane foam pipe insulation</i>						
19.10.1		Insulation to 15 mm pipes including fittings	m	30		
19.10.2		Insulation to 22 mm pipes including fittings	m	10		
19.11		Holes etc				
<i>Core drilling hole not exceeding 50 mm diameter</i>						
15.11.1		100 mm concrete slab	no	5		
15.11.2		220 mm brick wall	no	9		
<i>Core drilling hole exceeding 50 mm and not exceeding 100 mm diameter</i>						
15.11.3		100 mm concrete slab	no	5		
15.11.4		220 mm brick wall	no	9		
SCHEDULE SUB TOTAL CARRIED FORWARD TO PAGE 39						

BILL OF QUANTITIES PAGE NUMBER 38

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

BID NO. : 8/2/RNM0398
CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
 RAYNKONYENI MUNICIPALITY

Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents
	SANS 1 200	Schedule 19 continued Plumbing and drainage				
-schedule continued from page 38						
19.12		Rainwater drains				
		<i>0.50 mm galvanized sheet metal rainwater gutter attached to roof trusses, zinc/aluminium alloy coated with corrosion inhibitive primer and high performance exhibitve "Silver-White" exterior finish.</i>				
		<i>Pre-painted aluminium straps at 1000mm centres fixed to wall with nail plugs.</i>				
19.12.1		125 mm x 85 mm domestic OGEE x 0,6mm - brackets fixed at 600mm centres	m	58		
19.12.2		Stop ends are crimped onto the OGEE gutter and sealed on the inside with Dow Corning 813 silicone sealer.	No	4		
19.12.3		75 mm x 50 mm x 0,6 mm rectangular outlet, attached to gutter	No	12		
19.12.4		75 mm x 50 mm x 0,6 mm rectangular offset	No	12		
19.12.5		75 mm x 50 mm x 0,6 mm rectangular fluted downpipe, attached to brick wall with standard down pipe brackets for down pipe size <i>(inclusive of fixing nails)</i> 3300 mm long	No	12		
19.12.6		75 mm x 50 mm x 0,6 mm rectangular shoe outlet	No	12		
19.12.7		75 mm x 50 mm x 0,6 mm rectangular 90 degree connection units on horizontal gutter	No	4		
SCHEDULE 19 TOTAL CARRIED TO SUMMARY PAGE						

BILL OF QUANTITIES PAGE NUMBER 39

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

BID NO. : 8/2/RNM0398
CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
 RAY NKONYENI MUNICIPALITY

Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents
	SANS 1 200	Schedule 20 Glazing				
Supplementary preambles						
		Float glass <i>The term "float glass" is used for monolithic annealed glass</i>				
		Laminated glass <i>Laminated glass to have polyvinyl butyral (PVB)</i>				
20.1 Glazing to steel with putty						
		4 mm clear float glass				
20.1.1		Panes exceeding 0.1 m ² and not exceeding 0.5 m ² <i>(including putty)</i>	m ²	12		
		4 mm obscure glass				
20.1.2		Panes exceeding 0.1 m ² and not exceeding 0.5 m ² <i>(including putty)</i>	m ²	3		
		5 mm "Pacific" obscure glass at guardhouse				
20.1.3		Panes exceeding 0.1 m ² and not exceeding 0.5 m ² <i>(including putty)</i>	m ²	1		
20.2 Tops, shelves, doors, mirrors, etc						
		6 mm silvered float glass copper backed mirrors with polished edges, holed for and fixed with chromium plated dome capped mirror screws with rubber buffers to plugs in brick works				
20.2.2		Mirror 600 mm x 800 mm high with 6 mm screws	no	3		
SCHEDULE 20 TOTAL CARRIED TO SUMMARY PAGE						

BILL OF QUANTITIES PAGE NUMBER 40

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

BID NO. : 8/2/RNM0398
CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
 RAY NKONYENI MUNICIPALITY

Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents
	SANS 1 200	Schedule 21 Paintwork				
Paint specifications						
		Painting, etc <i>All painting shall be done in accordance with Plascon specifications unless otherwise described</i>				
		Colours, etc <i>Unless otherwise described all paintwork shall be deemed to have colour value in excess of 7 on the Munsell System in accordance with SANS 1091</i>				
21.1 On plasterboard surfaces						
		<i>One coat alkali resistant primer and two coats PVA emulsion paint for interior use</i>				
21.1.1		Ceilings and cornices, including priming metal cover strips and nail heads	m ²	190		
21.2 On fibre-cement board surfaces						
		<i>One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for interior and exterior use</i>				
21.2.1		Ceilings and cornices, including priming metal cover strips and nail heads	m ²	190		
21.2.2		Fascia and barge boards, including priming metal jointing strips	m ²	21		
21.3 On metal surfaces						
		<i>One coat alkyd based zinc phosphate primer, one coat alkyd based universal undercoat and two coats of superior quality universal enamel paint on steel</i>				
21.3.1		Door frames	m ²	14		
21.3.2		Windows	m ²	11		
21.3.3		Gates, grilles, burglar screens, balustrades, etc <i>(both sides measured over the full flat area)</i>	m ²	6		
21.3.4		"Xpanda" sliding security gate	m ²	1		
21.4 On wood surfaces						
		<i>One coat primer, one coat alkyd based universal undercoat and two coats of superior quality universal enamel paint</i>				
21.4.1		Doors	m ²	40		
21.4.2		Roof timbers at eaves and verges	m ²	19		
21.5 Paint on floated plaster						
		<i>Prepare and apply one coat plaster primer, one coat universal undercoat and two coats of Plascon Wall and All or similar approved enamel paint</i>				
21.5.1		On internal walls	m ²	645		
SCHEDULE 21 TOTAL CARRIED TO SUMMARY PAGE						

BILL OF QUANTITIES PAGE NUMBER 4 1

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

BID NO. : 8/2/RNM0398
CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
 RAYNKONYENI MUNICIPALITY

Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents
	SANS	Schedule 22				
	1 200	Electrical installation				
Supplementary preambles						
		Specifications, etc				
		<i>Tenderers are referred to the specification numbered annexed to these bills of quantities for the electrical work, for the full descriptions of the following items which are to be read and priced in conjunction with the said specifications</i>				
		General notes				
		<i>The conditions of contract and the application of the Contract Price</i>				
		<i>Adjustment provisions shall be set out in Section 1 : Preliminaries</i>				
		<i>The description in these bills of quantities shall be read in conjunction with the specification</i>				
		<i>The rate for each item in the bills of quantities shall include for all materials, labour, profit, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description.</i>				
		<i>The bills of quantities shall not be used for ordering purposes. The Contractor shall check the lengths of cables on site before ordering. Off-cuts shall be allowed for in the unit rates.</i>				
		<i>The rates shall exclude Vale Added Tax (VAT).</i>				
		<i>All materials covered in this specification shall, wherever possible, be of South African manufacture</i>				
22.1 All works of electrical nature						
22.1.1		Provisional sum for all electrical installations, connection, fittings etc. <i>(this includes all appliances, plugs, switches, cablings, luminaries, earthing, switchboards, testing, commissioning, etc.)</i>	Prov	1	110 000,00	110 000,00
22.1.2		Provisional sum for high mast floodlights	Prov	1	165 000,00	165 000,00
SCHEDULE 22 TOTAL CARRIED TO SUMMARY PAGE						

BILL OF QUANTITIES PAGE NUMBER 42

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

BID NO. : 8/2/RNM0398
CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
 RAY NKONYENI MUNICIPALITY

Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents
	SANS	Schedule 24				
	1 200	External works				
Roads and paved areas						
24,1		Earthworks				
		<i>Excavating over site to reduce levels</i>				
24.1.1		Average depth 80 mm	m ²	670		
		<i>Filling in making up levels with imported material</i>				
24.1.2		Levels to be determined on site	m ²	670		
		<i>Compaction</i>				
24.1.3		Compact all areas where material has been excavated or backfilled as well as the total area to receive paving to 95MOD AASHTO density	m ²	670		
		<i>Sand fill</i>				
24.1.4		20 mm layer of sand layer over the entire area to be paved	m ²	670		
		<i>Laying of paving blocks</i>				
24.1.5		Lay grey zig-zag type 30 mPa strength 60 mm type S-A road paving blocks on the 20 mm sand bedding	m ²	670		
		<i>Constraining edges from concrete</i>				
24.1.6		Figure 1 - rectangular curbs on straight/curving lines at connection to existing road surfaces or where the drawings indicate <i>(rate cover the cutting of</i>	m	181		
24.1.7		<i>Cutting of paving blocks</i>				
		Cutting of paving blocks along edge beam to fit, rate shall include any concrete filling as required	m	91		
SCHEDULE 24 TOTAL CARRIED TO SUMMARY PAGE						

BILL OF QUANTITIES PAGE NUMBER 44

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

BID NO. : 8/2/RNM0398
CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
 RAY NKONYENI MUNICIPALITY

SUMMARY OF THE SCHEDULE OF QUANTITIES

Schedule 1	Preliminary and general	
Schedule 2	Occupational health and safety requirements	
Schedule 3	Water pipe - earthworks	
Schedule 4	Water pipes and accessories	
Schedule 5	Sewer pipe - earthworks	
Schedule 6	Sewer pipes and accessories	
Schedule 7	Foundations, columns etc. for main building	
Schedule 8	Foundations for guard building	
Schedule 9	Architectural details - Masonry	
Schedule 10	Waterproofing	
Schedule 11	Roof coverings	
Schedule 12	Carpentry and joinery	
Schedule 13	Ceiling partitions and access flooring	
Schedule 14	Floor coverings, wall linings etc	
Schedule 15	Ironmongery	
Schedule 16	Metalworks	
Schedule 17	Plastering	
Schedule 18	Tiling	
Schedule 19	Plumbing and drainage	
Schedule 20	Glazing	
Schedule 21	Paintwork	
Schedule 22	Electrical installation	
Schedule 23	Mechanical installation	
Schedule 24	External works	

Sub - total : Construction value - SECTION A

Signature of authorized person

Date signed

BOQ PAGE NUMBER 45

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

BID NO. : 8/2/RNM0398
CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
RAY NKONYENI MUNICIPALITY

BILL OF QUANTITIES

SECTION B BOUNDARY WALL

For further clarification : all activities for each item shall be as described in the relevant SANS 1200 pay items

BILL OF QUANTITIES PAGE NUMBER 1

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

BID NO. : 8/2/RNM0398						
CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17						
RAY NKONYENI MUNICIPALITY						
Item number	Payment reference	Item Description	Unit	Quantities	Rate	Amount Rands.cents
	SANS	Schedule 7				
	1 200	Boundry wall				
7,1		Boundry wall earthworks				
		<i>Supply, install & construct the following items :</i>				
		Earthworks				
7.1.1	D8.3.2a	Excavate in bulk, use material for backfill and spoil excess and unsuitable material for wall foundations	m ³	276		
7.1.3	D8.3.2.(b)2	Extra over for excavation in hard rock material <i>(rate shall cover the cost of blasting, removal & replacement of all material with all haulage involved)</i>	m ³	41		
7.1.4	D8.3.2.(b)2	Extra over for excavation in boulder class A & B material <i>(rate shall cover the cost of removal & replacement of all material with all haulage involved)</i>	m ³	28		
7.1.5	D8.3.2(a)	Extra over for the removal of additional unsuitable material <i>(in any type of material only when requested by the Engineer in charge of the site - rate shall cover the cost of removal & replacement of all material with all haulage involved)</i>	m ³	14		
7.1.8	DM8.3.3.2	Rip excavated floor area and compact to 93 % Mod AASHTO density	m ²	394		
7.1.9	D8.3.4(a)	Make up deficiency in backfill material by importation of suitable material approved by the Engineer	m ³	17		
7.1.10	D8.3.4(a)	2 x 150 mm thick layer of G5 imported selected gravel material with 95% Mod AASHTO density compaction under foundations	m ³	118		
7,2		Concrete & Masonry related items				
		<i>Note : The costs of making and testing of 150 mm x 150 mm x 150 mm test blocks are to be included in the various concrete rates</i>				
		<i>Supply, install & construct the following items :</i>				
7.2.1	G8.4.2	50 mm thick blinding layer under foundations from 15 mPa concrete	m ²	394		
7.2.2	G8.4.3	300 mm thick column foundations from 25 mPa concrete	m ³	119		
7.2.9	G8.3.1	High tensile steel reinforcement to columns, beams, floor thickenings etc.	kg	8 925,00		
7.2.6	G8.2.1	Rough vertical form work to foundations and columns under ground	m ²	421		
7.2.8	G8.4.4	Uniform wood float finish on concrete surfaces	m ²	394		
9.1.1		One brick walls - use face brick (including brickforce & metal ties)	m ²	838		
9.1.2		Brick columns- tapered from 1.2m to 0.5m and filled with 15 Mpa Concrete	no	53		
9.1.3		15 mm thick cement plaster on brickwork	m ²	1 800		
9.1.4		One coat alkali resistant primer and two coats acrylic emulsion sheen paint finish with colour as per Client's requirement	m ²	1 800		
9.1.6		10mm Expansion joints in walls with sealant	m	133		
9.1.7		Security fence on top	m	360		
SUB-TOTAL OF BOUNDARY WALL : SECTION B						

BID NO. : 8/2/RNM0398
CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17
RAY NKONYENI MUNICIPALITY

BILL OF QUANTITIES

SECTION C CIVIL WORKS

For further clarification : all activities for each item shall be as described in the relevant COLTO Standard Specifications for Road and Bridge Works for State Road Authorities 1998 edition.

BILL OF QUANTITIES PAGE NUMBER 1

Contractor

Witness1

Witness2

Employer

Witness1

Witness2

SCHEDULE C : ROAD CONSTRUCTION						
ITEM NO	DESCRIPTION	UNIT	LIC	QTY	TENDER RATE	TENDER AMOUNT
	Brought forward					
B12.01	Location of existing services by hand	m ³	LIC	100		
B12.02	Relocation of underground cables	m	LIC	100		
B12.03	Relocation of water pipes	m	LIC	100		
B12.04	Relocation of sewer pipes	m	LIC	100		
B12.05	Relocation of fences	m	LIC	20		
1200	TOTAL CARRIED TO SUMMARY					

SCHEDULE C : ROAD CONSTRUCTION						SECTION 1500
ITEM NO	DESCRIPTION	UNIT	LIC	QTY	TENDER RATE	TENDER AMOUNT
	ACCOMMODATION OF TRAFFIC					
B15.01	Accommodating traffic and maintaining temporary deviations	km		0,300		
15.02	Earthworks for temporary deviation:					
	(a) Shaping of temporary deviations	km		0,10		
	(b) Cut and borrow to fill	m ³		10		
	(c) Cut to spoil	m ³		100		
	(d) Extra over subitem 15.02 (c) for haulage in excess of 1.0km free-haul Suitable borrow pit is 5km away form the site	m ³ -km		100		
B15.03	Temporary traffic-control facilities:					
	(a) Flagmen	man-day	LIC	154		
	(b) Portable STOP and GO-RY signs	No.		4		
	(e) Road signs, R- and TR-series, (1200mm)	No.		5		
	(f) Road signs, TW-series, (1200mm)	No.		5		
	(g) Road signs, STW-, DTG-, TGS- and TG-series (excluding delineators and barricades)	m ²		2		
	(h) Delineators (DTG50J), 600 x 150mm sides:					
	(i) Single	No.		20		
	(ii) Mounted back to back	No.		10		
	(i) Movable barricade/road sign combination, 1800 x 300mm and 900mm diameter	No.		1		
	(j) Traffic cones	No.		30		
	(n) Other traffic control measures ordered by the Engineer					
	(i) Provision of other traffic control measures	Sum	LIC	1		
1500	Carried forward					

SCHEDULE C : ROAD CONSTRUCTION						SECTION 1500
ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	BILLED AMOUNT	
	Brought forward					
	(ii) Handling costs and profit in respect of sub-item B15.03(n)(i) above	%				
15,06	Watering of temporary deviations	kl	170			
15.07	Blading by road grader of:					
	(a) Temporary deviations	km-pass	1,00			
B15.10	Accommodation of traffic where road is constructed in half-widths	km			Rate Only	
15,12	Temporary culverts :					
	(a) Provision and laying of temporary prefabricated culverts complete of type SC 75D load pipes with ogee joints and bedding					
	(i) 600mm dia	m	10			
	(ii) 900mm dia	m	3			
	(c) Eventual removal of temporary culverts on sub-item 15.12(a)(i)&(ii)					
	(i) 600mm dia	m	40			
	(ii) 900mm dia	m	3			
B15.15	Provision of traffic safety equipment for use by the Engineer					
	(a) Safety jackets	No.	10			
1500	TOTAL CARRIED TO SUMMARY					

SCHEDULE C : ROAD CONSTRUCTION					SECTION 1700	
ITEM NO	DESCRIPTION	UNIT	QTY	TENDER RATE	TENDER AMOUNT	
	CLEARING AND GRUBBING					
B17.01	Clearing and grubbing	ha	0,11			
17,02	Removal and grubbing of large trees and tree stumps:					
	(a) Girth exceeding 1 m up to and including 2 m	No.	3			
	(b) Girth exceeding 2 m up to and including 3 m	No.	3			
B17.07	Cut to Spoil of topsoil and unsuitable material and temporary stockpiling thereof in:					
	(a) Topsoil in windrows alongside the road and work area and stockpile at borrow pits	m ³	20			
1700	TOTAL CARRIED TO SUMMARY					

SCHEDULE C : ROAD CONSTRUCTION					SECTION 1800	
ITEM NO	DESCRIPTION	UNIT	QTY	TENDER RATE	TENDER AMOUNT	
	DAYWORK AND HIRE OF CONSTRUCTION EQUIPMENT					
B18.01	Labour					
	(a) Normal working hours:					
	(i) Foreman	hour	8			
	(ii) Artisan	hour	8			
	(iii) Operator	hour	8			
	(iv) Labourer	hour	8			
	(b) Overtime, Sundays and Public Holidays					
	(i) Foreman	hour	8			
	(ii) Artisan	hour	8			
	(iii) Operator	hour	8			
	(iv) Labourer	hour	8			
B18.02	Hire of construction equipment					
	(a) Bulldozer with ripper:					
	(i) Cat D6 or similar	hour	8			
	(b) Self-propelled grader (Cat 14H or similar)	hour	8			
	(c) Front-end loader with 2 to 3m ³ capacity	hour	8			
	(d) T.L.B. (Tractor, Loader, Backhoe):					
	(i) 48 kW capacity	hour	8			
	(e) Tip truck or dumper with:					
	(h) Pneumatic-tyred roller with 10 to 25 tons capacity	hour	8			
	(i) Vibratory roller of 8 tons capacity	hour	8			
	(j) 11 000 litre water tanker	hour	8			
1800	TOTAL CARRIED TO SUMMARY					

ITEM NO	DESCRIPTION	UNIT	LIC	QTY	TENDER RATE	TENDER AMOUNT
	DRAINS					
21.01	Excavation for open drains:					
	(a) Excavating soft material situated within the following depth ranges below the surface level:					
	(i) 0 m up to 1,5 m	m ³	LIC	50		
	(ii) Exceeding 1,5m and up to 3,0m	m ³		5		
	(b) Extra over subitem 21.01(a) for excavation in hard material, irrespective of depth	m ³		5		
21.02	Clearing and shaping existing open drains	m ³		20		
21,05	Excavation of Banks and Dykes	m ³		20		
21,06	Natural permeable material in subsoil drainage systems (crushed stone)					
	(a) Excavating soft material situated within the following depth ranges below the surface level:					
	(i) 0 m up to 1,5 m	m ³	LIC	200		
	(ii) Exceeding 1,5m and up to 3,0m	m ³		215		
	(b) Extra over subitem 21.01(a) for excavation in hard material, irrespective of depth	m ³		50		
	(b) Crushed stone obtained from commercial sources					
	(ii) Course grade	m ³	LIC	110		
	(ii) Filter sand	m ³	LIC	10		
21,08	Pipes in subsoil drainage system					
	(b) Unplasticised perforated PVC and fittings normal duty, complete with couplings					
	(iv) 160mm external dia perforated and slotted	m	LIC	270		
21.10	Synthetic fibre filter fabric (Kaytech 36 or similar)	m ²	LIC	875		
21.15	Overhaul for material hauled in excess of 1,0 km free-haul (normal overhaul) Suitable borrow pit is less than 5km away from the site	m ³ -km		2 575		
21.16	Backfilling existing eroded side drains and earth berm	m ³	LIC	100		
2100	TOTAL CARRIED TO SUMMARY					

SCHEDULE C : ROAD CONSTRUCTION							SECTION 2200
ITEM NO	DESCRIPTION	UNIT	LIC	QTY	TENDER RATE	TENDER AMOUNT	
PREFABRICATED CULVERTS							
22.01	Excavation:						
	(a) Excavating soft material situated within the following depth ranges below the surface level:						
	(i) 0 m up to 1,5 m	m ³	LIC	195			
	(ii) Exceeding 1,5 m and up to 3,0 m	m ³		10			
	(b) Extra over subitem 22.01(a) for excavation in hard material, irrespective of depth	m ³		5			
	(c) Extra over subitems 22.01(a) and (b) for overhaul of spoil of unsuitable material	m ³ -km		1 000			
22.02	Backfilling:						
	(a) Using the excavated material	m ³	LIC	60			
	(b) Using imported selected material	m ³	LIC	70			
	(c) Extra over subitems 22.02(a) and (b) for soil cement backfilling containing 5% cement	m ³	LIC	40			
	(d) Using filter sand bedding material	m ³	LIC	20			
22.03	Concrete pipe culverts:						
	(a) Without prefabricated floor slabs						
	(i) 900 x 600 x 175S	m				Rate Only	
	(ii) 600 x 450 x 175S	m				Rate Only	
	(ii) 1500 x 1500 x 175S	m				Rate Only	
	(b) On class B bedding, SC type with ogee joints:						
	(i) 450mm, 100D storm water pipe with og joints	m		10			
	(ii) 600mm, 100D storm water pipe with og joints	m		170			
22.07	Cast in situ concrete and formwork:						
	(c) In inlet and outlet structures, skewed ends, catchpits, manholes, culvert top and bottom slabs blocks, excluding formwork, but including						
	(i) Class 30 / 19 concrete	m ³	LIC	5			
2200	Carried forward						

SCHEDULE C : ROAD CONSTRUCTION						SECTION 2200
ITEM NO	DESCRIPTION	UNIT	LIC	QTY	TENDER RATE	TENDER AMOUNT
	Brought forward					
	(d) Formwork of concrete under subitem 22.07(c) above (type of finish indicated):					
	(i) Class F1 surface finish	m ²	LIC	40		
	(ii) Class F2 surface finish	m ²	LIC	40		
22.10	Steel reinforcement:					
	(a) Mild steel bars	t				Rate Only
	(b) High-tensile steel bars Y10 starters	t	LIC	10,00		
	(c) Welded steel fabric ref.: 617	kg	LIC	40		
	(d) Welded steel fabric ref.: MR500	kg	LIC	10		
22.12	Removing existing concrete:					
	(a) Plain concrete	m ³		20		
	(b) Reinforced concrete	m ³		20		
22,14	Removing and Stacking existing culverts					
	(a) 600mm pipe (All Classes)	m		10,0		
	(b) 750mm pipe (All Classes)	m		10,0		
22.25	Overhaul on excavated material carted to spoil, existing structures demolished and removed to spoil, and removing and relaying, and removing and stacking existing prefabricated culverts, for haul in excess of the free-haul distance	m ³ -km		500		
2200	Carried forward					

SCHEDULE C : ROAD CONSTRUCTION						SECTION 2200
ITEM NO	DESCRIPTION	UNIT	LIC	QTY	TENDER RATE	TENDER AMOUNT
	Brought forward					
22,26	Brickwork					
a)	115 mm thick	m ²	LIC	20,00		
b)	230 mm thick	m ²	LIC	20,00		
B22.30	Rehabilitation of existing borrowpits after construction					
	Rehabilitation of the existing borrow pits after construction	Sum				Rate Only
2200	TOTAL CARRIED TO SUMMARY					

SCHEDULE C : ROAD CONSTRUCTION						SECTION 2300
ITEM NO	DESCRIPTION	UNIT	LIC	QTY	TENDER RATE	TENDER AMOUNT
	<u>CONCRETE KERBING, CONCRETE CHANNELING, CHUTES AND DOWNPIPES AND CONCRETE LINING FOR OPEN DRAINS</u>					
23,01	Concrete kerbing					
	(a) Figure 7 barrier kerb at road edges	m	LIC	561		
	(b) Figure 7a barrier kerb at road edges	m	LIC	10		
	(c) Transition kerbs	m	LIC	10		
	(d) Mini Kerb barrier kerb at road edges and road edges	m	LIC	561		
	(e) Concrete class 30/19 in 300 mm x 200 mm edge beam at tie-ins to gravel surfaces	m ³	LIC	2		
23,08	Concrete lining for open drains					
	(a) Concrete class 30/19 including joint sealant	m ³	LIC	33		
	(b) Class U2 surface finish to cast-in-situ concrete	m ²	LIC	220		
23,09	(d) Formwork to cast-in-situ concrete lining for open drains (Class F2 surfaces)	m ²	LIC	20		
	(a) Excavating soft material situated within the following depth ranges below the surface					
	(i) 0m up to 1.5m	m ³	LIC	20		
	(i) Exceeding 1.5m up to 3m	m ³		0		
	(b) Extra over sub item 21.01 (a) for excavation in hard material irrespective of depth	m ³		5		
23.04-LI	Steel reinforcement					
	Welded steel fabric Ref MR245 Mesh	kg	LIC	539,00		
2300	TOTAL CARRIED TO SUMMARY					

SCHEDULE C : ROAD CONSTRUCTION					SECTION 3300	
ITEM NO	DESCRIPTION	UNIT	QUANTITY	TENDER RATE	TENDER AMOUNT	
	MASS EARTHWORKS					
33,01	Cut and borrow to fill including freehaul of up to 1.0km					
	(a) Material in compacted layer of 150 mm thickness					
	(i) G5 material compacted to 98% of modified AASHTO density	m ³	870			
33.03	Extra over item 33.01 for excavating and breaking down material in:					
	(a) Intermediate excavation	m ³	696			
	(b) Hard excavation	m ³	87			
	(c) Boulder excavation class A	m ³	44			
	(d) Boulder excavation class B	m ³	44			
33.04	Cut to spoil, including free-haul up to 1,0 km. Material obtained from:					
	(a) Soft excavation	m ³	1 225,00			
	(b) Intermediate excavation	m ³	175,00			
	(c) Hard excavation	m ³	175			
	(d) Boulder excavation class A	m ³	88			
	(e) Boulder excavation class B	m ³	88			
33,05	Overbreak in hard and boulder class A excavation	m ²	50			
33,07	Removal of unsuitable material (including free haul of 0.5 km					
	(a) In layer thickness of 150 mm :					
	(i) Stable material	m ³	50			
3300	Carried forward					

SCHEDULE C : ROAD CONSTRUCTION					SECTION 3300
ITEM NO	DESCRIPTION	UNIT	QUANTITY	TENDER RATE	TENDER AMOUNT
	Brought forward				
33.10	Roadbed preparation and the compaction of material:				
	(a) Compaction to 90% of modified AASHTO density, 150mm depth	m ³	884		
33.13	Finishing off cut and fill slopes, medians and interchange areas :				
	(a) Cut slopes	m ²	500		
	(b) Fill slopes	m ²	500		
B33.20	Fill from commercial sources				
	(e) Pioneer layer (Dump Rock)	m ³	80		
33/16.02	Overhaul on material hauled in excess of 1,0 km (overhaul)	m ³ -km	8 750		
3300	TOTAL CARRIED TO SUMMARY				

SCHEDULE C : ROAD CONSTRUCTION					SECTION 3400	
ITEM NO	DESCRIPTION	UNIT	QTY	TENDER RATE	TENDER AMOUNT	
	PAVEMENT LAYERS OF GRAVEL MATERIAL (OBTAINED FROM COMMERCIAL SOURCES)					
34.01	Pavement layers constructed from gravel taken from cut or borrow including free haul up to 1,0km:					
	(a) Gravel gravel selected layer including shoulders compacted to:					
	(ii) 95% of modified AASHTO density for a compacted layer thickness of 200mm G5 gravel material (Borrowed from cut)	m ³	884			
	(d) Gravel subbase material compacted to:					
	(ii) 97% of modified AASHTO density for a compacted layer thickness of 150mm G5 gravel material stabilised to C3 (Commercially sourced)	m ³	884			
	(f) Gravel base (chemically stabilised material) compacted to:					
	(ii) 98% of modified AASHTO density for a compacted layer thickness of 150 mm G5 material stabilised to C3	m ³	10			
34.02	Extra over item 34.01 for excavation of material in:					
	(a) Intermediate excavation	m ³	50			
	(b) Hard excavation	m ³	50			
34/16.02	Overhaul on material hauled in excess of 1,0 km overhaul)	m ³ -km	100			
3400	TOTAL CARRIED TO SUMMARY					

SCHEDULE C : ROAD CONSTRUCTION					SECTION 3500
ITEM NO	DESCRIPTION	UNIT	QTY	TENDER RATE	TENDER AMOUNT
	STABILIZATION				
35,01	Chemical stabilization extra over for unstabilised compacted layers:				
	(b) SubBase layer				
	(i) 150mm G5 Material to C3 Material	m ³	884		
35,02	Chemical stabilising agent				
	(g) Other stabilizing agents				
	(i) CRM 11 32.5 BL	ton	75		
3500	TOTAL CARRIED TO SUMMARY				

SCHEDULE C : ROAD CONSTRUCTION					SECTION 3600
ITEM NO	DESCRIPTION	UNIT	QTY	TENDER RATE	TENDER AMOUNT
	CRUSHED STONE BASE				
36,01	Crushed-stone base :				
	(a) Constructed from type G2 material obtained from commercial sources and compacted to 88% apparent density in 150 mm layer thickness	m ³	884		
3600	TOTAL CARRIED TO SUMMARY				

SCHEDULE C : ROAD CONSTRUCTION						
ITEM NO	DESCRIPTION	UNIT	QTY	TENDER RATE	TENDER AMOUNT	
	PRIME COAT					
41,01	Prime coat					
	(c) MC-30 cut back bitumen @ 1.2 l/m ² application	ℓ	4625			
4100	TOTAL CARRIED TO SUMMARY					

SCHEDULE C : ROAD CONSTRUCTION					
ITEM NO	DESCRIPTION	UNIT	QTY	TENDER RATE	TENDER AMOUNT
	ASPHALT BASE AND SURFACING				
42,02	Asphalt surfacing (40 mm thick with 80/100 penetration grade bitumen) (on road with)				
	(a) Continuously graded (medium grade)	m ²	5679		
	Asphalt surfacing (25 mm thick with 80/100 penetration grade bitumen) (on sidewalks)				
	(b) Continuously graded (medium grade)	m ²	101		
42,04	Tack coat 30% stable grade emulsion	ℓ	6940		
B42.08	100 mm cores in asphalt pavement	No	10		
B42.11	Asphalt layer constructed for rehabilitation purposes in accordance with the provisions of sub-sub-clause B4213(f)(ii)	ton	0,20		
B42.21	Aggregate variations	ton	0,20		
4200	TOTAL CARRIED TO SUMMARY				

SCHEDULE C : ROAD CONSTRUCTION					
ITEM NO	DESCRIPTION	UNIT	QTY	TENDER RATE	TENDER AMOUNT
	DOUBLE SEALS Note: No extra payment for work in areas inaccessible to Mechanical Equipment				
45,01	Double seal using : precoated aggregate				
	(a) 19.0 mm and 9.5 mm aggregate (Grade 1 aggregate with 80/100 penetration grade bitumen applied @1.8 l/m ² for first coat and 1.2 l/m ² for second coat)	m ²			Rate Only
45,02	Bituminous binder variations :				
	(b) 80/100 penetration grade bitumen application for first coat	l			Rate Only
B45.03	Aggregate variations : precoated				
	(a) 19.0mm aggregate	m ³			Rate Only
	(c) 9.5mm aggregate	m ³			Rate Only
	(f) Extra over subitem 45.01(a) for application of second layer of aggregate in two separate operations	m ²			Rate Only
45,04	Application of fog spray consisting of :				
	(b) 30% spray grade emulsion (cationic)	l			Rate only
B45.05	Precoating aggregate				
	(i) 80/100 penetration grade bitumen @ 13 l/m ³ for 19 mm stones	m ³			Rate Only
	(ii) 80/100 penetration grade bitumen @ 18 l/m ³ for 9.5 mm stones	m ³			Rate Only
B45.08	Slurry				
	(i) Apply 8 mm thick medium grade slurry mixed with 220 l/m ³ stable grade emulsion	m ³			Rate Only
4500	TOTAL CARRIED TO SUMMARY				

SCHEDULE C : ROAD CONSTRUCTION						
ITEM NO	DESCRIPTION	UNIT	LIC	QTY	TENDER RATE	TENDER AMOUNT
	<u>PITCHING, STONWORK AND PROTECTION AGAINST EROSION</u>					
51,01	Stone pitching:					
	(b) Grouted stone pitching (Method 1)	m ²	LIC	100		
51,04	Concrete pitching and block paving					
	(b) Segmented block paving with 80 mm heavy duty interlocking paving blocks including soil poisoning on 20mm sand bedding	m ²	LIC	50		
5100	TOTAL CARRIED TO SUMMARY					

SCHEDULE C : ROAD CONSTRUCTION						
ITEM NO	DESCRIPTION	UNIT	LIC	QTY	TENDER RATE	TENDER AMOUNT
	GABIONS					
52.01	Foundation trench excavation and backfilling:					
	(b) In all other classes of material	m ³	LIC	10		
52.02	Surface preparation for bedding the gabions	m ²	LIC	10		
52.03	Gabions:					
	(a) Galvanized gabion boxes, (80 x 100 x 2,7mm dia wire mesh:					
	i) 1 x 1,0 x 1,0 high	m ³	LIC	20		
	ii) 2 x 1,0 x 1,0 high	m ³	LIC	10		
	(c) Galvanized gabion mattresses, (80 x 100 x 2,7mm dia wire mesh 3 x 2 x 0,3m deep)	m ³	LIC	10		
52.04	Filter fabric, (Kaytech A4 or similar, non-woven)	m ²	LIC	50		
52.04	Loffelstein Retaini Wall refurbishment	m ³	LIC	50		
5200	TOTAL CARRIED TO SUMMARY					

SCHEDULE C : ROAD CONSTRUCTION						
ITEM NO	DESCRIPTION	UNIT	LIC	QTY	TENDER RATE	TENDER AMOUNT
	GUARDRAILS					
54.01	Guardrails on timber posts:					
	(a) Galvanized	m	LIC	10		
	(b) Painted	m		10		
54.03	Extra over items 54.01, 54.02 and 54.11 for horizontally curved guardrails factory bent to a radius of less than 45 m	m		10		
54.04	End treatments:					
	(a) End wings	No		10		
	(b) Bull noses	No	LIC	10		
54.05	Additional guardrail posts:					
	(a) Timber	No	LIC	10		
54.06	Reflective plates	No	LIC	10		
54.07	Removing existing guardrails	m		10		
54.12	Extra over items 54.01 and 54.02 for drilling and blasting holes for guardrail posts	No		10		
5400	TOTAL CARRIED TO SUMMARY					

SCHEDULE C : ROAD CONSTRUCTION						
ITEM NO	DESCRIPTION	UNIT	LIC	QTY	TENDER RATE	TENDER AMOUNT
	ROAD SIGNS					
B56.01	Road sign boards with painted or coloured semi-matt background. Symbols lettering and borders in semi-matt black or in Class 1 retro-reflective material where the signboard is constructed from					
	(c) Prepainted galvanised steel plate (chromadek 1.6 mm thick or approved equivalent)					
	(i) Area not exceeding 2m ²	m ²		10		
	(e) Chromadek sheet regulatory warning and information signs					
	(i) Octagonal (900mm width)	No		5		
	(ii) Triangular (1200mm side)	No		4		
	(iii) Round (1200mm diameter)	No		4		
	(iv) Rectangular (1200mm x 900mm)	No		1		
56,04	Kilometer posts					
	(a) Galvanised steel	No	LIC	10		
56,05	Excavation and backfilling of road sign supports not applicable to kilometer posts	m ³	LIC	5		
56,06	Extra over for item 56.05 for cement treated soil backfill	m ³	LIC	3		
56,07	Extra over for item 56.05 for rock excavation	m ³	LIC	2		
B56.10	Danger plates at culverts / structures	No	LIC	10		
5600	TOTAL CARRIED TO SUMMARY					

SCHEDULE C : ROAD CONSTRUCTION					
ITEM NO	DESCRIPTION	UNIT	QTY	TENDER RATE	TENDER AMOUNT
	ROAD MARKINGS				
57,01	Road marking paint				
	(a) White lines broken or unbroken				
	(i) Width of line: 100mm	km	2,000		
	(ii) Width of line: 200mm continuity line WM2	km	0,100		
	(b) Yellow lines broken or unbroken				
	(i) Width of line: 200mm	km	0,100		
	(c) Red lines broken or unbroken	km	0,100		
	(d) White lettering and symbols	m ²	5		
	(f) Transverse lines, painted island and arrestor bed markings (any colour)	m ²	5		
B57.05	Roadstuds				
	(a) Bidirectional studs - red / red	no	5		
57,06	Setting out and pre-marking the lines (including traffic island marking, lettering & symbols)	km	2,000		
57,07	Re-establishing the painting unit at the end of the maintenance period	lump sum	1		
5700	TOTAL CARRIED TO SUMMARY				

SCHEDULE C : ROAD CONSTRUCTION					
ITEM NO	DESCRIPTION	UNIT	QTY	TENDER RATE	TENDER AMOUNT
	<u>FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS</u>				
59.01	Finishing the road and road reserve:				
	(b) Single-carriageway road	km	0,200		
5900	TOTAL CARRIED TO SUMMARY				

BID NO. : 8/2/RNM0166		
CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17		
RAYNKONYENI MUNICIPALITY		
Summary of the Schedule of Quantities		
SCHEDULE C : ROAD CONSTRUCTION		TENDER AMOUNT
1200	RELOCATION OF SERVICES	
1500	ACCOMMODATION OF TRAFFIC	
1700	CLEARING AND GRUBBING	
1800	DAYWORK AND HIRE OF CONSTRUCTION EQUIPMENT	
2100	DRAINS	
2200	PREFABRICATED CULVERTS	
2300	CONCRETE KERBING, CHANNELLING, CHUTES, LININGS FOR DRAINS	
3100	BORROW MATERIALS	
3300	MASS EARTHWORKS	
3400	PAVEMENT LAYERS OF GRAVEL MATERIAL	
3500	STABILIZATION	
3600	CRUSHED STONE BASE	
4100	PRIME COAT	
4200	ASPHALT BASE & SURFACING	
4500	DOUBLE SEALS	
5100	STONE PITCHING	
5200	GABIONS	
5400	GUARDRAILS	
5600	ROAD SIGNS	
5700	ROAD MARKINGS	
5900	FINISHING THE ROAD AND ROAD RESERVE	
TOTAL OF SCHEDULE OF QUANTITIES		

SUMMARY OF SCHEDULE OF QUANTITIES	
SUBTOTAL A = (SECTION A + SECTION B + SECTION C)	
ADD 10% CONTINGENCIES (10% of total above)	
SUBTOTAL	
ADD VALUE-ADDED TAX (VAT) (The tenderer shall add 15% of the subtotal for VAT)	
TENDER SUM CARRIED TO FORM OF TENDER	

SIGNED BY/ON BEHALF OF TENDERER

NAME

SIGNATURE

DATE

COMPANY STAMP

NOTICE NO: 185 OF 2022
TENDER NO: 8/2/RNM0398

Declaration

(In respect of completeness of Tender)

RAY NKONYENI MUNICIPALITY
10 Connor Street
Port Shepstone
4240

I/we, the undersigned, do hereby declare that these are the properly priced Bill of Quantities forming Part C2.2 of this Contract Document comprising 28 pages + the Bill of Quantities comprising 25 pages in consecutive order upon which my/our tender for the **TENDER NO.: 8/2/RNM0398– CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND-WARD 17** has been based.

SIGNED BY/ON BEHALF OF TENDERER

NAME

SIGNATURE

DATE

Part C3: Scope of Work

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Status

Should any requirement or provision in the parts of the Scope of Work conflict with any requirement of any Specification(s) forming part of this contract or any drawings, the order of precedence, unless otherwise specified, is:

- Drawings
- Scope of Work
- Specifications

RAY NKONYENI MUNICIPALITY
NOTICE NO: 185 OF 2022
TENDER NO: 8/2/RNM0398

C3.1. Description of the Works

C3.1.1 Employer's Objectives

A This contract is for the Construction of the Municipal Pound in Ward 17 within Ray Nkonyeni Municipality.

The description of the contract contained in the Scope of Work is merely an outline of the Contract Works and shall not limit the work to be carried out by the Contractor under this Contract. Details of some of the major items are given in this section and approximate detailed quantities for each type of work to be carried out in accordance with the Contract Documents are included in the Bill of Quantities.

C3.1.2 Overview of the Works

The project entails the Construction of the Municipal Pound in Ward 17. The project falls under the UGU District Municipality Area and is administered by the Ray Nkonyeni Municipality. Works will take place in the Marburg Area and the location of the project is as follows:

PROJECT NAME	PROJECT ADDRESS	DISTRICT MUNICIPALITY	LOCAL MUNICIPALITY	CO-ORDINATES	
CONSTRUCTION OF THE MUNICIPAL VEHICLE POUND – WARD 17	LOT No.1058 MARBURG EXTENSION 11	UGU	RAY NKONYENI	30 44 49,07 S	30 25 42,76 E

The major items of construction are as follows:

The following items are to form part of the scope of works:

- I. Site Establishment
- II. Clearing and grubbing
- III. Drainage approximate lengths – (kerb & channel = 561m, 600mm stormwater pipes = 170m, subsurface drainage = 270m)
- IV. Construction of a closed perimeter wall approximately 360m long
- V. Construction of new platform layerworks for parking area, access roads and associated stormwater drainage – (Approximate area is 6000 m2)
- VI. Construction of retaining wall
- VII. Surfacing of platform i.e asphalt surfacing -(Approximate area is 6000 m2)
- VIII. Construction of a guard house – (Approximate Area 10 m2)
- IX. Construction of an administration block comprising of offices, kitchenette, ablution facilities, control room and strong room - (Approximate Area 218 m2)
- X. Installation of flood lights – (Approximately No is 2)
- XI. Electrical and mechanical works
- XII. Finishing off the site
- XIII. Completion and handover of the Project to Ray Nkonyeni Municipality.
- XIV. Defects Liability period.

A general arrangement layout drawing illustrates the overview of the contract.

The detailed work that is to be carried out under the contract is as provided for in the Bill of Quantities, Drawings and project particular specifications. However, if during the course of construction conditions are found to differ from those anticipated, the Employer's Agent reserves the right to modify the scope of the work to suit the prevailing conditions and circumstances. Variations introduced in this manner

will be dealt with in accordance with the General Conditions of Contract (GCC) 2015 3rd Edition as published by South African Institute of Civil Engineering (SAICE).

The standard specifications on which this contract is based are the COLTO Standard Specifications for Road and Bridge Works for State Road Authorities 1998 edition

The work to be undertaken by the Contractor includes, but is not limited to, the following:

- The establishment on site of the Contractor's campsite;
- Provision of offices for the Employer's Agent's site personnel. It is not required to establish a site laboratory for the Employer's Agent's site personnel, as it is envisaged that the acceptance control be undertaken by an established commercial laboratory. The contractor remains responsible for his production control testing as required per the standard (plus any special) project specifications;
- The supply of plant, labour, tools, equipment and materials necessary to complete the work;
- Setting out of the works;
- Accommodation of traffic and maintaining temporary deviations;
- Clearing and grubbing of the site;
- Protection of works;
- Erection of signage and
- Finishing off and removal of site establishment.

The structure should be constructed to ensuring that it is self-draining. A 600mm diameter stormwater drainage system will be constructed.

The following earthworks will be undertaken under this contract

- Earthworks for the municipal pound will include cut-to-fill, borrow-to-fill, sourcing materials from commercial sources, cut-to-spoil, removal of unsuitable material, stockpiling of material, roadbed preparation etc.; and
- Base: 150 mm Crushed Stone G1 – Commercially sourced.
- Subbase: 150 mm Imported Gravel G5 stabilized to C3 – commercially sourced.
- Subgrade: 150mm Imported G6 In-situ - In-situ minimum CBR 15% - Reuse existing material on site (where possible).
- Rip and recompact 150 roadbed 90% MOD AASHTO
- Surfacing: 40mm asphalt
- Construction of kerbing and gid inlets;
- Installation of new signage;

Labour

A Project Liaison Committee will be established and is a vital means of communication between all parties involved with the Project. The composition of the PLC comprises representatives of the Employer, the Engineer and formal structures within the Community.

The Contractor shall make use of these communication channels, and shall appoint from amongst his site personnel a responsible person to participate in the affairs of the PLC, and this representative will be also required to attend the monthly PLC meetings.

It is mandatory that the Contractor shall interact with the community via proactive project liaison and project participation by its leaders and constituted organisations and forums, as well as through the employment of its people, and these activities shall constitute essential facets of the Project.

Local labour is to be used and the employment of such labour is to be done in conjunction with the PLC. The PLC will form a Labour Committee who shall assist the Contractor with the recruitment of local labourers.

C3.1.3 Description of Site and Access

The site is located in Marburg, south west of Port Shepstone. Access to the site can be gained from N2 travelling on the Main Road to Harding in a north easterly directions towards Port Shepstone. The site is located at Erf 1058 Protea Road in Marburg.

C3.1.4 Temporary Works

The Contractor will be responsible for accommodation of traffic. It is anticipated that residents will be disrupted as little as possible and will have access to their houses as far as possible. Note that Councillors and residents will be informed well in advance via the CLO and Contractor.

Temporary works will comprise of dealing with stream whilst installing gabions and reno-matresses.

In arriving at his rates the tenderer/contractors must take note of the following limitations that characterise the site of the roads. These must be taken into account in pricing and during construction of the roads.

- The roads are already operational. Construction activities should allow for continuous access to the users. The successful contractor will take full responsibility for this and is expected to allow for it by construction of the road entrance to the platform in half widths and/or by the construction and maintenance of detours.
- The project is urgent and the tenderer/contractor must complete the works as soon as possible. An estimated construction period of **Eight (8) months** has been allowed. Tenderers will be allowed to tender other competitive periods by indicating so in the section of alternatives and amendments in the returnables.

(i.1.1.1.1 **PS-5.1** **General**

The Contractor is referred to SANS 1921: 2004: Construction and Management Requirements for Works Contracts, Part 1: General Employer's Agenting and Construction Works, and Part 2: Accommodation of Traffic on Public Roads. These specifications shall be applicable to the contract under consideration and the Contractor shall comply with all requirements relevant to the project.

Certain aspects however require further attention as described hereafter.

(i.1.1.1.2 **PS-5.2** **Quality Assurance (QA)** *(Read with SANS 1921 – 1: 2004 clause 4.4)*

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

The Contractor shall ensure that efficient supervisory staff, the required transport, instruments, equipment and tools are available to control the quality of his own workmanship in accordance with his QA-system. His attention is drawn to the fact that it is not the duty of the Employer's Agent or the Employer's Agent's representative to act as foreman or surveyor.

The Employer's Agent's Quality Management System that will be used during Construction in conjunction with the contractor's Quality Assurance System on site is detailed under section, **PARTICULAR SPECIFICATIONS QMS.**

(i.1.1.1.3 **PS-5.3** **Management and disposal of water** *(Read with SANS 1921 - 1 : 2004 clause 4.6)*

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

(i.1.1.1.4 **PS-5.4** **Disposal of spoil or surplus material** *(Read with SANS 1921 - 1 : 2004 clause 4.10)*

The Contractor shall dispose all surplus and unsuitable material in legal spoil areas identified by the Employer's Agent. These spoil areas will be within 5km distance from the site. No overhaul will be paid for disposing of unsuitable material in the designated areas within 5km from the site.

(i.1.1.1.5 **PS-5.5** **Testing** *(Read with SANS 1921 – 1 : 2004 clause 4.11)*

PS-5.5.1 Process control

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

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

PS-5.5.2 Acceptance control

The process control test results submitted by the Contractor for approval of materials and workmanship may be used by the Employer's Agent for acceptance control. However, before

accepting any work, the Employer's Agent may have further control tests carried out by a laboratory of his choice. The cost of such additional tests will be covered by a provisional sum provided in the schedule of quantities, but tests that failed to confirm compliance with the specifications, will be for the account of the Contractor.

(i.1.1.1.6 **PS-5.6** **Survey beacons** *(Read with SANS 1921 - 1 : 2004 clause 4.15)*

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

(i.1.1.1.7 **PS-5.7** **Existing Services** *(Read with SANS 1921 - 1 : 2004 clause 4.17)*

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

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

(i.1.1.1.8 **PS-5.8** **Management of the environment** *(Read with SANS 1921 - 1 : 2004 clause 4.19)*

The Contractor shall pay special attention to the following :

(a) Natural Vegetation

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

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

(b) Fires

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

(i.1.1.1.9 **PS-5.9** **Overhaul**

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

(i.1.1.1.10 **PS-5.10** **Security**

The Contractor shall provide security watchmen for the contract as he deems fit at no extra cost for the Employer. The Contractor must ensure that all his employees as well as the *employees of his subcontractors are able to identify themselves as members of the construction team.*

i. **PS-6 CONSTRUCTION PROGRAMME**

(i.1.1.1.11 PS-6.1 Preliminary programme

The Contractor shall include with his tender a preliminary programme on the prescribed form to be completed by all Tenderers. The programme shall be in the form of a simplified bar chart with sufficient details to show clearly how the works will be performed within the time for completion as stated in the Contract Data.

The Contractor shall be deemed to have allowed fully in his tendered rates and prices as well as in his programme for all possible delays due to normal adverse weather conditions and special non-working days as specified in the Special Conditions of Contract, in the Project Specifications and in the Contract Data.

In addition, intermittent disruptions will include for the Employer's Agent's inspections at the following stages:

- Level control inspections and compaction tests after roadbed preparation and/or subgrade earthworks
- Level control inspections and compaction tests after subbase and base construction.

No additional payments, other than through scheduled items, will be made for these stoppages/disruptions/constraints.

Tenderers are to note that design mixes may be required for materials used in the construction of "Concrete Pavement Surfacing". In his programming, the tenderer must make allowance for this. No additional costs will be allowed for this testing except through scheduled items

The completion period of the contract is to be tendered by the tenderer and is expected not to exceed **EIGHT MONTHS**.

(i.1.1.1.12 PS-6.2 Programme in terms of Clause 5.6 of the General Conditions of Contract 2015

It is essential that the construction programme, which shall conform in all respects to Clause 5.6 of the General Conditions of Contract 2015, be furnished within the time stated in the Contract Data. The preliminary programme to be submitted with the tender shall be used as basis for this programme. The Contractor's attention is also drawn to clause 5.7.3 of the General Conditions of Contract 2015.

ii. **PS-7 SITE FACILITIES AVAILABLE**

(i.1.1.1.13 PS-7.1 Contractor's camp site and depot *(Read with SANS 1921 - 1 : 2004 clause 4.14)*

The Contractor will be permitted to locate his offices, storage facilities, workshops, latrines, etc, on a site approved by the Employer's Agent, in liaison with the community and the owners of farms traversed by the contract or any other appointed representatives. Temporary buildings and fencing are to be neat and presentable and the surrounding areas must at all times be kept in a neat, clean and orderly condition. The Contractor must not cut down or damage any trees nor make any excavation without the written permission of the Employer's Agent and will be required to restore the site to its original condition on completion of the Works.

All buildings and latrines shall be in accordance with the Local Authority and State Health regulations and shall be kept in a clean, sanitary condition to the satisfaction of the Employer's Agent.

(i.1.1.1.14 PS-7.2 Accommodation of Employees

No employees except for security guards will be allowed to sleep or be accommodated on the site.

No housing is available for the Contractor's employees and the Contractor shall make his own arrangements to house his employees and to transport them to site.

No informal housing or squatting will be allowed.

The Contractor shall provide the necessary ablution facilities at his camp site and the site of the works for the use of his employees. Chemical toilets only will be allowed where temporary facilities have to be provided.

PS 7.3 Source of Water Supply

The Contractor shall make his own arrangements for the supply of water for construction purposes. The source of water shall be subject to the approval of the Employer's Agent.

Should the contractor's source of water be Ugu District Municipality, the contractor will be required to ensure that the water account with Ugu District Municipality is in good standing prior to the issue of completion certificate. The Employer's Agent will withhold any payments until arrears are cleared with Ugu District Municipality.

(i.1.1.1.15 PS 7.4 Source of Power Supply

The power supply authority is Eskom. The Contractor will be required to make his own arrangements with, and pay all the requisite connection and consumption charges to Eskom for whatever temporary power supplies he may require for his use on the site and his tender will be held to include for all such costs and charges.

iii. PS-8 SITE FACILITIES REQUIRED FOR THE EMPLOYER'S AGENT

(i.1.1.1.16 PS 8.1 Temporary/Permanent Offices

The Contractor is to provide a temporary furnished office for use by the Employer's Agent. The offices should be able to accommodate one full time Employer's Agent's Representative and two assistants.

(i.1.1.1.17 PS 8.2 Laboratory Facilities

The Contractor will not be required to provide a testing laboratory on site for use by the Employer's Agent.

(i.1.1.1.18 PS 8.3 Sanitary Facilities

All latrines shall conform to the requirements of the Local Authority and shall be subject to approval by the Employer's Agent. All sanitary fees and charges due under the Local Authority or State Health Regulations or bylaws shall be paid by the Contractor. Throughout the progress of the contract, all latrines shall be maintained by the Contractor in a clean, sanitary condition to the satisfaction of the Employer's Agent.

(i.1.1.1.19 PS 8.4 Parking Facilities

The Contractor will be required to provide one covered parking for the Employer's Agent.

(i.1.1.1.20 PS 8.5 Employer's Agent's Transport

The Contractor will not be required to provide transport for the Employer's Agent's staff.

(i.1.1.1.21 PS 8.6 Security

The Contractor will be responsible for providing adequate security for the Works and for the site establishment. All costs associated with the provision of security staff shall be borne by the Contractor and should be allowed for in the rates tendered for items in the Schedule of Quantities. No additional payments will be made for security measures taken during the contract period, other than through the schedule items in the Schedule of Quantities.

(i.1.1.1.22 PS 8.7 Survey Equipment

The contractor shall provide the following survey equipment to the Employer’s Agent throughout the duration of the contract:

- A dumpy level
- Measuring tape
- An assistant, when required, to assist the Employer’s Agent to operate survey equipment, when provided

(i.1.1.1.23 PS 8.8 Contract staff to assist the Employer’s Agent

The following staff will be recruited by the contractor to assist the Employer’s Agent in carrying out his services:

Description of Staff	No. Required	Remarks
Occupational Health & Safety Monitoring	One	Provisional sum provided for appointment as directed by the Employer’s Agent. Personnel directed by and report to Employer’s Agent
Environment Compliance Officer	One	
Community Liaison Officer	One	

iv. PS-9 GENERAL SITE FACILITIES REQUIREMENTS

(i.1.1.1.24 PS 9.1 Existing Services

PS 9.1.1 Care, Damage and Protection

Known services will be indicated in the tender and contract documents. The Contractor will be responsible for identifying all services with the relevant Service Providers.

The Contractor shall familiarize himself with all services and expose them at the start of the Contract to verify their position and establish their depths.

No additional payment will be made to the Contractor for identifying and locating services. Therefore the Contractor will have to include the costs thereof in the scheduled items in the Schedule of Quantities.

Any information regarding existing services is given in good faith and without guarantee.

PS 9.1.2 Blasting

No blasting will be permitted within 10 m of any structure, pipeline or service unless the Contractor can satisfy the Employer’s Agent that his proposed blasting methods and controls are such that no damage will be caused to the adjoining structure, pipeline or service. In any event the Employer’s Agent will require the Contractor to plan and execute each blast in such a manner as to ensure that no damage will be caused to any structure, pipeline or service. In addition, the Employer’s Agent will require vibro-recordings to be taken at no additional cost to the Employer. No blasting is to be carried out in Eskom servitudes or wayleaves unless the Eskom authorities have been advised in writing three weeks prior to blasting. Where blasting is done adjacent to Eskom power lines, the Contractor shall arrange for a representative of Eskom to be present prior to and during any blast.

PS 9.1.3 Environmental Aspects

The Contractor will be required to plan and undertake his work in a manner that minimises its impact on the natural environment. Trees and other vegetation shall, wherever possible, be left undisturbed. Trees that are marked by the Employer's Agent shall not be damaged and in the event of the Contractor doing so, a penalty will be deducted from monies due to the Contractor.

Every effort shall be made by the Contractor to prevent pollution of the adjacent areas and river and to reduce the noise, dust and fumes emanating from his construction activities.

PS 9.1.4 Dealing with Water

Where necessary, the Contractor shall construct temporary drainage channels to divert ground water from his excavation and excess water must be pumped out.

No compensation for any variation of the actual conditions during construction from the data given will be considered. Neither will additional compensation be considered for data omitted or inaccurately given.

The rates tendered shall allow for the requirements of this clause and all incidentals.

(i.1.1.1.25 PS 9.2 Servitudes and Rights of Way

The Employer will, where necessary, obtain permanent servitudes and rights of way along the road routes indicated on the tender drawings. New servitudes will only be registered after completion of the Works.

(i.1.1.1.26 PS 9.3 Dealing with Damaged Services

In the event of any service being damaged or accidentally disconnected for any reason, the Contractor shall immediately contact the relevant authority for instruction and shall report the occurrence of the incident. The damage is to be repaired as soon as possible to the approval of the Employer's Agent and the authority. The Contractor will be held responsible for paying all costs incurred by the authority or himself as a result of each such incident, where relevant.

(i.1.1.1.27 PS 9.4 Accommodation of Traffic

The Contractor shall ensure the safe and expeditious passage of traffic at all times and shall provide all necessary temporary road traffic signs, barricades, flagmen, etc to safeguard the travelling public. Any detours or bypasses constructed by the Contractor shall be adequately signposted, as per the South African Road Traffic Signs Manual, and maintained in such a manner as to provide safe and easy passage of traffic.

(i.1.1.1.28 PS 9.5 Spoil Material

No indiscriminate spoiling of material will be allowed. All surplus or unsuitable material shall be spoiled, levelled and spread in designated areas as directed by the Employer's Agent. All haul will be regarded as freehaul.

(i.1.1.1.29 PS 9.6 Finishing and Tidying and Defects Liability Period

On no account must rubble and spoil materials, other materials, equipment or unfinished operations be allowed to accumulate in such a manner as to unnecessarily impede the activities of other Contractors or Authorities.

Finishing and tidying must not simply be left until the end of the construction period. The Contractor will be entitled, subject to prior agreement with the Employer's Agent and within reasonable limits, to request that work in a particular area and/or work of a particular discipline, be inspected for partial completion. The specified defects liability period in respect of any specific section of the Works shall commence on the date on which the relevant section is accepted by the Employer's Agent as being completed, i.e. fully commissioned, including finishing and tidying.

On completion of the Contract the Contractor shall ensure that all materials used in the construction of the temporary Site office, workshop and storage yard are removed from Site. Waste materials such as construction debris and soil contaminated with oil and fuel are to be disposed of at the solid waste disposal site used approved by the Employer's Agent. Prior to the handover of the Site to the Employer, the Contractor and the Employer's Agent will conduct a post construction audit to determine if any additional measures that are to be taken. The Completion Certificate will only be issued after this stage.

(i.1.1.1.30 PS 9.7 Employee Accommodation

Refer to Subclause 3.2.1 of Section A of Part 2 and Subclause 1.2.1 of Section A of Part 3 of SABS 0120.

The Contractor shall conform in all respects with the provisions of any Act, Regulations or By-Law of the Ray Nkonyeni Municipality, which may be applicable to employee accommodation. Save for a security guard on active duty, no employees may be housed on Site or the Contractor's campsite after normal working hours.

(i.1.1.1.31 PS 9.8 Employment of Local Labour

The Employer has determined that 100% of the Contractor's unskilled labour force shall be made up from the local community. A labour sub-committee (of a Project Steering Committee) comprising representatives of the community and other stakeholders will be responsible for the recruitment of all local labour. The Contractor will be required to provide details of the numbers of semi-skilled and unskilled workers he will require, together with their anticipated starting dates. The PSC through its labour sub-committee will then make this labour available to the Contractor.

A minimum of 50% of the local labour shall comprise of women and, where appropriate, disabled labour shall be employed. It is a requirement that tenderers acquaint themselves fully with requirements for registration with Unemployment Insurance Fund.

The Employer requires that the successful contractor registers all labour with the Unemployment Insurance Fund. The local labour rate has been determined at R196 per day per labourer (based on a 9 hour working day at R28/hour) or R196.00 per task. The task for excavation by hand has been agreed at 2,4 m³/day (e.g. 0,76 m x 1,0 m x 3,15 m).

During project execution, the successful contractor will be required to provide progress reports indicating to what level these requirements have been met.

(i.1.1.1.32 PS 9.9 Frequency of Labour Wages Payments

The contractor will be required to pay labour on a fortnightly/monthly basis

(i.1.1.1.33 PS 9.10 Training and Capacity Building

During project execution, it is the desire of the Employer that an identified number of community members receive appropriate level of non accredited training in either pipelaying activities or construction management activities. Within 14 days of appointment, the successful contractor will be required to provide, together with his method statement, a proposal for consideration by the Project Steering Committee for activities in which the community members can receive training. This proposal will be considered by the Project Steering Committee after which the Contractor will be given an instruction on the training to provide. Training will be provided to local labour that is already in the

employ of the contractors as per clause PS 9.8. It must be noted that the Contractor will be required to pay the labour based on their daily rates indicated in PS 9.8.

The contractor will be required to provide a training diary and report indicating the following to be updated monthly:

- Details of persons receiving training
- What areas there have been trained in
- Performance of the trainees
- Further training still to be done

Should the contractor fail to provide this training, the Employer reserves the right to seek training from alternative sources. In that case, the cost of the training sought will be deductible from any monies due to the contractor.

(i.1.1.1.34 PS 9.11 PORTION OF WORK CONSTRUCTED USING LABOUR INTENSIVE METHODS

The Ray Nkonyeni Municipality intends to use all construction contracts as a tool for creating employment opportunities for the local communities. It is therefore imperative that, as far as possible, work is done using the labour pool recruited in accordance PS9.9. Most, if not all of the works and activities (some of them named bellow) will be undertaken using labour intensive methods:

- Clearing and grubbing;
- Removal of trees/hedges/fences;
- Erosion protection – Gabions and Stone pitching;
- Construction of kerbing and channelling

v. PS-10 REQUIREMENTS FOR ACCOMMODATION OF TRAFFIC

(i.1.1.1.35 PS-10.1 General

The Contractor will be responsible for the safe and easy passage of public traffic past and on sections of roads of which he has occupation or where work has to be done near traffic.

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

(i.1.1.1.36 PS-10.2 Basic Requirements

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

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

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

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

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

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

(i.1.1.1.37 PS-10.3 Traffic Safety Officer

Where warranted by traffic conditions on or near the site, the Contractor shall nominate a suitable member of his staff as traffic safety officer to be responsible for the arrangement and maintenance of all the measures for the accommodation of traffic for the duration of the project. Duties of the traffic safety officer shall be as set out in SANS 1921 Part 2 and shall also be in compliance with the Occupational Health and Safety Act No 85 of 1993 and the Construction Regulations 2003.

(i.1.1.1.38 PS-10.4 Payment

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

Items that may be considered for payment are specified in SABS 1200 Standardized Specifications and the COLTO (Standard Specification for Roads and Bridge works for State Road Authorities) 1998 Edition.

vi. **PS-11 OCCUPATIONAL HEALTH AND SAFETY** (*Read with SANS 1921 - 1: 2004 clause 4.14*)

(i.1.1.1.39 PS-11.1 General statement

It is a requirement of this contract that the Contractor shall provide a safe and healthy working environment and to direct all his activities in such a manner that his employees and any other persons, who may be directly affected by his activities, are not exposed to hazards to their health and safety. To this end the Contractor shall assume full responsibility to conform to all the provisions of the Occupational Health and Safety Act No 85 and Amendment Act No 181 of 1993, and the OHSA 1993 Construction Regulations 2003 issued on 18 July 2003 by the Department of Labour.

For the purpose of this contract the Contractor is required to confirm his status as mandatory and employer in his own right for the execution of the contract by entering into an agreement with the Employer in terms of the Occupational Health and Safety Act by executing the Agreement form C1.2.4 included in Section C1: Agreements and Contract Data.

(i.1.1.1.40 PS-11.2 Health and Safety Specifications and Plans to be submitted at tender stage

(a) Employer's Health and Safety Specification

The Employer's Health and Safety Specification will be included in the tender documents as part of the Project Specifications.

(b) Tenderer's Health and Safety Plan

The successful Tenderer shall, on receipt of notification that he has been awarded the contract, submit without delay his own documented Health and Safety Plan for the execution of the work under the contract. His Health and Safety Plan must at least cover the following:

- (i) a proper risk assessment of the works, risk items, work methods and procedures in terms of Regulations 7 to 28;
- (ii) pro-active identification of potential hazards and unsafe working conditions;
- (iii) provision of a safe working environment and equipment;
- (iv) statements of methods to ensure the health and safety of subcontractors, employees and visitors to the site, including safety training in hazards and risk areas (*Regulation 5*);
- (v) monitoring health and safety on the site of works on a regular basis, and keeping of records and registers as provided for in the Construction Regulations;
- (vi) details of the Construction Supervisor, the Construction Safety Officers and other competent persons he intends to appoint for the construction works in terms of Regulation 6 and other applicable regulations; and
- (vii) details of methods to ensure that his Health and Safety Plan is carried out effectively in accordance with the Construction Regulations 2003.

The Contractor's Health and Safety Plan will be subject to approval by the Employer, or amendment if necessary, before commencement of construction work. The Contractor will not be allowed to commence work, or his work will be suspended if he had already commenced work, before he has obtained the Employer's written approval of his Health and Safety Plan.

Time lost due to delayed commencement or suspension of the work as a result of the Contractor's failure to obtain approval for his safety plan, shall not be used as a reason to claim for extension of time or standing time and related costs

(i.1.1.1.41 PS-11.3

Cost of compliance with the OHSa Construction Regulations

The rates and prices tendered by the Contractor shall be deemed to include all costs for conforming to the requirements of the Act, the Construction Regulations and the Employer's Health and Safety Specification as applicable to this contract. Should the Contractor fail to comply with the provisions of the Construction Regulations, he will be liable for penalties as provided in the Construction Regulations and in the Employer's Health and Safety Specification.

Items that may qualify for remuneration will be specified in the Safety Specifications included or in the Project specifications.

vii. PS-12 ADVERSE WEATHER CONDITIONS

In terms of Clause 5.12 of the General Conditions of Contract 2015, extension of time will be considered for **abnormal rainfall**. The numbers of days per month on which work is expected not to be possible as a result of **normal rainfall**, and for which the Contractor shall make provision in his tendered rates, prices and programme, are listed in Table PS-12.1 hereafter. Only the number of days lost as a result of adverse weather conditions, exceeding the number of days listed in Table PS-12.1, will qualify for consideration of extension of time.

During the execution of the Works, the Employer's Agent's Representative will certify a day lost due to abnormal rainfall and adverse weather conditions only:

- if no work was possible on the relevant working day on any item which is on the critical path according to the latest approved construction programme; or
- if less than 30% of the work force and plant on site could work during that specific working day.

Extension of time as a result of abnormal rainfall and adverse weather conditions shall be calculated monthly being equal to the number of working days certified by the Employer's Agent's Representative as lost due to rainfall and adverse weather conditions, less the number of days allowed for as in Table PS-12.1, which could result in a negative figure for certain months. The total extension of time as a result of abnormal climatic conditions for which the Contractor may apply, shall be the cumulative

algebraic sum of the monthly extensions. Should the sum thus obtained be negative, the extension of time shall be taken as nil.

RAY NKONYENI MUNICIPALITY
NOTICE NO: 185 OF 2022
TENDER NO: 8/2/RNM0398

C3.2. Engineering

SECTION B1200: GENERAL REQUIREMENTS AND PROVISIONS

Add the following clauses:

B12.04 Protection and relocation of services:

- (a) Payment to relocate and/or protect services.....provisional sum (Prov Sum)
- (b) Contractor's handling costs, profit and all other charges in respect of subitem B12.04(a) percentage (%)

The provisional sum item shall be paid in accordance with the provisions of the General Conditions of Contract as amended by Particular Conditions of Contract. The tendered percentage is a percentage of the amount actually spent under the prime-cost item, which shall include full compensation for the profit in connection with providing the specified service.

Item	Unit
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B12.05 Exposing of Services:

Excavation for material in the following depth ranges below ground level:

- (a) 0m up to 2m:
(i) Soft material cubic metre (m³)
(ii) Hard material cubic metre (m³)
- (c) Extra over subitems (a) above or hand excavation by means of hand tools such as picks, crowbars and pneumatic tools in close vicinity of services or where no blasting or machine excavation is allowed:
(i) Soft material cubic metre (m³)
(ii) Hard material cubic metre (m³)

The protection of services shall be as per B1202 of this section.

The unit of measurement to expose existing services shall be the cubic metre of material excavated in accordance with the authorised dimension, measured in place before excavation.

SECTION b1300:CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS

B1302 General Requirements

(c) Legal and Contractual Requirements and responsibilities to the public

Add the following:

“Legislation imposes mutual obligations on the Employer and contractor in the performance of their duties to society and to the built and natural environment. To assist the contractor in understanding and assessing his obligations, and thus to make allowances for the cost of compliance with this legislation, the following additional specifications are included in the project specifications.

Section C of the Scope of Works contains the Environmental Management Plan for this project. Its provisions regulate the contractor’s construction methods to ensure responsible conduct and treatment of the environment relevant to the project. No separate payment mechanism has been made available for the contractor to allow for his compliance with relevant environmental legislation. The contractor shall include such costs in the existing payment items under section B1303: Payment. However, non-compliance with the provisions of this section may lead to the imposition of penalties by the relevant authority.

Section D of the Scope of Works contains provisions that regulate the contractor’s construction methods for compliance with Government’s initiatives towards black economic empowerment. It also contains information on criteria used in the procurement process. No separate payment mechanism has been made available for the contractor to allow for his compliance with relevant black economic empowerment legislation. The contractor shall include such costs in the existing payment items under section B1303: Payment. However, non-compliance with the provisions of this section may lead to the imposition of penalties.

Section E of the Scope of Works contains the specifications that regulate the contractor’s construction methods so far as to ensure health and safety of his employees and of the public. New pay item has been made available under this section to allow the contractor to make separate provision for the cost of health and safety measures during the construction process.”

B1303 PAYMENT

Item		Unit
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B13.01	The contractor's general obligations	
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Add the following pay subitem:

“(d)	Health and safety obligation	month”
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Add the following sub-sub-clause defining ‘the contractor’s general obligations’:

“(iv) Complying with the requirements and conditions of the additional specifications relating to the Government’s Broad Based Black Economic Empowerment and the Environmental Management Plan

(v) The provision of a 10 seater mini-bus for inspecting the works during monthly site meetings, which is generally one day per month. This vehicle shall be in a neat and roadworthy condition and the contractor will be responsible for the insurance of such a vehicle.”

Delete the third paragraph commencing “Should the final value of the work ”.

Replace “clause 49” in the 4th, 8th and 10th paragraphs with “sub-clauses 13.7 and 13.8”.

In the 11th paragraph, the following amendments apply:

Insert as a new 2nd sentence “Hire costs or minimum hourly charges per month for constructional plant shall be deemed to be a part of construction time”.

Delete “received the letter of acceptance in terms of clause 12” and replace with “date of commencement in terms of clause 8.1”.

In the last line, change “clause 45” to read “clause 8.4”.

Add the following at the end of the second last paragraph of the payment clause:

"... Such limitations to payments shall occur whenever the contractor falls behind by more than two month(s) on his first programme, or any acceptable revised programme thereafter, this pay item shall cease to be active until the contractor makes up the time lost to be within a month of the abovementioned programme."

Add the following paragraphs:

"Should the combined total tendered for subitems (a), (b), and (c) exceed 20% of the tender sum (excluding CPA, contingencies and VAT), the tenderer shall state his reasons in writing for tendering in this manner. The tenderer's attention is drawn to Form B1: Contractor's Establishment on Site, (bound in this Volume), to be completed by the tenderer. If the tenderer should require additional compensation for his obligations under section 1300 (over and above the total tendered for item B13.01) by including such additional compensation in the tendered rates and/or lump sum of items in the Pricing Schedule, these items and the value of such additional compensation shall also be indicated in writing in a letter attached to Form B1.

Payment of the rate per month for subitem 13.01(d) shall include full compensation for all the contractor's obligations relevant to health and safety legislation.

The tendered rate shall apply in the same manner as pay subitem B13.01(c) but shall not form part of the calculation of the restrictions imposed by Condition of Tender F.3.8(c) and Form to tender B1: Contractor's Establishment on Site. A contractor who tenders zero for this pay item shall not be relieved of his statutory obligations. A nil rate offered shall be deemed not as an omission but as deliberate notice that costs have been included in the tendered rates for individual items of work or in the other preliminary and general pay items."

The following paragraph relates to the treatment of all pay items for which the unit of measurement is the month and shall become applicable only for use in calculations of approved extensions of time in terms of the General Conditions of Contract:

"All pay items for which the unit of measurement is "month" are deemed to be based on 23 working days per month."

Insert the following paragraphs:

"The tendered percentage under item (e) shall be the day, or part thereof, for which the vehicle was hired and used for its intended purpose. The rate tendered shall include full compensation for the hire of the vehicle including cost of insurances, fuel, wear and tear and any other incidentals."

SECTION b1400:HOUSING, OFFICES AND LABORATORIES FOR THE ENGINEER'S SITE PERSONNEL

B1402 Offices and Laboratories

(a) General

Add the following:

"It is a requirement of the contract that the offices for the engineer's supervisory staff shall be supplied with approved burglar proofing, the cost of which shall be taken as included in the relevant tendered rates for the provision of the specified building. In addition, the offices and any living accommodation are to be separated by at least 200m."

(b) Offices

Amend sub-clause (xii) to read as follows:

"(xii) A complete telephone service capable of delivering electronic and facsimile data, together with ..."

Amend sub-clause (xvii) to read as follows:

"(xvii) A combination colour printer/copier/scanner/facsimile machine for A3 and A4 size documents."

Add the following sub-clauses:

"(xviii) Plan holders which shall be able to accommodate 150 AO – sized drawings hanging vertically and of a robust construction to withstand continuous use over the duration of the contract.

(xix) An electric refrigerator of specified capacity.

(xx) Floodlights which are to be controlled by a photocell for security purposes at the offices and laboratory."

(c) Laboratories

In the second paragraph, second line substitute "drawings" with "figures included in the project document"

B1404 Services

(b) Water electricity and gas

Add the following to the end of the third paragraph:

"The power supply shall be regulated by a suitable voltage regulator in order to maintain a constant current and voltage level at all times to prevent damage to the office and laboratory equipment and related machinery during power surges. In the event of damage to the office and laboratory equipment and related machinery because of a faulty voltage regulator, the contractor shall be liable for payment of all repair or replacement costs of such damaged items."

Add the following paragraph:

"The supply of electricity and water to the offices and laboratories of the engineer's supervisory staff shall be maintained 24 hours per day"

SECTION b1500:ACCOMMODATION OF TRAFFIC

B1501 SCOPE

Add the following:

"It is a condition of this contract that traffic is accommodated taking into account the provisions of the latest edition of the South African Road Traffic Signs Manual (SARTSM). The latest version for use in the accommodation of traffic is volume 2, chapter 13 of the June 1999 edition. Copies of this publication are available from Government Printers –Tel: (012) 334 4507/8/9 or (012) 3344510 Fax: (012) 323 9574.

This section also covers the provision of additional information signs for motorists and the release of any notices to the media and public."

B1502 GENERAL REQUIREMENTS

Insert the following:

"The whole of the site will be handed over to the Contractor at the beginning of the contract. The sequence in which various parts of the site may be occupied by the Contractor for the execution of the different items of work shall be subject to the requirements of the contract documents regarding, inter alia, working hours and the number, spacing and length of the work areas which may be occupied at any particular time.

The contractor shall programme his work taking due cognizance of restrictive conditions indicated in Clause B1204. The contractor's tendered rates shall include full compensation for all possible additional costs which may arise from the above and no claims for extra payment as a result of this modus operandi will be considered. The contractor shall in particular note that no additional compensation shall be made for work that could be considered as half-width construction."

(a) Safety

Replace the full stop at the end of the first paragraph and continue with the following:

"... flow of traffic, including the prohibition of his, and his subcontractor's, construction plant from disregarding the stop/go accommodation of traffic control facilities. Failure to comply with this requirement shall be taken as a penalty event in terms of B1502(l)".

Add the following paragraphs:

"The contractor shall be responsible for maintaining the existing road surface both within the works area and the advance warning and termination areas in a safe and trafficable condition for the duration of the contract.

The contractor shall be fully responsible for all the traffic accommodation on site, including for work undertaken by subcontractors, e.g. at bridges etc.

Traffic shall be accommodated as indicated on the drawings unless an alternative tender incorporating an amended method of traffic accommodation has been accepted.

The contractor may amend the agreed traffic accommodation scheme but only with the approval of the engineer in consultation with the provincial and municipal traffic authorities.

During the non-working hours, or when construction is not taking place on a certain section of road all obstructions to the traffic shall be removed and all signs no longer applicable to the situation shall be removed to an approved safe location or effectively covered.

No equipment or vehicles shall be stored or parked in the median or on the road side during non-working hours except if protected or demarcated and only if approved by the engineer.

When requested by the engineer, the contractor shall provide lane closures for the purpose of road inspection. This must be done in advance of the actual programmed time for the work."

(f) Approval of temporary deviations

Add the following:

"If, after any temporary deviation has been constructed, any changes are considered necessary or desirable, the proposal shall be submitted to the engineer for his approval."

(i) Traffic Safety Officer

Add the following to the end of the second paragraph:

"The contractor shall submit a CV of the candidate to the engineer for approval before the candidate is appointed as the traffic safety officer. "

Insert the following as the opening phrase to sub-sub-clause (i):

"make himself available to discuss road safety and traffic accommodation matters whenever required by the engineer and shall be responsible..."

Delete sub-sub-clauses (ii) and (iii) and replace with the following:

Record on neat and dimensioned sketches and submit to the engineer the position and sign reference number, where applicable, of each sign, barricade, delineator, cone, amber flicker light, guardrail and permanent or temporary painted road marking feature. The position of each shall be adequately referenced from the marker boards or other surveyed points on the site of the works.

These records shall also show the date and time at which the recorded traffic accommodation features are certified correct by the traffic safety officer, and shall be signed by the traffic safety officer before being submitted to the engineer.

The records shall similarly account for whatever changes are made in the field. Such changes shall record the position of flagmen and stop/go control men and their associated traffic accommodation equipment wherever they are used.

(iii) Personally inspect the position and condition of each traffic accommodation feature on the whole site of works twice per workshift, whether daytime or nightwork, and at least twice a day/night during non-working hours, to record all irregularities discovered and the remedial action taken, and to sign off as correct and submit to the engineer such record sheets by middle of the next working shift. The above inspections must at least take place before the commencement of peak traffic periods. The traffic safety officer shall keep a duplicate book for this specific purpose.

The traffic safety officer shall also submit with this report the daily labour returns of flagmen, stop/go, traffic signal control personnel employed and the traffic data recorded at each traffic control point."

Add the following sub-sub-clauses:

"(ix) The traffic safety officer shall be equipped with a cellular telephone and shall have a traffic safety vehicle and sufficient labour at his disposal 24 hours a day, including all prescribed non working days, and shall not be utilised for other duties. He shall be directly answerable to the contractor's site agent. The traffic safety officer shall have his own vehicle to carry out inspections and at least one assistant to accompany him full time. Furthermore the traffic safety vehicle shall be a truck with a capacity of 3 tons and shall be equipped with a high visibility rear panel in accordance with the requirements of the SARTSM as well as a truck mounted impact attenuator complying with TL-2 criteria when tested in accordance with NCHRP 350 or N1 criteria when tested in accordance with EN 1317. (Certification of compliance must be on site at all times.) The attenuator shall be used when the vehicle is utilized to close traffic lanes or when attending to stationary or broken down vehicles or accident scenes. The words TRAFFIC CONTROL shall be written on a warning sign in highly legible letters, not less than 150 mm high, and the sign shall be mounted on both the traffic safety officer's vehicle and the traffic safety vehicle at least 1,5 m above ground level. The proposed sign and letter dimensions shall be submitted to the engineer for his approval.

The vehicles shall also be equipped with an amber-coloured flashing light of the rotating parabolic reflector type with a minimum intensity of 100W. The warning light shall be switched on at all times and the sign shall be displayed when the vehicle is used on site.

The traffic safety officer shall have a direct line of communication at all times with the police and traffic officers responsible for the area within limits of the contract.

(x) Ensure that all obstructions related to the contractor's activities be removed at the end of each work shift where applicable as instructed by the engineer and that the roads are safe for the traveling public.

(xi) The traffic safety officer shall, in addition to the duties listed in paragraph 1502 (i), also be responsible to arrange for the removal of stationary or broken down vehicles off the roadway in conjunction with the routine maintenance contractor and/or traffic authorities and implementing actions requested by the traffic authorities with

regard to the work to be carried out and be responsible for the erection and maintenance of all traffic signs necessary for the accommodation of traffic.

(xii) In the event of an accident the traffic officer shall record in a written report the details of the accident, record the position of all temporary road signs, barricades, delineators, flagmen and any other devices used for traffic accommodation. In addition the report shall include a neat dimensional sketch, photographs, identifiable permanent features, and any other relevant information.

(xiii) At least two separate traffic safety officers and teams shall be employed when construction is carried out during the day and night.”

Add the following sub-clauses:

“(j) Crossing the median or carriageway centreline

No vehicle or item of equipment shall be allowed to cross the median of a dual carriageway road or the centreline of a single carriageway unless the traffic accommodation and signage specifically allows for this and is approved by the engineer as safe.

(k) Site personnel

The contractor shall ensure that all his personnel, excluding those who are permanently office bound, are equipped with reflective safety jackets and that these are worn at all times when working on or near to the travelled way. Any person found not wearing a reflective jacket under these circumstances shall be removed from the site until such time as he is in possession of and wearing a reflective jacket. Reflective safety jackets shall be kept in good condition and any jackets that are, in the opinion of the engineer, ineffective shall be immediately replaced by the contractor.

(l) Penalty events

Whenever the following events occur, the contractor shall be subjected to penalty conditions expressed in the Appendix to Tender.

(i) Non compliance with accommodation of traffic specifications

Failure or refusal on the part of the contractor to take the necessary steps to ensure the safety and convenience of the travelling public, accommodation of traffic, plant and personnel in accordance with these specifications or as required by statutory authorities or ordered by the engineer, shall be sufficient cause for the engineer to apply penalties as follows:

A fixed penalty of R10 000,00 per occurrence shall be deducted for each and every occurrence of non-compliance with any of the requirements of section 1500 of the standard specifications and section B1500 of the project specifications.

In addition a time-related penalty of R1000,00 per hour over and above the fixed penalty shall be deducted for non-compliance to rectify any defects in the accommodation of traffic within the allowable time after the engineer has given an instruction to this effect. The engineer's instruction shall state the allowable time, which shall be the time in hours for reinstatement of the defects. Should the contractor fail to adhere to this instruction, the time-related penalty shall be applied from the time the instruction was given.

(m) Liaison with relevant Authorities

Where applicable, the contractor shall liaise on a daily basis with the Employer's relevant i-traffic Management Centre (TMC), informing their operations manager about the expected works and lane closures for the next day, inclusive of all work shifts, in order for the operational manager to take into account the accommodation of traffic impacts in the TMC's operations. The daily report shall be submitted to the TMC operations manager not later than 10h00.

For exceptional traffic accommodation impacts, such as lane closures in peak hours, short term contra flow conditions, lane closures over weekend peak periods, etc, the TMC operational manager shall be informed seven days prior to the event.

The contractor shall inform the TMC about all traffic related incidents, as soon as he becomes aware of the incident.

Where required the contractor shall be responsible for acquiring the services of a municipal traffic officer and traffic vehicle (equipped with a blue light) to assist in the accommodation of traffic. The traffic officer and vehicle will be required when lanes are to be closed and/or where directed by the Engineer.

If the road under construction forms part of an abnormal load route the contractor shall liaise with the relevant provincial abnormal load office that issues permits to ensure that permits are not issued when construction restrictions do not allow passage of the abnormal load.

(n) Other requirements

The following other requirements must be adhered to for the entire contract period:

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

ii) The contractor's tendered rates for the relevant items in the schedule of quantities shall include full compensation for all possible additional costs which may arise from the above and no claims for extra payment due to inconvenience as a result of the modus operandi will be considered."

B1503 TEMPORARY TRAFFIC-CONTROL FACILITIES

Replace the first sentence of the first paragraph with the following:

"The contractor shall provide, erect and maintain the necessary traffic-control devices, road signs, channelisation devices, barricades, warning devices and road markings (hereinafter referred to as traffic-control devices) in accordance with these special provisions and as shown on the drawings and in the SARTSM and remove them when no longer required. It shall be incumbent upon the contractor to see to it that the abovementioned traffic-control devices are present where required at all times and are functioning properly."

Replace the last sentence of the second paragraph with the following:

"Traffic-control facilities no longer required at the site of a deviation or a lane closure shall be moved for re-use. Traffic-control facilities lost or damaged by the contractor shall be replaced at his own cost. Where it can be proved that loss of or damage to such facilities is beyond the contractor's control and not the result of his actions or omissions, the engineer may order the facilities to be replaced and paid for at scheduled rates."

Replace the third paragraph with the following:

"The type of construction, spacing and placement of traffic-control devices shall be in accordance with the SARTSM. The recommended arrangements of the traffic control devices illustrated and/or drawings issued by the engineer shall not be departed from without prior approval of the engineer. The arrangements expected to be most commonly used in the contract are given on the tender drawings.

The details shown for spacing and placement of traffic-control facilities may however, be revised at the discretion of the engineer where deemed necessary to accommodate local site geometry and traffic conditions."

(a) Traffic control devices

Add the following at the end of the last paragraph:

"At each traffic control point, an all-weather shelter of at least three (3) square metres capable of accommodating two operators, with a clear window, a stable door, two chairs and a portable chemical toilet that shall be regularly maintained, shall be provided. Each control point shall have sufficient continuous power supply to operate a 2 x 400 Watt floodlight mounted onto a 9m high pole to light up the traffic control point and sufficient flood lights for the queue in waiting at night time.

At each traffic control point, plastic moveable barriers, fitted with STOP signs to both sides, shall be provided to prevent vehicles from utilising the closed road lanes. These barriers shall be moved to open and close the relevant lanes for road users. Movable barrier separately allowed for under pay item B15.03(i)

Records of opening and closing of closures and traffic counts shall be kept and submitted daily to the traffic safety officer."

(b) Road signs and barricades

Add the following:

"The contractor shall be responsible for the protection and maintenance of all signs, and shall at his own cost replace any that have been damaged, lost, or stolen.

All temporary road signs required to remain in position for some time shall be pole mounted as shown on the drawings. All temporary road signs required to be moved more often shall be mounted on portable supports for the easy moving of signs to temporary positions. The only permitted method of ballasting the sign supports shall consist of durable sandbags filled with sand of adequate mass to prevent signs from being blown over by wind. The cost of the sandbags shall be included in the tendered rates for the various types of temporary road signs.

The covering of permanent road signs, if applicable, shall be by utilizing a suitable and durable covering that shall be pulled over the sign in the form of a hood and fastened to the signposts. Plastic bags or other materials and fastened by means of adhesive tape shall not be permitted. The cost of covering of permanent road signs shall be included in the tendered rates of items B15.01 and B15.10."

(c) Channelisation devices and barricades

Add the following:

“The use of drums as channelisation devices shall not be permitted. Drums may however be used to set up barriers as provided for in sub-clause 1503(d).

Delineators shall:

(i) comply with the manufacturing and reflective requirements of the SARTSM and the blades shall be reversible with dimensions as indicated on the drawings;

(ii) have smooth and round edges and be mounted on a post and base. All components shall be of durable plastic material;

(iii) have the lower edge of the reflective part of the delineator mounted not lower than 250mm above the road surface;

(iv) be capable of withstanding the movement of passing vehicles and gusting winds up to 60 km/h in typical working conditions without falling over. To achieve this, the base shall be at least 0,18m² and ballasted by its own weight or with sandbags filled with sand;

(v) together with its mounting be designed such that it will collapse in a safe manner under traffic impact.

Traffic cones manufactured in a fluorescent red-orange or red plastic material may be used only at short term lane deviations during daylight. Cones shall not be used on their own, but shall be interspersed with delineators at a ratio not exceeding 3:1. Cones used on all deviations shall be 750mm high. Lane closures which continue into the night time shall be demarcated by delineators only.

On section of road where the centreline has been obliterated, delineators shall be provided on both road edges at minimum 200m spacing on straight sections and at least 3 (three) visible on all curves.”

(d) Barriers

Add the following:

“Barriers for preventing vehicles from leaving the permitted lanes shall be movable barriers with an approved safety shape design (e.g. New Jersey, F-shape or single slope). Temporary movable barriers to be obtained from suppliers and to be placed between the existing road and the new construction areas shall comply with the requirements of either of the following specifications:

(i) The European Specification EN 1317 with containment level H1, or

(ii) The American Federal Highways Administration Specification NCHRP Report 350 with containment level TL4.

The containment levels given are based on the assumption of a standard lateral movement of a barrier system upon Impact Severity Level B and it is therefore the contractor's responsibility to select and price a barrier system that matches his method of construction relating to safe widths between barrier and work area. The contractor is at liberty to prove a different connecting system mindful that any change from what is shown on the drawings is entirely in the knowledge that the risk of protection lies with the contractor. The displacement width of the barrier shall not exceed the available safe width to the nearest edge of the construction. All moveable barriers shall be installed in accordance with the manufacturer's instructions or generally accepted best practice and shall be submitted to the engineer for review and comment.

Where instructed by the engineer, the terminal sections of moveable barriers may be a proprietary type or may be contractor designed to attenuate head-on impacts of at least NCHRP Test Level 1 (50 km/h, 2 000 kg) or EN1317 Containment Level H1 (80 km/h, 1 500 kg). The displacement width of the barrier shall not exceed the available safe width to the edge of the construction work area.

(e) Warning devices

Add the following:

“All construction vehicles and plant used on the works shall be equipped with rotating amber flashing lights and warning boards as specified. All vehicles and plant before being allowed onto the site shall obtain a clearance permit from the engineer.

(i) Vehicle mounted flashing lights

Rotating lights shall have an amber lens of minimum height of 200mm and shall be mounted in such a way as to be highly visible from all directions. The lights on construction vehicles shall not be switched on while vehicles are being operated on unrestricted sections of a public road, but shall be switched on while construction vehicles are operating within the accommodation of traffic area, as the vehicles decelerate to enter a construction area, and as the vehicles accelerate to the general speed when entering the road from a construction area. Lights on plant shall operate continuously while the plant is working alongside sections of road open to public traffic within the work areas.

All LDV's and cars operating on site shall also be equipped with rotating amber flashing lights which shall be placed so as to be highly visible from all directions and operated continuously while the vehicles are manoeuvring in or out of traffic or are travelling or parked alongside roads open to public traffic within the work areas.

Rotating lights and the "construction vehicle" signs on the contractor's vehicles and plant shall not be paid for separately but shall be included in the rates covering the use of the vehicles.

The contractor shall apply and maintain lights together with temporary mounting brackets, to the approval of the engineer. Vehicles and plant that do not comply with these requirements shall be removed from the site.

(ii) Sign mounted flashing lights

Two amber flashing lights shall be vertically mounted on top of the traffic signs at each end of each traffic accommodation section as shown on the drawings. The lights shall be operated during the hours of darkness."

(iv) Mobile Variable Message Sign (VMS)

The VMS shall be mobile and located in a safe position to convey to the travelling public of traffic conditions ahead and/or inform a motorist of his actual travelling speed at each work section and according to the programme.

The mobile VMS system must be equipped with solar panels to provide an output of 400 Watt. It shall be stable for shocks up to 3G and wind speeds up to 120 km/h.

The sign face shall not be less than 3m wide by 1.5m high to provide a full matrix LED with at least 50 and 27 pixels for the width and height respectively. Each pixel shall have 4 LED's and the pixel spacing shall not be less than 60mm. An LED mask for contrast and shading shall be provided. The sign shall be able to display 3 lines by 10 characters. The cone of vision is to be 30°.

The information displayed on each individual sign shall be controlled by a computer with internet connection operated by the contractor."

Add the following sub-clauses:

"(g) Other traffic control measures ordered by the engineer

The engineer may instruct the contractor to provide any other road sign, reflective tape, etc not measured in standard pay items. Such road signs shall conform to the requirements of the SARTSM, or specification provided by the engineer. Similarly, in order to ensure that the travelling public is kept fully informed and warned on matters relating to the accommodation of traffic, construction sign posting and the effect of the construction on the free flow of traffic through the site, the engineer may arrange for advertising in the press and/or for other forms of publicity.

(h) Flagmen

Flagmen shall be provided where shown on the drawings or required by the specification. During the daytime, at least two flagmen shall be provided at each traffic control point in addition to the STOP/GO sign operator, one flagman at the 80 km/h sign and a second roving flagman to indicate to the traffic at the end of the queue to stop. At night time only one roving flagman equipped with a Stromberg Lightman xenon strobe, or similar approved, and a torch is required at each traffic control point as well as the traffic light operator. Where the shoulder of the

road is closed to traffic, a flagman shall be provided at the leading end of the closure during daytime. This flagman shall be provided at the 80-km/h sign to warn the traffic about the closure. No flagman shall be on duty for a period of more than 10 hours per day.

Flagmen shall be adequately trained in the standard flagging techniques as described in the SARTSM (refer to figure 13.23 of detail 13.23.1) and be provided with conspicuous clothing such as safety jackets utilizing retro-reflective and/or fluorescent panels in red, yellow and/or white.

Flagmen shall have in their possession, at all times, certification that they have attended and passed an accredited course in flagging techniques before being allowed onto the construction site.

Flags shall be made from bright red or red-orange material and shall be square with a minimum side length of 600mm. The flag shall be attached to a staff at least 1,0m in length.

In terms of lateral clearance and safety, flagmen shall stand on the shoulder of the lane of traffic that is being controlled and under no circumstances shall flagmen be permitted to stand within the traffic lane. In order to obtain maximum visual impact for the travelling public, flagmen shall stand-alone.”

B1504 Width and Length of temporary deviations

The following restricted working conditions must be noted and taken into consideration:

The road is a national route and construction planning and execution must be done with cognisance of the fact that traffic flow disruptions will be kept to a minimum at all times.

Traffic and traffic accommodation will be regulated 24 hours per day for the entire construction period.

The advance warning areas (terminal sections) will be controlled with the required road signs in terms of the South African Road Traffic Sign Manual (SARTSM). Full Stop/Go operations with traffic signals are to be provided and the level of disruption with this type of traffic accommodation is regarded as tolerable

The safe operation of traffic on advance warning areas require additional attention in order to take geometry and travelling speed in consideration and also where the situation of advance warning of unwary traffic in motion towards slower moving and/or waiting traffic at lane reduction to a single lane occur.

Special attention will be given to areas where traffic accommodation is done next to construction areas where excessive drop-off (in excess of 800mm) occurs, typical where a change in the vertical alignment is required. The necessary warning signs shall form part of the traffic accommodation.

B1517 MEASUREMENT AND PAYMENT

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

Amend item 15.01 to read as follows:

Item		Unit
B15.01	Accommodating traffic and maintaining temporary deviations:	
(a)	On the national route	kilometre (km)
(b)	On provincial road	kilometre (km)

Replace the first paragraph with the following:

"The unit of measurement shall be the kilometre, measured along the centre lines of the road, the ramps from the noses and the cross roads where work is carried out. Accommodation of traffic shall be measured once only, that is no separate payments shall be made for lane and shoulder rehabilitation, slurry, reseal, asphalt overlay, side drains, etc. The bypass for abnormal vehicles and gravel service roads shall not be measured. Only the net distance of the road shall be measured and overlapping distances during staged rehabilitation shall not be measured. A distinction shall be made between accommodation of traffic on the through road and accommodation of traffic on the ramps and cross roads of interchanges.

In the second paragraph delete the whole of the second sentence, which refers to compensation for the traffic safety officer.

And add the tendered rate shall include for watering of by-passes and temporary deviations on the whole of the works"

Item		Unit
B15.03	Temporary traffic control facilities	
	Add the following and change the payment item to read::	
"(a)	Flagmen (use of the Engineer).....	man-day

"The unit of measurement shall be a full day and night worked by flagmen. A man-day shall be deemed to comprise of three eight hour shifts in a twenty four hour period. Three shifts of eight hours per flagman equates to one man-day. Shorter single portion shifts (6 to 10 hours) shall be measured as a half man-day. This item is an additional item and will only be used upon the written instructions of the Engineer"

Item	Unit
Add the following subitem:	
“(n) Other traffic control measures ordered by the engineer:	
(i) Provision of other traffic control measures	provisional
(prov) sum	
Handling costs and profit in respect of	
subitem B15.03(n)(i)	percentage (%)

Expenditure under this item shall be made in accordance with the general conditions of contract, sub-clause 13.5, for the supply and installation of any additional signs or other traffic control measure ordered by the engineer in accordance with clause B1503(g).

The tendered percentage is a percentage of the actual amount spent under subitem B15.03(n)(i), which shall include full compensation for the handling costs of the contractor, and the profit in connection with providing other signs and traffic control measures ordered by the engineer."

Delete payment items 15.08)

Add the following pay items:

Item	Unit
"B15.14 Amber flashing lights mounted on signs	number (No)

The tendered lump sum shall include full compensation to provide, erect, operate and maintain two amber flashing lights per sign at each end of the traffic accommodation sections. It shall also include the provision of power to operate the lights, replacing bulbs as required and keeping the lenses clean and visible.

Item	Unit
B15.15 Provision of traffic safety equipment for use by the engineer	
(a) Safety jackets	number (No)
(b) Amber flash light with magnetic base, "LED"-type	number (No)

The unit of measurement shall be the number of each item provided as specified, and approved by the engineer.

The tendered rates for the various safety items shall include full compensation for provision thereof and maintenance in good working order.

Item	Unit
B15.16 Traffic safety officer	month

The unit of measurement shall be the period in months that the approved traffic safety officer is employed.

The tendered rate per month shall include full compensation for the cost of the traffic safety officer to conduct his duties as specified in sub-clause B1502(i) and also includes the provision of the traffic safety vehicle, his own vehicle, fuel, vehicle maintenance costs, drivers, labourers and the cost of the cellular telephone and all other incidentals related to the performance of the traffic safety officer's duties.

Item		Unit
B15.17	Penalties	
(a)	Fixed penalty per occurrence	number (No)
(b)	Time related penalty	hour (h)

In subitem B15.17(a) the unit of measurement shall be number and applied for each and every occurrence of non-compliance with any of the requirements of section 1500 of the standard specifications and section B1500 of the project specifications at the rate specified in the pricing schedule.

In subitem B15.17(b) the unit of measurement shall be hour and applied for each hour over and above the time set by the engineer that the identified non-compliance has not been rectified.

The above pay items shall be applied at the rates stated in the Appendix to Tender and in the pricing schedule and become payable by the contractor in each and every month they occur and shall be deducted from the amount due to the contractor on the relevant monthly payment certificates.

SECTION b1600:overhaul

B1602 DEFINITIONS

(a) Overhaul material

Replace the sub-clause with:

"All material shall be regarded as a commercial source and no haul shall be payable for materials under this contract"

(c) Haul distance

Replace the sub-clause with:

"No overhaul will be measured or payable under this contract"

(d) Free-haul distance

Replace the paragraph with:

"The free haul distance shall be unlimited"

(d) Overhaul distance

Replace the paragraph with:

"This overhaul distance shall be unlimited"

No haul whatsoever will be entertained on this contract.

SECTION B1700: CLEARING AND GRUBBING

B1702 DESCRIPTION OF WORK

(c) Conservation of topsoil

Add to the end of the 1st paragraph:

“The contractor will not be required to remove topsoil to more than an average depth of 400mm, from any particular area. The depth of topsoil removed shall be reliant on the terrain, suitability of material and topsoil requirements of the work.”

Replace the second paragraph of this clause with the following:

“After clearing and grubbing, all topsoil shall be removed to either windrows alongside the construction area or to stockpile. Where ordered by the engineer, any topsoil that shall be required for the topsoiling of new banks and cuts, but which cannot be accommodated within the construction site, shall be loaded and hauled to the designated stockpile area where it shall be placed in temporary stockpiles for later use in the rehabilitation of the site affected by construction activities. Where new borrow pits are to be opened up the topsoil shall first be removed (independently of the overburden) and placed in temporary stockpiles at the edge of the borrow pit. The moving of topsoil from windrow or the loading of topsoil from temporary stockpiles and the placing and spreading of thereof on cut or fill slopes or on borrow pit spoil sites, is covered in Section 5800.

Refer also to clause B5802(g) of this project specification.”

B1704 Measurement And Payment

Item		Unit
B17.01	Clearing and grubbing	hectare (ha)

Add the following to the measurement and payment paragraphs:

“Clearing and grubbing for the construction of site offices shall not be measured separately and shall be deemed to be included in the rates tendered for item B13.01”

Add the following payment item:

Item		Unit
B17.07	Removal of topsoil and unsuitable material and temporary stockpiling thereof in:	
(a)	Topsoil in windrows alongside the work area cubic metre (m3)	
(b)	Topsoil in temporary stockpiles after loading cubic metre (m3)	

The unit of measurement for items (a) to (c) 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.

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 normally be classed as topsoil has also been excavated, the excavation shall be backfilled and compacted with selected material at the contractor's 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.

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.”

“The unit of measurement for item (d) shall be the cubic metre of material placed in stockpile at the borrow pit. Excavation of the material shall be deemed to be included in the rate.”

SECTION B1800: DAYWORKS

B1801 Scope

This section covers the listing of daywork items in accordance with the general conditions of contract sub-clause 13.6 as amended by Particular Condition, for the use in determining payment for work which cannot be quantified in specific units in the Pricing Schedule, or work ordered by the engineer during the construction period which was not foreseen at tender stage and for which no applicable rate exists in the Pricing Schedule.

B1802 Ordering of daywork

No daywork shall be undertaken unless written authorisation has been obtained from the engineer.

B1803 MEASUREMENT AND PAYMENT

Item		Unit
B18.01	Personnel	
(a)	Unskilled labour	hour (h)
(b)	Semi-skilled labour	hour (h)
(c)	Skilled labour	hour (h)
(d)	Ganger	hour (h)
(e)	Foreman	hour (h)
Item		Unit
B18.02	Equipment	
(a)	Tipper Trucks:	
(i)	5 cubic metre	hour (h)
(ii)	10 cubic metre	hour (h)
(b)	TLB	hour (h)
	Machines:	
(d)	Pneumatic Roller	hour (h)
(e)	Front End Loader	hour (h)
(f)	Walk-behind roller (Bomag BW 90 or similar)	hour (h)
(g)	Grader (minimum of 220kW)	hour (h)
Item		Unit
B18.03	Materials	
(a)	Procurement of materials	provisional (prov) sum
(b)	Contractor's handling costs, profit and all other charges in respect of subitem B1803(a)	percentage (%)
Item		Unit
B18.04	Transport	
(a)	LDV	kilometre (km)
(b)	Flatbed truck	kilometre (km)
(c)	Grader (minimum of 220kW)	kilometre (km)
(d)	Lowbed	kilometre (km)

The unit of measurement for items B18.01 and B18.02 shall be the hour for the item of equipment or personnel. Non-working hours for transport breakdown, lack of operator of any other reason shall not be measured. The time shall be taken from the time that the personnel and/or equipment depart until return.

Measurement shall only be for work instructed and directed by the engineer, where the engineer considers no other appropriate rate is applicable in the Pricing Schedule. Prior to the commencement of any work by the personnel described under item B18.01 the contractor must obtain written consent from the engineer regarding their classification in terms of "unskilled", "semi-skilled" and "skilled" personnel.

The tendered rates for labour under B18.01 shall include full compensation to cover overhead charges and profit, leave pay, bonuses, subsistence, allowances, Employer's contributions, additional payment for overtime where applicable, insurances, housing, site supervision, use of small hand tools and appliances, non -mechanical plant and equipment and consumable stores, for all administrative, supervisory, operative and contingent costs, relating to the supply of personnel.

The tendered rates for plant for item B18.02 shall be an all-inclusive hire charge for the use of the vehicle and driver or plant/equipment and operator and shall apply only to vehicles plant and equipment nominated in writing by the engineer, for all administrative, supervisory, operative and contingent cost, and profit relating to the running of the plant.

The unit of measurement for subitem B18.03(a) shall be the amounts actually paid for the procurement of materials to be purchased and shall be made in accordance with the provision of the general conditions of contract. Only the actual quantities of materials used, as verified by the engineer, shall be paid for.

The percentage tendered for subitem B18.03(b) shall be the percentage of the amounts actually paid for the procurement of materials as ordered under subitem B18.03(a) and shall be in full and final compensation in respect of the contractor's handling costs, profit and all other charges in connection with the procurement and supply of the materials to the point of usage.

The unit of measurement for item B18.04 shall be the kilometre distance that the vehicle travelled for transporting personnel and/or plant. All travelling shall be approved by the engineer.

The tendered rate for item B18.04 shall include full compensation for the cost of the vehicle including fuel, maintenance depreciation and running costs.

The above mentioned tendered rates shall be full compensation for the various items as specified and no further profit shall be paid.

COLTO SERIES 2000: DRAINAGE

SECTION B2100: 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

(i) Pipes

Amend this sub-clause by adding the following to the end of the third paragraph:

“(category-heavy duty) or SABS 1601 (stiffness class 350)

HDP pressure pipes, 100mm ID.”

The pipes to be used shall be either slotted u PVC pipes or perforated

(ii) Natural permeable material

Add the following to the 3rd paragraph:

nominal) and shall be washed clean of all fines”

“The crushed stone shall be fine (13.2mm nominal) or coarse (19mm

In the first line of the fifth paragraph delete “and/or crushed stone”.

(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 ± 400 mm 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.”

2107 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. The tendered rates shall include full compensation for removal of surplus material from site to an approved spoil site. Overhaul will not be paid.”

SECTION B2200: PREFABRICATED CULVERTS

B2202 TYPES OF CULVERTS

B2203 MATERIALS

(b) Portal and rectangular prefabricated concrete culvert units

Replace this sub-clause with the following:

"Precast concrete units shall comply with the requirements of the latest SANS 986:2006 specification.

Prior to the manufacture of any units the manufacturer shall submit his Quality Plan to be approved by the engineer before delivery of any units to site. As part of the Quality Plan submitted for approval copies of calibration certificates of both gauges used for proof loads and cover meters used at the factory shall be supplied to the engineer. The originals of these certificates shall at all stages also be available for inspection at the factory premises. The manufacturer shall check each precast unit for cover compliance, and random checking of units shall not be permitted. The engineer's representative may visit the factory at any stage to ascertain adherence to the quality plan as well as to check covers before delivery to site. Any substandard cover shall result in the batch being rejected. Should the manufacturer not be adhering to their Quality Plan the engineer may exercise the right to reject the use of products from the manufacturer concerned. The Employer shall also be informed in all such cases.

For durability requirements due to the reduced cover provided for pre-cast culverts all durability testing shall be done in accordance to Clause B6404(h) shall fall within the severe category. For units within the 5km zone from the coast the very severe category shall be used and increased cover shall be as specified by the engineer."

SECTION B3300: MASS EARTHWORKS

B3301 SCOPE

Add the following paragraph:

"This section furthermore applies to the reworking of the existing roadbed to form the selected layer(s) underneath the 250mm thick cemented subbase."

B3302 MATERIALS

(b) Fill

Add the following under item (iv):

"The maximum swell at 100% Mod AASHTO compaction shall not be more than 2%."

B3312 MEASUREMENT AND PAYMENT

"Item Unit

Change the payment item to read as follows:

B33.04 Cut to spoil to site to be provided by the Contractor.

Add the following to the payment paragraph:

The tendered rate shall include all haul, any royalties payable at designated spoil sites and all other incidental costs to remove the material to the satisfaction of the Engineer and overhaul shall be deemed to be included in the rate and all references to all haul shall be taken out and will not be entertained"

SECTION B3400: PAVEMENT LAYERS OF GRAVEL MATERIAL

B3402 MATERIALS

(a) General

Add the following at the end of the second paragraph:

"For chemically stabilised layers the material shall conform to the requirements in table B3402/5."

Add the following after the second paragraph:

"Distinction shall be made between crushed and natural G4, G5 and G6 materials. Where the crushing and/or screening of these materials has been specified, the combined grading shall conform to the grading limits specified for G4 class material in Table 3402/1."

Replace Table 3402/5 with:

"Table B3402/5: Requirements For Chemically Stabilised Layers

Classification	C1	C2	C3	C4
Material before treatment	At least G2 quality	At least G4 quality	At least G5 quality	At least G6 quality
PI after treatment	Non-plastic	Non-plastic	6 max. *(1)	6 max. *(1)
UCS (MPa) *(2)	6 min.	4 min.	1,5 min	0,75 min.
ITS (kPa) *(3)	-	-	250 min.	200 min.
WDD (% loss)	5 max.	10 max.	20 max.	30 max.

Note:

- * (1) For materials derived from the basic crystalline rock group, the stabilisation shall be non-plastic.
- * (2) Unconfined Compressive Strength @ 100% Mod. AASHTO density
- * (3) Indirect tensile Strength @ 100% Mod. AASHTO density
- * (4) Wet/Dry Durability according to Method B 8110"

(b) Compaction requirements

Add the following after the last paragraph:

"The minimum compaction requirements for this contract shall be as specified in the table below:

Base :G1 to 88% of apparent relative density
 Subbase:C4 to 97% of modified AASHTO density
 Gravel Shoulders: G6/ G7 to 93% of modified AASHTO density

B3405 CONSTRUCTION TOLERANCES

(a) Level

Replace the table in the sub-sub-clause with the following:

"	H90	Hmax
Selected layers	25 mm	33 mm
Sub-base layers	15 mm	20 mm
Base layers	12 mm	15 mm
Shoulders		25 mm"

Add the following:

"Level control for the various pavement layers shall be done at least at the following intervals in the longitudinal direction:

Layer	Interval
Selected layer, sub-base, shoulders and wearing course	20 m
Base	10 m

(b) Layer thicknesses

Replace the table in the sub-sub-clause with the following:

"	D90	Dmax	Dave
Selected layers	25 mm	35 mm	8 mm
Sub-base layers	18 mm	24 mm	5 mm
Base layers	15 mm	22 mm	5 mm
Shoulders		30 mm	0 mm"

B3406 QUALITY OF MATERIALS AND WORKMANSHIP

Replace the second paragraph with the following:

"Test results and measurements will be assessed in accordance with the provisions of Section 8200."

B3407 MEASUREMENT AND PAYMENT

Change the payment item to read as follows:

"Item	Unit
B34.06 Extra over Item 34.04 for adding extra material as specified in sub-clause 3207 (b)(iii) from commercial sources	cubic metre (m3)

Change the order of sub payment items to read as follows:

- (a) Gravel selected layer (G5 / G6) cubic metre (m3)
- (b) Gravel subbase (G5) cubic metre (m3)
- (c) Gravel shoulder (G6) cubic metre (m3)
- (d) Fill (G7/G8) cubic metre (m3)
- (e) Rockfill cubic metre (m3)

Add the following to the payment paragraph:

The tendered rate shall allow for all haul on the material to be imported from commercial sources and therefore deemed to be included in the rate"

SECTION B3500: STABILISATION

B3502 MATERIALS

(a) Chemical stabilising agents

Delete sub-clauses (ii) Ordinary Portland cement and (iii) Portland blast-furnace cement and replace with the following:

"Cement shall comply with the relevant requirements of SANS 50197-1:2000. The use of strength classes greater than 32,5 shall not be permitted.

On this contract CEM _ II 32,5 A-L shall be used for stabilisation purposes."

B3503 CHEMICAL STABILISATION

(d) Mixing in the stabilising agent

Replace the entire clause with the following:

Immediately after the stabilising agent has been spread, it shall be mixed with the material to the full depth of treatment. This shall be effected by utilising a modified milling or recycling machine to mix the existing pavement material together with any imported material as well as the compaction water to the required depth in a single pass. The existing pavement material shall mean the previously broken down material, temporarily removed to windrow and subsequently bladed and placed back into position.

As a minimum, the recycling machine shall have the following features:

The capability of milling to depths of at least 300 mm in a single pass and be fitted with an automatic sensor system to accurately maintain a pre-set depth of cut;

A milling drum that rotates upwards into the direction of advance and achieves a satisfactory cut width in a single pass; and

A gradation control system consisting of an adjustable bar, or beam, positioned in front of the milling drum to promote fragmentation of the material being recycled.

In order to mix the milled material with water, the recycling machine, or separate processing unit, shall include the following features:

A micro-processor controlled system to regulate the application of water and/or fluid stabilising agent(s) in relation to travel speed and mass of material being recycled. The pumping system shall be calibrated to deliver within a tolerance of +3% by volume.

A system of self-cleansing nozzles that promotes a uniform application of water and/or fluid stabilising agents across the full width of treatment. The application system shall be capable of adjustment for varying widths of treatment.

Where the milling depth exceeds 300 mm, the effective volume of the mixing chamber shall increase in relation to the depth of cut in order to accommodate additional material generated by increasing the depth of cut.

The recycled material shall exit from the mixing chamber in a manner that prevents particle segregation. Spreading and placing to form the new layer shall be effected by a motor grader, or a screed mounted on the rear of the recycling machine.

No leaking tankers for the supply of water to the mix will be permitted on the site.

The material to be recycled shall be tested to determine the in-situ moisture content. The frequency of testing shall be determined by the variability of initial test results. As a minimum, a line of samples shall be extracted for testing at 2,0 m intervals across the road width, every 200 m, and where there is a known change in the material in the existing pavement.

Moisture content tests shall not be undertaken more than one day in advance of recycling 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.

The moisture content of the material during compaction shall never exceed 80% of the saturation moisture of the natural material without stabilising agent, calculated at maximum dry density in accordance with subclause 8107(d). Any portion

of the work that becomes too wet after the stabilising agent has been added and before the mixture has been compacted, will be rejected, and such portions shall be allowed to dry out to the required moisture content and shall then be scarified, re-stabilised, re-compacted and again finished off in accordance with the requirements specified herein, all at the expense of the contractor.”

(h) Curing the Stabilised work

Add the following to paragraph:

“Method (iii) and (iv) shall not be applicable.”

(i) Construction limitations

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

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.”

In Table 3503/1, delete “8 hours for ordinary Portland cements and cement blends” and replace with “6 hours”.

“(j) General

Any biscuit layers or bowls, identified by the hollow sound caused when a chain is dragged over the stabilized layer, shall be removed and repaired. The repairs shall be for the account of the contractor.”

B3506 TOLERANCES

(b) Uniformity of mix (chemical stabilisation)

Method II shall be used.

B3509 QUALITY OF MATERIALS AND WORKMANSHIP

Add the following after the second paragraph:

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

SECTION B3600: CRUSHED-STONE BASE

B3602 MATERIALS

(a) Requirements for crushed aggregate

After the first sentence delete the remainder of the paragraph and replace with the following:

“The aggregate shall not contain more than 0,1% by mass of unwanted material such as wood, coal or similar organic material.

Aggregates containing mica, such as granite, gneiss, mica schist, pegmatite, sandstone shall not contain more than 2% by mass of free mica, especially muscovite, when assessed by visually separating the particles, or more than 4% by volume when assessed by means of microscopic slides. Aggregate containing easily detectable quantities (more than 1%) of olivine, serpentine and sulphide minerals such as pyrites and marcasite, must be considered with caution, and may warrant additional evaluation to the satisfaction of the engineer. Argillaceous rocks may only be used if specified in the project specifications, or with the engineer’s written approval.

Soft or weathered particles shall be controlled by the Durability Mill Index values specified in B3602(e) Durability.

Provision has been made in clause B8108(b)(iii), calculation, for the determination and calculation of the Apparent Density for aggregates with a total water absorption greater than 1,5%, when total water absorption is determined according to TMH1 methods B14 and B15.”

(c) Grading requirements

Replace entire clause with the following:

“The target grading, after compaction, shall be as near as possible to the mean of the specified grading envelope listed in table 3602/1 and shall be continuous with no marked gaps or excessive quantities of any particular size. The mean grading of each lot (minimum of 4 but preferably 6 test points per lot) shall conform to the approved target grading plus or minus the tolerances specified in table 3602/4.”

Add the following sub-clause:

“(e) Durability

The durability property of aggregates derived from the basic crystalline group shall be assessed by means of the Ethylene Glycol Durability Index. When tested in accordance with the method prescribed in B 8105(g) the Durability Index shall not exceed four. In addition, the 10% FACT value obtained after soaking in ethylene glycol for four days shall not be less than 50% of that obtained on the unsoaked sample. Where any values are obtained that fall outside the above requirements, a detailed assessment of the quarry shall be undertaken together with a specialist mineralogical evaluation of both the coarse as well as fine fractions in order to assess the long-term durability properties of the material.

For Basic crystalline rocks, Arenaceous rocks, Argillaceous rocks and Diamictites the Durability Mill Index (DMI) shall be less than 125. For all other rock types the Durability Mill Index (DMI) shall not be more than 420, subject to the % passing the 0,425mm sieve not increasing by more than 8 percentage points during the Durability Mill test.”

Table 3602/1

In table 3602/1 delete “85% of bulk relative density” and replace with:

“89% of Apparent Density”.

B3604 CONSTRUCTION

(b) Compaction

Add the following at the end of the first paragraph:

“The specified density shall also be obtained in the upper 50mm of the layer.”

c) Surfacing preparation of the base

Replace the final paragraph in sub clause 3604(c)(i) with:

“Slushing of the base is compulsory and shall be carried out within 48 hours after completion of the compaction. Even if the specified density is achieved without slushing or before completion of the slushing process, the full slushing process must still be completed.”

Delete sub-sub-clause (ii) Multi-stage process (water or slurry rolling).

B3605 PROTECTION AND MAINTENANCE

Replace “moisture content of the layer” in the first paragraph with “moisture content of the upper 50mm of the layer.”

Add the following to the end of the second sentence:

“as determined according to TMH 1 method A7.”

B3607 QUALITY AND WORKMANSHIP

Delete “or 8300” in the second paragraph.

B3608 MEASUREMENT AND PAYMENT

Delete the first paragraph and replace it with the following:

“Note: No additional or extra over payment shall be made for work in restricted or confined areas.”

COLTO SERIES 4000: ASPHALT PAVEMENTS AND SEALS

SECTION B4100: PRIME COAT

B4102 MATERIALS

(b) Aggregate for blinding

Add the following sentence:

“Blinding of the primed surface with aggregate shall only be permitted to facilitate vehicular access to adjoining properties”

B4104 WEATHER AND OTHER LIMITATIONS

Replace paragraph (g) with the following:

“(g) When the moisture content of the upper 50mm of the layer is higher than 50% of the optimum moisture content determined according to TMH 1, Method A7. In the event of rain after priming, the base shall be allowed to dry out to meet the above moisture content requirement prior to surfacing”

B4106 APPLICATION OF THE PRIME COAT

Add the following to paragraph (c):

“The nominal application rate of the prime shall be 0,7 l/m2. Unless directed otherwise by the engineer or indicated on the drawings, the edges of the primed surface shall be 150mm wider than the edges of the surfacing.”

Add the following sub-clause:

“(j) Application in areas treated by reworking and construction of a new base shall be primed using a mechanical distributor complying with sub-clause 4103(a). The edges of the previously constructed or existing surfacing shall be adequately protected by approved means to ensure that an overlap of prime not exceeding 50mm is sprayed onto the previously constructed or existing surfacing.”

B4108 TOLERANCES

Replace the first paragraph with the following:

“The actual spray rates measured at spraying temperature shall not deviate by more than 8.0% from that ordered by the engineer. The engineer may, at his discretion, conditionally accept application rates falling outside this tolerance at reduced payment in accordance with Table B4108/1.

Table B4108/1: Payment Reduction Factors for Conditionally Accepted Prime Coat

Deviation specified spray rate at spraying temperature. (%)	Payment reduction factor of tendered rate.
±8,0	1.00
±9,0	0.97
±10,0	0.95
±11,0	0.90
±12,0	0.85
±13,0	0.80

Any deviation outside these limits shall not be paid for, however, the engineer shall have the right to instruct the contractor to make up any deficiency, or blind excessive prime without additional payment. Where so instructed, the material for blinding shall consist of approved, but shall consist of screened 4,75mm nominal single size aggregate. The use of crusher dust for blinding shall not be permitted. If under-spraying occurs, and it is accepted by the engineer, only the actual quantities applied shall be paid for.”

B4109 TESTING

Add the following:

“No payment will be made if this condition is not adhered to. The contractor shall provide, at his cost, representative samples of every batch of prime delivered onto site.”

SECTION B4200: ASPHALT BASE AND SURFACING

B4202 MATERIALS

(a) Bituminous binders

(iii) Homogeneous modified binders

Replace the last sentence with:

“The modified binder to be used on this project shall be A-E2.

The homogeneous modified binder shall be manufactured according to the guidelines contained in “Technical Guideline: The use of Modified Bituminous Binders in Road Construction (TG 1-2007): Asphalt Academy”. The base bitumen shall conform to SANS 4100 BT1-2012, or a blend of grades according to SANS 4100 BT1-2012. The type as well as percentage of modifier is not prescribed, however the contractor shall indicate in the Pricing Schedule what polymer he shall be using. The properties of the homogeneous modified binder shall comply with the relevant requirements for binder class A-E2 as listed in table B4202/12.

Table B4202/12: Properties of polymer-modified binder for hot-mix asphalt

Property	Unit	Test Method	Binder Class		
			A-E1	A-E2	A-P1
Softening Point1	°C	MB-17	55-65	65-85	63-73
Dynamic Viscosity@165°C	Pa.s	MB-18	≤0.6	≤0.6	≤0.55
Force Ductility @ 5°C	N	EN 13703	Report3	Report3	Report3
Elastic Recovery @ 15°C	%	MB-4	>50	>60	>30
Storage Stab @ 160°C)	°C	MB-6	≤5	≤5	≤5
Flash Point	°C	ASTM: D93	≥230	≥230	≥230
Complex shear modulus: G*Sin δ @10 rad/s	°C	AASHTO:TP5	Report	Report	Report
Creep Stiffness	MPa	AASHTO:TP1	Report	Report	Report
Properties after ageing (RTFOT)			MB-3		
Diff in Softening Point	°C	MB-17	-2 to +8	-2 to +8	-2 to +8
Elastic Recovery @ 15°C	%	MB-4	>40	>50	Report2
Mass change	%	MB-3	≤1.0	≤1.0	≤1.0
Dynamic Viscosity @ 165°C	Pa.s	MB-18	Report2	Report2	Report2

Notes:

The prescribed test method is based on not using stirrers although it has been reported that the use of stirrers has shown no difference in test results. For referencing purposes no stirrers should be used.

No limits are given and the values should be recorded for reporting purposes only as they may be used in future specifications.

No values given but the test can be used to rank various binders according to their low temperature cohesion properties

(b) Aggregates

Add the following paragraph to the introductory description:

“Asphalt mixes shall be manufactures using different individual single size coarse aggregates fractions and crushed fine aggregates blended to conform to the specified grading requirements. The use of natural sands shall only be permitted if approved by the engineer and shall be limited to a maximum of 5% for continuously graded mixes. All aggregate in excess of 4,75mm shall consist of individual nominal single sized aggregate. For stone mastic asphalt mixes all aggregate fractions in excess of 2,36 shall consist of individual single size fractions. Contractors shall note that commercial suppliers may not be able to supply all the required single size aggregates, in which instance arrangements will have to be made for additional on site screening. No additional payment shall be made for screening aggregate. The use of run of crusher type materials shall not be permitted.”

(v) Absorption
Add the following sentence:
"In addition, the total binder absorption of the combined coarse and fine aggregate blend shall not exceed 0,5%"

(viii) Grading
Delete the second paragraph commencing with "The target grading..." and add the following paragraphs)

"The grading limits for the combined aggregate grading for the asphalt base shall be as specified in table 4202/6: Continuously graded 26,5m maximum.

The grading limits for the combined aggregate grading for the asphalt surfacing shall be as specified in table 4202/7: Continuously graded medium grade."

(h) General

Add the following after the second paragraph:

"Sufficient aggregate for a minimum of 3 days production shall be separately stockpiled and tested for conformance and uniformity prior to use. The test results shall be presented to the engineer"

B4203 COMPOSITION OF ASPHALT BASE AND SURFACING MIXTURES

In the first paragraph, third last line, after "or active filler content" add:

"or aggregate content"

Replace the fifth paragraph 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 surfacing mixes
Marshall Stability (kn)	8 – 18
Marshall Flow (mm)	2 – 6
Stability /Flow (kN/mm)	> 2,5
VMA (%)	> 15
VFB (%)	65 – 75
Air voids (%)	4 – 6
Indirect tensile strength @ 25°C (kPa)	> 1000
Dynamic Creep Modules @ 40°C (MPa)	> 20
Modified Lottmann @ 7% voids (TSR)	> 0, 8
Air permeability @ 7% voids (cm2)	< 1 x 10-8
Binder film thickness (microns)	5,5 – 8,0
Filler bitumen ratio	1 – 1,5
Immersion index (%)	-

B4205 GENERAL LIMITATIONS AND REQUIREMENTS AND THE STOCKPILING OF MIXED MATERIAL

(b) Moisture

Add the following at the end of the second last paragraph after “engineer”:
“even if the underlying layer has been previously primed.”

(c) Surface Requirements

(iii) Tack Coat

Add the following paragraph:

“Hand spraying shall only be permitted on areas approved by the engineer. The binder distributor 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.

The contractor shall ensure that trucks used to haul asphalt are not overloaded and the legal axle loads are not exceeded. Before any asphalt can be transported, the contractor must provide the engineer with the certified carrying capacity of each truck intended for the purpose of transporting the mix. The contractor shall provide the engineer with a weighbridge ticket before discharging into the paver hopper.

Any truck that is overloaded shall not be allowed to discharge its load and shall return to the depot/batching plant for adjustment of the load. In addition a penalty shall be applied for the overload.”

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 contractor’s 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.

After approval is obtained for the laboratory design mix, a plant mix at varying binder contents of approximately 5 to 10 tons each shall be produced. The purpose of the plant mix is for the contractor to prove that the laboratory design mix can be produced successfully. The engineer shall conduct the necessary testing on the plant mix. The plant mix shall not be placed on the road. During the production of the plant mix, the engineer shall be afforded the opportunity to inspect the asphalt plant.

After the plant mix is approved, permission shall be given for laying a trial section at varying binder contents in accordance with the requirements of section 4211 of the specifications. The engineer may require that the mix be further assessed by means of CSIR Wheel Tracking or MMLS testing, the cost of which will be borne by the Employer. Mass production of asphalt shall only commence after approval of the trial section, which should be given within a maximum of ten days.

The engineer may instruct the contractor at any time to halt his paving process and to review the whole or part of the above process should a change of aggregate properties occur, the specified asphalt requirements not being met and/or a consistent asphalt mixture not be produced.”

B4208 JOINTS

Add the following to this clause:

“Where the difference in level between the new work and the existing road surface exceeds 25mm, 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.”

B4209 PRE-COATED CHIPPINGS FOR ASPHALT SURFACING

In the first sentence of the fifth paragraph, delete “6-8 kg/m²” and “7-9kg/m²” respectively and replace with:

“3-4 kg/m² and 5-6 kg/m²”

In the last sentence of the fifth paragraph, delete “between 0,6 and 1,0mm” and replace with:

“between 0,8 and 1,2mm”

B4210 COMPACTION

Replace the wording in the paragraph after “than” with

"93 per cent after the voids have been subtracted, determined as described in TMH1 method C4."

B4214 QUALITY OF MATERIAL AND WORKMANSHIP

- (b) Coring of asphalt layers
Add the following:

"A suitable coring machine shall be available on a daily basis when asphalt paving is taking place. Cores shall only be drilled, 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 paragraphs:

"The contractor shall keep accurate records of:

The position where every truckload of asphalt is paved (chainage, lane, time and date).

The temperatures of the asphalt in the trucks both at the mixing plant and at the paving equipment immediately prior to discharging the load.

The truck and load number from which control samples are taken. All samples taken shall be appropriately numbered.

Test results and measurements will be assessed in accordance with the provisions of section 8200."

Add the following sub-clause:

- (d) Special tests

n-Heptane-Xylene Equivalent (Spot test) (AASHTO-T102)

If the engineer suspects that bitumen or asphalt has been overheated, he may order that the bitumen, or the bitumen recovered from the asphalt, be subjected to the Spot Test. Recovery of binder for use in the Spot Test shall be carried out according to an approved method as specified in SANS 4001.

Any bitumen having an n-Heptane-Xylene equivalent in excess of 36, or in excess of the manufacturers test result on the dispatched stock, shall be considered to have been overheated and shall be deemed to be rejected unless proven otherwise."

B4215 MEASUREMENT AND PAYMENT

Amend the following payment item:

Item		Unit
B42.08	100mm cores in asphalt paving	number (no)

"drilled...": Amend the 1st sentence by adding the following after the word "irrespective of depth of core."

Add the following payment items:

Item		Unit
B42.21	Aggregate variations	ton (t)

The unit of measurement in respect of increases or decreases in the aggregate content from that specified in the nominal mix shall be the ton.

Payment for variations shall be made as specified for clause 1213

COLTO SERIES 5000: ANCILLARY ROADWORKS

SECTION B5100: PITCHING, STONEMWORK AND PROTECTION AGAINST EROSION

B5102 Materials

 (a) Stone

 Replace the 2nd paragraph with the following:

 “Unless suitable stone can be located on site, the stone for pitching shall come from commercial sources but, from whatever source, its use shall be subject to the prior approval of the engineer.”

SECTION B5600: ROAD SIGNS

B5601 Scope

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

"SADC Road Traffic Signs Manual"

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 100mm x 150mm 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."

(ii) Steel profile road signboards

Add the following:

"Chromadek section shall be assembled in accordance with the details of Standard Plans SP-B-12-Sheets 4 and 5 and SP-B-4-Sheets 33E and 34E.

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 sub-clause:

"(e) Application of retro-reflective material

All sign faces shall be faced with 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 Pricing Schedule. Payment will differentiate between different types of sign panels.”

B5609 Measurement and Payment

Item	Unit
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B56.01	Road sign boards with painted or coloured semi-matt background. Symbols, lettering, and borders in semi-matt black or in Class I retroreflective material, where the sign board is constructed from:
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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 items:

Item	Unit
------	------

B56.10	Danger plates at culverts/structures (1200mm x 300mm at bridges) number (No)
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The unit of measurement shall be the number of danger plates provided and erected in accordance with the drawings.

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

SECTION B5700: ROAD MARKINGS

B5701 Scope

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

“SADC Road Traffic Signs Manual”

Replace the words "ordinary road marking paint" with "solvent borne road marking paint".

Replace "BS 3262" with "EN 1436".

Replace "Hot melt plastic road marking" with "thermoplastic road marking".

B5702 MATERIALS

Insert the following before subclause (a) Paint:

"The selection of the appropriate road marking paint and materials for permanent road markings to ensure conformance with the requirements of this specification rests with the contractor. Such paint and material shall have technical characteristics (brightness, luminance, skid resistance, durability) equal to or greater than road marking paint and materials specified in subclauses 5702(a), (b) and B5702(c).

Where plastic road-marking material (hot-melt plastic (also known as thermoplastic) and two-component (also known as cold plastic)) is used, the contractor shall obtain an approved guarantee from the manufacturer that the paint complies with the specification. This shall be submitted to the Engineer on request."

Replace sub-subclause B5702(a)(i) with the following:

"(i) Road marking paint

Road marking paint shall be as specified in SANS 731-2. Water Borne paint. Only paint, manufactured in a SANS approved and accredited facility shall be accepted. The no-pick-up time of road-marking paint shall comply with the Class 1 requirement in accordance with SANS 731-2.

SANS 731-2 The paint shall be delivered at the site in sealed containers marked in accordance with

The rate in the tender must allow for an rate of application of 0,6l/m2 .

down." The viscosity of the paint shall be such that it can be applied without being thinned

Replace sub-subclause B5702(a)(iii) with the following:

"(iii) Thermoplastic road marking material

Thermoplastic road marking material shall comply with the requirements of EN 1436, and EN 1423: 1998 for drop-on glass beads for road marking and anti-skid aggregates and mixtures thereof. Blending of thermoplastic road marking material and glass beads shall comply with EN 1424: 1998.

The binder shall be an elasticized synthetic resin and the material shall be reflectorized by mixing in 25% by mass Class A glass beads in accordance with EN 1424: 1998. An additional topping of glass beads shall be applied to the hot surface of the material for instant retro-reflectivity.

The road marking material shall contain 6% by mass minimum titanium dioxide content and shall have a skid resistance of 45 S.R.T. – units or higher. SABS Method 1248: 1995 shall be used for determination of traffic wear index; indication of durability.

The following minimum lamination values are required for the completed product:

250 mcd/m2.lux & 70 mcd/m2.lux for white & yellow lines respectively, at 30 days after application.

200 mcd/m2.lux & 60 mcd/m2.lux for white & yellow lines respectively, at 6 months after application.

Determination of coefficient of retro-reflected luminance by means of portable retro-reflectometer shall be carried out using SANS 6261: 2008. Application of the permanent roadmarking will thus have to be performed within the first 6 months of the 12 month defects liability period to allow for the second measurement to fall within the contract dates. Should the application of the permanent road-marking fall outside the first half of the defects liability period for whatever reason, the settlement of the retention money will be delayed until the second measurement of luminance can be performed at the stipulated time and the required adjustment can be made to the tendered rate (if required).

Two-component cold plastic road marking material shall be used for symbols, arrows and letters (hand painted markings) unless otherwise instructed by the Engineer."

Add the following sub-subitem:

“(v) Cold plastic road marking material

Cold plastic road marking material shall be used for symbols, arrows and letters (hand painted markings) and shall consist of a solvent-free reactive acrylic resin, stuffing, beads and pigment to which a hardener shall be added. Application is carried out using a trowel. Material applied by paint brush shall not be used.

Cold plastic road marking material shall be reflectorized by mixing in 25% by mass (or 400 g/m²) Class A glass beads in accordance with EN 1424: 1998. An additional topping of glass beads is applied to the wet surface of the material after application and will comply with EN 1423: 1997.”

(b) Roadstuds

Replace the second sentence with the following:

“All square roadstuds shall have a footprint of 100mm x 100mm and a height of at least 20mm. Round roadstuds shall be 100mm in diameter and not less than 20mm in height. Roadstuds shall comply with EN1463-1:1997 specifications. Only non metallic products with glass as reflective material shall be used. Shank roadstuds shall be used on the outside slow lane shoulders and only where the pavement layers are appropriate.”

Add the following sub-item:

“(c) Retro-reflective beads

Retro-reflective glass beads shall be applied to the wet paint, thermoplastic and cold plastic.

The beads shall comply with Class A beads in accordance with EN 1424: 1998, with the following requirements or as approved by the Engineer:

colour	:	crystal clear
roundness	:	> 80%
size range of	:	14 – 200 US Mesh (75 – 1400 Microns)
refractive index	:	> 1.5
specific gravity	:	± 2.5
granulometry	:	

Cumulative retained mass		
Sieve	Minimum	Maximum
1700	0	2
1400	0	10
1180	5	30
850	40	80
600	70	100
425	80	100
355	90	100
212	95	100
Pan	100	100

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 SANS, confirming that the beads form part of a lot tested by SANS and comply with the requirements of EN 1424: 1998. Alternatively, the Contractor shall at all times have a SANS certificate on the site, identifying the batches to which the inspection seals apply and certifying that they have been tested by SANS, and comply with the requirement of EN 1424: 1998.”

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.”

B5705 SURFACE PREPARATION

Add the following at the end of the second paragraph:

“The onus is on the contractor to ensure that the surface on which the road markings are to be applied is sufficiently clean and dry to ensure that the quality of the road markings will not be adversely affected. The contractor is also responsible for protecting road studs from being painted over, and the subsequent cleaning thereof if such over-painting did occur.”

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

Insert the following before the first paragraph:

“The Contractor’s establishment on site and general obligation 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 on site or is required to move within the site.

Provision is also made under item B57.07 for de-establishment and re-establishment in the contract or maintenance period if such action is required by delays not attributable to the contractor and/or ordered by the Engineer.”

Replace the sixth paragraph with the following:

“Solvent borne road marking paint shall be applied at a nominal rate of 0,42 l/m² or as directed by the Engineer. Thermoplastic road marking shall be applied at a nominal rate of 2,5 kg/m² to achieve a minimum thickness of 1,25mm to 1,5mm or as directed by the Engineer. The two-component road marking material shall be applied by hand by means of a trowel. The desired symbol or line shall be marked with a tape or a template on the road surface. Thereafter apply the required volume of material and spread uniformly over the entire area. When dry/set, remove the tape or template. A spreading rate of 4,5kg/m² is estimated to achieve a 2,0mm material thickness.

In order to ensure proper coverage on all types of surfaces the Engineer may order an increase in the above nominal application rates. Payment for these variations in application rates shall be made under item 57.04.

A daily log-sheet, provided by the Employer, shall be completed and signed by the Contractor and the Engineer’s representative, recording the quantities of paint and glass beads used on that day and shall be available for inspection at all times. The completed and signed log-sheet for the period covered by a payment certificate shall be attached to the payment certificate.”

Replace the last paragraph with the following:

“Solvent-based road marking as specified by the Engineer shall be carried out within 14 days of opening the road full width to traffic after the completion of the surfacing.

If in the in the opinion of the Engineer, conditions are unsafe, the centre-line shall be painted immediately after 2,0 km of continuous road has received a new asphalt layer, or 4,0 km of continuous road has received a new seal surfacing.”

B5708 APPLYING THE RETRO-REFLECTIVE BEADS

In the first paragraph, replace the nominal application rate of 0,8kg/litre with “400gm/m²”.

Replace the second paragraph with the following:

“The thermoplastic road marking material and two-component road marking material shall contain insitu glass beads of minimum content of 25% in order to obtain night visibility (reflectivity). The contractor shall immediately apply additional glass beads at 400g/m² to obtain immediate reflectivity. The beads shall be sprayed onto the road marking layer by means of a pressure sprayer. Where letter, symbol, traverse line and island road marking is undertaken by hand, the glass beads may be applied by hand if approved by the Engineer. Prior to any hand application work, the contractor shall first request approval from the Engineer.”

Add the following:

“Beads shall be applied in accordance with EN 1424.”

B5710: TOLERANCES

Add the following paragraphs to subclause (c) Alignment of markings:

“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 100mm 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 10mm 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 subclause:

”(e) Testing

(1) 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:

that the painting machine is in good working order and properly adjusted;
that the operator is fully experienced; and
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 clause:

“The Contractor shall provide temporary traffic control facilities in accordance with Section 1500 of the COLTO’s standard specifications for road and bridge works, this document and the SARTSM to ensure traffic safety where work is being executed.

Property and/or road signs damaged by the Contractor, his personnel, his agents or sub-contractors shall be repaired or restored to their condition prior to the damage at his own cost.”

B5712: FAULTY WORKMANSHIP OR MATERIAL

Add the following paragraphs to this item:

“The Contractor shall rectify in an acceptable manner and at his own costs; all marking that do not comply with the specified requirements.

While work is in progress, tests shall be carried out on materials and/or the quality of work to ensure compliance with the specified requirements. The sampling methods are specified in SANS 731-1. The sampling methods described in TMH5 shall be followed where applicable.”

B5713: PROTECTION

Add the following paragraph

”Traffic cones shall not be smaller than 750mm in height and shall be placed on the road not further than 48m apart. Cones shall not be removed before the paint on the road has hardened to such an extent that it will not be damaged by traffic and the adhesive of the road studs has hardened to such an extent that the studs will not turn or become loose. All marks on the road caused by traffic driving over wet paint shall be removed by the Contractor at his own cost.”

B5714 Measurement and payment

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

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. All reference that differentiate in the specification between line distances must be ignored and lines shall be measured once only along the measured left edge line irrespective of the distance between the lines, meaning all edge lines and/or possible centre lines will be regarded as a once of single measurement”

Item	Unit
B57.11 Re-establishing the painting unit on instruction of the Engineer during the maintenance period	lump sum

“The unit of measurement shall be a lump sum for the painting unit to re-established on site on instruction of the Engineer during the maintenance period and expected to be approximately 9 (nine) months after issuing of the Taking-Over-Certificate.

The tendered rates must include for the re-establishment and de-establishment during the maintenance period if such action is required and/or ordered by the Engineer.

The tendered rate shall therefore include full compensation for re-establishing the complete painting unit on site and the subsequent removal of all special equipment, personnel, etc., for painting the road-traffic markings during the maintenance period.”

SECTION B5900: FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS

B5901 SCOPE

In the first line of the second paragraph, insert the following after 'this section'

"...distinguishes between new construction and renewal construction. When construction is new, as in the case of new alignments for example, then this section "

B5902 FINISHING THE ROAD AND ROAD RESERVE

Retain the existing paragraphs as sub-clause:

"(a) New construction"

Replace the sixth paragraph with:

"All materials resulting from the finishing operations shall be disposed of at approved spoil sites."

Add the following:

"(b) Renewal construction

After completing construction work within the site, the contractor shall ensure that all construction generated or related material that may have been swept, windrowed, stockpiled, stored or spread beyond the road surface is removed. This shall be done before any other rehabilitation work is undertaken, including shaping, topsoiling and grassing. Should, during the removal of construction generated or related material, existing vegetation or topsoil be disturbed or destroyed, the contractor shall, at his own cost, re-instate the road reserve to its original state. This shall include ripping, should the construction material have compacted the existing surface.

Culvert inlets and outlets, culvert barrels, and open drains shall be cleared of debris, soil, silt and other material generated from the construction activities.

The surfacing shall be cleared of all dirt, mud and foreign objects. Dragging, pushing or scraping material across the finished surfacing shall not be permitted.

All junctions, intersections, islands, kerbing and other elements making up the completed works shall be neatly finished off.

The contractor shall ensure that all undesirable plants have been removed from the road reserve and borrow pit areas.

All materials resulting from the finishing operations shall be disposed of at approved spoil sites."

C3.2.1 Design Services and Activity Matrix

The responsibilities for design are as follows:

Permanent works :	
Concept, feasibility and overall process	Employer
Basic engineering and detail layouts to tender stage	Employer
Final design to approved for construction stage	Employer
Temporary works	Contractor
Preparation of as-built drawings	Contractor

- The Employer is responsible for the design of the permanent Works as reflected in the Contract Documents unless otherwise stated.
- The Contractor is responsible for the design of the temporary Works and their compatibility with the permanent Works.
- 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 entire Permanent Works have been designed by the Employers representative, i.e. the Engineer

C3.2.3 Design Brief

The Contractor will supply a typical layout for accommodation of traffic. Any alterations to this layout need to be approved by the Engineer and Employer.

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 Engineer. The Engineer 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 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 Engineer's Representative on a regular basis.

All information in possession of the Contractor, required by the Engineer and/or the Engineer's Representative to complete the record drawings, must be submitted to the Engineer's Representative before a Certificate of Completion will be issued.

The Drawings prepared by the Employer for the permanent Works are listed and bound in a separate volume. The Employer reserves the right to issue amended and/or additional drawings during the Contract.

C3.2.5 Design Procedures

All statutory requirements shall be taken into consideration.

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C3.3. Procurement

C3.3.1 Preferential Procurement Procedures

C3.3.1.1 Requirements

The Preferential Procurement Procedures are detailed in C1.3 (Tenderer's Direct Participation of Targeted Labour) and C1.4 Tenderer's Direct Participation of Targeted Enterprises.

C3.3.1.2 Resource Standard Pertaining to Targeted Procurement

- SANS 1914-1:2002 Targeted Construction Procurement Part 1 – Participation of Targeted Enterprises
- SANS 1914-2:2002 Targeted Construction Procurement Part 1 – Participation of Targeted Partners in Joint Ventures
- SANS 1914-3:2002 Targeted Construction Procurement Part 1 – Participation of Targeted Enterprises and Targeted Partners in Joint Ventures
- SANS 1914-4:2002 Targeted Construction Procurement Part 1 – Participation of Targeted Enterprises and Targeted Labour (local resources)
- SANS 1914-5:2002 Targeted Construction Procurement Part 1 – Participation of Targeted Labour
- SANS 1914-6:2002 Targeted Construction Procurement Part 1 – Participation of Targeted Enterprises in Concession Contracts

C3.3.2 Subcontracting

C3.3.2.1 Scope of Mandatory Subcontract Works

No requirements specified.

C3.3.2.2 Preferred Subcontractors / Suppliers

No requirements specified.

C3.3.2.3 Subcontracting Procedures

SubContractors shall be appointed in line with Clause 4.4 of the General Conditions of Contract (GCC 2015) and were required / necessary a subContractor shall be selected in consultation with the Employer.

Subcontractors shall submit their Health and Safety Plan to be approved by the Engineer.

C3.3.2.4 Attendance on Subcontractors

The provisions of Clause 4.4 of the General Conditions of Contract (GCC 2015) shall be applicable.

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C3.4. Construction

C3.4.1 Works Specifications

C3.4.1.1 Applicable Specification

The specification for the contract is the COLTO Standard Specification for Road and Bridge Works for State Authorities 1998 (Green Book) for Civil Engineering Construction.

C3.4.1.1.1 Applicable Technical Recommendations For Highways (TRH)

- TRH 14 Guidelines for Road Construction Materials
- TRH 20 The Structural Design, Construction and Maintenance of Unpaved Roads

C3.4.1.1.2 Applicable Technical Methods For Highways (TMH)

- TMH 1 Standard Methods for Road Construction Materials
- TMH 5 Sampling Methods for Road Construction Materials
- TMH 6 Special Methods for Testing Roads
- TMH 10 Manual for the Completion of As-Built Materials Data Sheets
- TMH 11 Standard Survey Methods

C3.4.1.2 Particular Specifications

Refer to C3.5.

C3.4.1.3 Certification by Recognised Bodies

Certified by the CIDB

C3.4.2 Plant and Materials

C3.4.2.1 Plant and Materials Supplied by the Employer

None

C3.4.2.2 Materials, Samples and Shop Drawings

All materials are to be tested by a commercial laboratory.

C3.4.3 Construction Equipment

C3.4.3.1 Requirements for Equipment

The Contractor is required to use plant and equipment that is sufficient for the construction of roads and the ancillary works.

C3.4.3.2 Equipment Provided by the Employer

None

C3.4.4 Existing Services

C3.4.4.1 Known Services

All known services are shown on the Construction Drawings. However all existing service should be proven prior to construction. The onus still lies with the Main Contractor to ensure that no services are damaged during the construction period.

C3.4.4.2 Treatment of Existing Services

It is envisage that some of the existing services may require temporary or permanent relocation. The relevant local authorities should be contacted before relocating any services.

C3.4.4.3 Use of Detection Equipment for the Location of Underground Services

Not applicable.

C3.4.4.4 Damage To Services

It is the responsibility of the Contractor to ensure that no services are damaged during the construction process. In case the known services indicated on the drawings are damaged, the main Contractor shall be responsible for the repair off the services to the original state before it was damaged, as well as all cost associated with the damaged service

C3.4.5 Site Establishment

C3.4.5.1 Services and Facilities Provided by the Employer

(a) Water Source

A potable water supply is available in the vicinity of the Site. Should the Contractor wish to utilise such water supply, he/she shall be responsible for making his own arrangements with the responsible water supply authority for the supply of all water that he may require from such reticulation network for construction purposes as well as for domestic consumption.

If so required by the responsible water supply authority, the Contractor shall further be responsible, at his own cost, for making or otherwise providing metered connections to the available services at the positions specified by the water authority, as well as for the removal of such connections on completion of the Contract.

No warranty is offered or given by the Employer that the existing available reticulated water supply will necessarily be adequate for the Contractor's purposes nor that such supply is in any way guaranteed.

All charges as may be levied by the responsible water supply authority in respect of water consumed by the Contractor shall be for the Contractor's account and payment to the Contractor in respect thereof shall, in accordance with the provisions of subclause, be deemed to be included in the sums tendered by the Contractor for the various items listed in the Bill of Quantities, as well as in the rates tendered by the Contractor for the various other items listed in the Bill of Quantities which require the consumption of water.

The Contractor shall, when reasonably required by the Engineer, produce documentary proof that all amounts as may have become due and payable by the Contractor to the responsible water authority have been promptly paid in full.

(b) Electricity supply

A electrical power supply is available in the vicinity of the Site. Should the Contractor wish to avail himself of such supply, he shall, in accordance with the provisions of relevant subclause, and at his own cost, be responsible for making his own arrangements with the responsible electricity supply authority for the supply of all electrical power he may require from such reticulation network for construction purposes as well as for domestic consumption.

If so required by the responsible electricity supply authority, the Contractor shall, at his own cost, be responsible for making metered connections to the available services at the positions specified by the electricity supply authority, as well as for the removal of such connections on completion of the Contract.

No warranty is offered or given by the Employer that the existing available reticulated electrical power supply will necessarily be adequate for the Contractor's purposes nor that its supply is in any way guaranteed.

All charges as may be levied by the responsible water supply authority in respect of water consumed by the Contractor shall be for the Contractor's account and payment to the Contractor in respect thereof shall, in accordance with the provisions of subclause, be deemed to be included in the sums tendered by the Contractor for the various items listed in the Bill of Quantities, as well as in the rates tendered by the Contractor for the various other items listed in the Bill of Quantities which require the consumption of electricity.

The Contractor shall, when reasonably required by the Engineer, produce documentary proof that all amounts as may have become due and payable by the Contractor to the responsible electricity supply authority have been promptly paid in full.

(c) Area for Contractor's site establishment

The Contractor may erect his site offices and storage depot within the boundaries of the area indicated by the Engineer at the clarification meeting or during the site handover meeting.

The Contractor shall submit a general layout drawing to a scale of not less than 1:200 to the Engineer for approval before any work on the camp or offices is commenced.

No housing is available and the Contractor shall make his own arrangements to house his employees and transport them to and from the site. All arrangements for housing workmen shall be made in accordance with and subject to applicable regulations and requirements.

The Contractor shall use this area only for the purposes of erecting his site offices, workshops, stores and other facilities required for the execution of the Contract. The Contractor shall not use the area nor allow it to be used for any purposes not directly associated with the execution of the Contract.

The Contractor shall be responsible for arranging, at his own cost, for the provision of all services he may require in the area, as well as elsewhere on the Site.

Should the Contractor deem the area made available by the Employer to be inadequate or unsuitable for the Contractor's particular needs, then the Contractor shall be at liberty to make his own arrangements with the owners of other sites which he considers are better suited to his needs; provided always that the use by the Contractor of any area other than that made available to him by the Employer shall be subject to the prior written approval of the Engineer, which approval shall not be unreasonably withheld; and provided further that the Contractor shall have no claim against the Employer in respect of any costs incurred by him, either directly or indirectly in consequence of utilising any area other than that made available to him by the Employer, and which costs exceed those costs allowed for by the Contractor in his Tender.

C3.4.5.2 Facilities Provided by the Contractor

(a) Facilities for the Engineer

The Contractor shall provide on the Site, for the duration of the Contract and for the exclusive use of the Engineer and/or his Representative (as applicable), the various facilities described hereunder. All such facilities shall be provided promptly on the commencement of the Contract and failure on the part of the Contractor to provide any facility required in terms of this specification shall constitute grounds for the Engineer to withhold payment of the Contractor's tendered items until the facility has been provided or restored as the case may be.

The following are typical facilities to be provided:

- Office accommodation
- Site meeting venue
- Contract nameboards
- Survey equipment and assistants
- Electricity supply for the Engineer
- Site diary.

(b) Water

The Contractor shall, at his own expense, be responsible for obtaining and distributing all water as may be required for the purposes of executing the Contract, including water for both construction purposes and domestic use, as well as for making all arrangements in connection therewith. The Contractor shall further, at his own expense, be responsible for providing all necessaries for procuring, storing, transporting and applying water required for the execution of the Contract, including but not limited to all piping and other plant and equipment, as well as for all work and superintendence associated therewith.

The sources of all water utilised for the purposes of the Contract shall be subject to the prior approval of the Engineer, which approval shall not be unreasonably withheld.

The Contractor shall comply with all prevailing legislation in respect of drawing water from natural and other sources and shall, when required by the Engineer, produce proof of such compliance. The distribution of water shall be carried out by the Contractor strictly in accordance with the applicable laws and regulations.

All water provided by the Contractor for construction purposes shall be clean, free from undesirable concentrations of deleterious salts and other materials and shall comply with any further relevant specifications of the Contract. The Contractor shall, whenever reasonably required by the Engineer, produce test results demonstrating such compliance. Water provided by the Contractor for human consumption shall be healthy and potable to the satisfaction of the health authorities in the area of the Site.

No separate payment will be made to the Contractor for the obtainment, distribution and consumption of water, the costs of which will be deemed to be included in the Contractor's tendered rates.

(c) Electricity

The Contractor shall, at his own expense, be responsible for obtaining and distributing all electricity as he may require for the purposes of executing the Contract, including electricity for both construction purposes and domestic use, as well as for making all arrangements in connection therewith.

The distribution of electricity shall be carried out by the Contractor strictly in accordance with the applicable laws and regulations.

No separate payment will be made to the Contractor for the obtainment, distribution and consumption of electricity, the costs of which will be deemed to be in the Contractor's tendered rates and prices.

C3.4.5.3 Storage And Laboratory Facilities

No requirements are specified. A commercial laboratory will be utilised

C3.4.5.4 Vehicles and Equipment

No requirements are specified

C3.4.5.5 Advertising Rights

It is the Main Contractor's responsibility that no suppliers advertise on site. Any advertisement from suppliers shall be removed at the cost of the Main Contractor.

C3.4.5.6 Notice Boards

The main Contractor is allowed to place a Notice board on site. The maximum allowed size of this board should be as per the attached notice board drawing.

C3.4.6 Site Usage

The Contractors are not allowed to work outside the allowed working hours, as agreed with the Employer's Agent. The disturbance to the residence should be kept at a minimum.

C3.4.7 Permits and Way Leaves

Before construction of the Works, or any phase of the Works, the Contractor shall contact all relevant parties and authority officials to establish the existence of existing services on site. The Contractor shall be responsible for obtaining permission to proceed. No claims shall be lodged by the Contractor for delays in obtaining these permissions

C3.4.8 Water for Construction Purposes

The onus lies with the Main Contractor to source and pay for construction water. The quality of the construction water should be as specified is COLTO.

C3.4.9 Survey Control and Setting Out of the Works

The survey control points and setting out data is provided by the Employer. It is the Contractor's responsibility to ensure that the survey control points are correct and to use these control points for setting out.

C3.4.10 Extension of Time Due to Abnormal Rainfall

- (a) Regardless of the cause of any delay an extension of time will only be considered if it can be shown that the activity delayed is on the critical path indicated on the Works Programme.
- (b) No extension of time will be granted in respect of any delays attributed to normal climatic conditions. Normal Climatic Conditions shall be deemed to include normal rainfall and associated wet conditions and materials, strong winds and extremes of temperature. However, in the event that delays to critical activities exceed the number of working days listed below for each month, then abnormal climatic conditions shall be deemed to exist, and an extension of time shall be granted in accordance with the provisions of that Clause.
- (c) The number of days quoted below shall be regarded as a fair estimate of the delays to be anticipated and allowed for under normal climatic conditions where inclement weather prevents or disrupts work on the critical path.
 - 3 working days per month for the months of May to October
 - 2 working days per month for the months of November to April
- (d) Claims for delays for abnormal climatic conditions shall be accompanied by substantiating facts and evidence, which shall be submitted timeously as each day or half-day delay is experienced. Should an extension of time be granted by the Engineer such extension of time will be added to the Time for Completion or set against any over-provision that may have occurred in the abovementioned schedule.
- (e) It shall be further noted that where the critical path is not affected, no extension of time for abnormal climatic conditions or for any other reason will be entertained.
- (f) Any extension of time in respect of wet climatic conditions granted in terms of this clause shall not be deemed to take into account delays experienced by the Contractor in repairing or reinstating damage to or physical loss of the Works arising from the occurrence of abnormal climatic conditions. Extension of time in respect of any such repairs or reinstatement regarding damage shall be the subject of a separate application for extension of time in accordance with the provisions of the Conditions of Contract.

C3.4.11 Features Requiring Special Attention

(a) Site Maintenance

During progress of the work and upon completion thereof, the Site of the Works shall be kept and left in a clean and orderly condition. The Contractor shall store materials and equipment for which he is responsible in an orderly manner, and shall keep the Site free from debris and obstructions.

(b) Subcontractors

All matters pertaining to subcontractors (including Nominated Subcontractors) and the work executed by them shall be dealt with directly between the Engineer and the Contractor in the context of all subcontract work being an integral part of the Works for which the Contractor is responsible.

The Engineer will not liaise directly with any Subcontractors nor will he issue instructions concerning the subcontract works directly to any Subcontractor.

All matters arising from the subcontract agreements shall be dealt with directly between the Contractor and the Subcontractors and the Engineer will not become involved.

(c) Access to Properties

The Contractor shall organise the work to cause the least possible inconvenience to the public and to the property owners adjacent to or affected by the work, and except as hereunder provided, shall at all times provide and allow pedestrian and vehicular access to properties within or adjoining or affected by the area in which he is working.

If, as a result of restricted road reserve widths and the nature of the work, the construction of bypasses is not feasible, construction shall be carried out under traffic conditions to provide access to erven and properties.

Notwithstanding the foregoing, the Contractor may, with the prior approval of the Engineer (which approval shall not be unreasonably withheld), make arrangements with and obtain the acceptance of the occupiers of erven and properties to close off part of a street, road, footpath or entrance temporarily, provided that the Contractor duly notifies the occupiers of the intended closure and its probable duration, and reopens the route as punctually as possible. Where possible, such streets, roads, footpaths and entrances shall be made safe and reopened to traffic overnight. Such closure shall not absolve the Contractor from his obligations under the Contract to provide access at all times. Barricades, traffic signs, drums and other safety measures appropriate to the circumstances shall be provided by the Contractor to suit the specific conditions.

(d) Existing Residential Areas

Electricity and water supply interruptions in existing residential areas shall be kept to a minimum. The Engineer's approval shall be obtained prior to such interruptions and residents shall be notified in writing at least **24 hours** but not more than 48 hours in advance. Supplies shall be normalised by 16:00 on the same day.

(e) Employment of Local Labour

The Tenderer shall limit the utilisation of his permanently employed personnel to Key Personnel, such as Contracts Managers, Site Agents, Foremen, Supervisors, Plant Operators, Materials and Survey Technicians, Artisans, Trainers, Buyers, Storemen and the like should such expertise not be available out of the community.

The Tenderer shall make maximum use of the human resources existing in the local community. The Tenderers shall apply to the employment labour desk, conveyed by the Project Steering Committee for details of those labourers who are available in the area of work and he shall provide preference to those labourers identified by the Steering Committee.

The employment of labour from outside the local area will only be considered and permitted by the Engineer in the event of:

- the unavailability of sufficient numbers of local labourers to execute the work;
- the unavailability within the local community of the required skills necessary for the execution of specific portion of work, and where the completion period does not permit the creation of the necessary skills through training.

In both cases the Tenderer shall prove to the satisfaction of the Engineer that he has exercised his best endeavours and taken all reasonable actions to recruit local labour.

The Tenderer shall maintain accurate and comprehensive daily records of all labour engaged on the tender and shall submit to the Engineer at two weekly intervals detailed labour returns substantiating the actual numbers of labourers employed, the amounts actually paid in respect thereof, and details of the various activities undertaken by the labourers.

The employment of casual labour will be done in co-operation with community leaders and local structures. The Tenderer shall ensure that all remuneration paid to employees is in line with the relevant sectorial determination in terms of the Basic Conditions of Employment Act, as determined by the Department of Labour.

(f) Monthly Statements and Payment Certificates

The statement to be submitted by the Contractor in terms of the Conditions of Contract shall be prepared by the Contractor at his own cost, strictly in accordance with the standard payment certificate prescribed by the Engineer, in digital electronic computer format. The Contractor shall, together with a copy of the digital electronic computer file of the statement, submit two (2) A4 size paper copies of the statement.

For the purposes of the Engineer's payment certificate, the Contractor shall subsequently be responsible, at his own cost, for making such adjustments to his statement as may be required by the Engineer for the purposes of accurately reflecting the actual quantities and amounts which the Engineer deems to be due and payable to the Contractor in the payment certificate.

The Contractor shall, at his own cost, make the said adjustments to the statement and return it to the Engineer within three (3) normal workings days from the date on which the Engineer communicated to the Contractor the adjustments required. The Contractor shall submit to the Engineer five (5) sets of A4 size paper copies of such adjusted statement, together with a copy of the electronic digital computer file thereof.

Any delay by the Contractor in making the said adjustments and submitting to the Engineer the requisite copies of the adjusted statement for the purposes of the Engineer's payment certificate will be added to the times allowed to the Engineer in terms of the Conditions of Contract to submit the signed payment certificate to the Employer and the Contractor. Any such delay will also be added to the period in which the Employer is required to make payment to the Contractor.

(g) Construction in Restricted Areas

Working space is sometimes restricted. The construction method used in these restricted areas largely depends on the Contractor's Plant. Notwithstanding, measurement and payment will be strictly according to the specified cross-sections and dimensions irrespective of the method used, and the rates and prices tendered will be deemed to include full compensation for any difficulties encountered by the Contractor while working in restricted areas. No extra payment or any claim for payment due to these difficulties will be considered.

(h) Notices, Signs, Barricades and Advertisements

All notices, signs and barricades, as well as advertisements, may be used only if approved by the Engineer. The Contractor shall be responsible for their supply, erection, maintenance and ultimate removal and shall make provision for this in his tendered rates.

The Engineer shall have the right to instruct the Contractor to move any sign, notice or advertisement to another position, or to remove it from the Site of the Works if in his opinion it is unsatisfactory, inconvenient or dangerous.

(i) Workmanship and Quality Control

The onus to produce work that conforms in quality and accuracy of detail to the requirements of the Specifications and Drawings rests with the Contractor, and the Contractor shall, at his own expense, institute a quality control system and provide suitably qualified and experienced engineers, foremen, surveyors, materials technicians, other technicians and technical staff, together with all transport, instruments and equipment to ensure adequate supervision and positive control of the Works at all times.

The cost of supervision and process control, including testing carried out by the Contractor, will be deemed to be included in the rates tendered for the related items of work.

The Contractor's attention is drawn to the provisions of the various Standardized Specifications regarding the minimum frequency of testing required. The Contractor shall, at his own discretion, increase this frequency where necessary to ensure adequate control.

On completion and submission of every part of the work to the Engineer for examination and measurement, the Contractor shall furnish the Engineer with the results of the relevant tests, measurements and levels to demonstrate the achievement of compliance with the Specifications.

(j) Survey Control and Setting Out of the Works

Before commencement of work, the Contractor shall liaise with the Engineer to establish and verify the position and level of benchmarks, and the status of all boundary pegs. The Contractor shall record the exact position of all erf pegs on a marked-up print of the site.

On Completion of the contract, the pegs that have been unavoidably disturbed will be replaced by the Employer. Pegs which have, in the opinion of the Engineer, been disturbed due to the negligence of the Contactor, will be replaced at the Contractor's cost.

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C3.5. Management

C3.5.1 Management of the Works

C3.5.1.1 Applicable Specification

As specified under Clause C3.4

C3.5.1.2 Particular Specifications (C3.6 - Annexes)

As specified under Clause C3.4 and C3.6

C3.5.1.3 Planning and Programming

If, during the progress of the Works, the quantities of work performed per week fall below those shown on the approved Contractor's programme, or if the sequence of operations is altered, or if the programme is deviated from in any other way, the Contractor shall, within one week after being notified by the Engineer, submit a revised programme clearly indicating how he intends to regain lost time to ensure completion of the Works within the period defined in term of Conditions of Contract or any extended time granted.

Proposal to increase the tempo of work must incorporate positive steps to increase production either by more labour and plant on the Site, or by using the available labour and plant in a more efficient manner.

Failure on the part of the Contractor to submit or to work according to the programme or revised programmes shall be sufficient reason for the Engineer to take steps as set out in the Conditions of Contract.

The approval of a programme by the Engineer shall have no contractual significance other than that the Engineer will be satisfied if the work is carried out according to the programme. The said approval shall not limit the right of the Engineer to instruct the Contractor to vary the programme if necessary.

C3.5.1.4 Sequence Of The Works

As specified elsewhere. (Refer also C3.5.1.3 and the Contract Data)

C3.5.1.5 Software Application For Programming

Not applicable.

C3.5.1.6 Methods And Procedures

The Works shall be executed in terms of the various and applicable COLTO specifications, the EMP, the general Health and Safety Specifications and subsequent Health and Safety Plan, the Conditions of Contract as well as the various clauses within the Scope of Work.

C3.5.1.7 Quality Plans and Control

Refer the various and applicable COLTO specifications, the EMP, the general Health and Safety Specifications and subsequent Health and Safety Plan, the Conditions of Contract as well as the various clauses within the Scope of Work.

C3.5.1.8 Environment

The Contractor shall, for the duration of the contract, take appropriate measures to control the dust and soil movement which may arise due to his operations.

C3.5.1.9 Accommodation of Traffic on Public Roads Occupied by the Contractor

Refer the various and applicable COLTO specifications, the EMP, the general health and safety specifications and subsequent health and safety plan, the Conditions of Contract as well as the various clauses within the Scope of Work.

C3.5.1.10 Other Contractors On Site

Refer the various and applicable COLTO specifications, the EMP, the general health and safety specifications and subsequent health and safety plan, the Conditions of Contract as well as the various clauses within the Scope of Work.

C3.5.1.11 Testing, Completion, Commissioning and Correction of Defects

Refer the various and applicable COLTO specifications, the EMP, the general health and safety specifications and subsequent health and safety plan, the Conditions of Contract as well as the various clauses within the Scope of Work.

C3.5.1.12 Recording of Weather

Refer C3.4.9

C3.5.1.13 Format of Communications

All contractual communication shall be in writing.

The Contractor shall, for the full duration of the Contract Period, supply and maintain the following documentation:

- (a) Site Diary and Instruction Book.
- (b) Safety File containing all relevant safety data.
- (c) Daily register of all labour, plant and equipment.
- (d) Quality Control file containing all quality control/assurance forms and records.
- (e) One full set of Contract Drawings and documents.
- (f) Latest revision of the Construction Programme.

The above-mentioned shall be kept on Site and shall be accessible to the Engineer at all times.

C3.5.1.14 Key Personnel

Key personnel shall be on site at all times to control and supervise construction activities.

C3.5.1.15 Management Meetings

The Contractor shall have regular site management meeting to coordinate and manage the Works. Monthly Contract Meeting shall be held on site. This meeting shall be chaired by the Engineer.

C3.5.1.16 Forms for Contract Administration

The Employer, the Contractor and the Engineer shall operate and maintain their own individual contract administration systems.

C3.5.1.17 Daily Records

Refer the various and applicable COLTO specifications, the EMP, the general health and safety specifications and subsequent health and safety plan, the Conditions of Contract as well as the various clauses within the Scope of Work.

C3.5.1.18 Payment Certificates

Refer the various and applicable COLTO specifications, the EMP, the general health and safety specifications and subsequent health and safety plan, the Conditions of Contract as well as the various clauses within the Scope of Work.

C3.5.1.19 Proof of Compliance with the Law

Refer the various and applicable COLTO specifications, the EMP, the general health and safety specifications and subsequent health and safety plan, the Conditions of Contract as well as the various clauses within the Scope of Work.

C3.5.1.20 Insurance Provided by the Employer

Refer the various and applicable COLTO specifications, the EMP, the general health and safety specifications and subsequent health and safety plan, the Conditions of Contract as well as the various clauses within the Scope of Work.

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C3.6. Annexes

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Annex C3.6.1 Variations and Additions to Standard Specifications

Notes to tenderer:

1. In certain clauses the Standard Specifications allow a choice to be specified in the project specifications between alternative materials 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 project specifications. It also contains some additional specifications required for this particular contract.
2. 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 standard specifications. The number of a new clause or a new payment item which does not form part of a clause or a payment item in the standard specifications and which is included here, is also prefixed by B followed by a new number. The new numbers follow on the last clause or item number used in the relevant section of the standard specifications.

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Annex C3.6.2 Health and Safety Specifications by the Employer

1. Interpretations

1.1 Application

This specification is a compliance document drawn up in terms of South African legislation and is therefore binding. It must be read in conjunction with relevant legislation as noted previously.

1.1 Definitions

The definitions as listed in the Occupational Health & Safety Act 85/1993 and Construction Regulations (2014) shall apply.

2. MINIMUM ADMINISTRATIVE REQUIREMENTS

2.1 Health and Safety Plan

The Principal Contractor shall prepare a documented Health and Safety Plan as per Construction Regulations 7(1) (a) based on the information / requirements contained in this specification and the baseline risk assessment for the project and demonstrate to us how he is going to implement Health and Safety on site.

2.2 Health and Safety File

The Principal Contractor must, as required by Construction Regulation 7(2)(b) compile and keep a health and safety file on site at all times that must include all documentation required in terms of The Act and Regulations and this specification. It must also include a list of all Sub Contractors on site that are accountable to the Principal Contractor and the agreements between the parties and details of work being done. The Principal Contractor health and safety file must after compilation be submitted to the Health and Safety Agent for approval before any work commencement on site.

The health and safety file must contain the following documentation:

- Notification of Construction Work
- Proof of registration and good standing with the Compensation Commissioner or a COID Insurer
- Safety, Health and Environment Policies
- Health and safety plan agreed with the Client's Agent
- Legal Appointments
- Certificates of medical fitness
- Risk assessment(s) and method statements
- Material Safety Data Sheets (MSDS)
- Traffic Management Plan
- Emergency Preparedness Plan
- Training Records
- Personal Protective Equipment (PPE) records
- A list of Contractors (Sub-Contractors) including copies of the agreements between the parties and the type of work being done by each Contractor
- The following registers:
 - Accident and/or incident register (Annexure 1 of the General Administrative Regulations)
 - Occupational Health and Safety representative's inspection register
 - Daily inspections of vehicles, plant and other equipment by the operator, driver and/or user
 - Inspection of hand tools
 - Inspection and maintenance of explosive powered tools
 - Inspection of electrical installations (including inspection of portable electrical tools, electrical equipment and other electrical appliances)
 - Inspection for temporal electrical installations
 - First-aid box content
 - Record of first-aid treatment
 - Fire equipment inspections and maintenance

- Record of hazardous chemical substances (HCS) kept and used on site
- Machine safety inspections (including machine guards, lock-outs etc);
- Inspection registers and logbooks for lifting machines and – tackle (including daily inspections by drivers/operators)
- Inspection of stacking and storage
- The OHS Act and its Regulations (Construction Regulations 2014)
- Meeting records
- Internal Audits records
- Client's Audits records
- Other records relating to health and safety management on site

The Client's Agent will conduct an evaluation of the Principal Contractor's health and safety file from time to time during a month, but at least once a month.

2.3 Mandataries and Contractors Safety File

It is a requirement that the Principal Contractor, when he appoints Contractors, includes an OHS Act Section 37(2) agreement (i.e. Agreement with Mandatary) in his agreement with such Contractor.

Each Contractor must keep his/her health and safety file updated for the Principal Contractor, on a weekly basis. The Subcontractor must agree to comply with the terms of the Provisions of Section 37(2) of the Occupational & Safety Act, Act No. 85 of 1993 together with the Construction Regulations 2014.

The Principal Contractor must conduct an evaluation of the Contractor's health and safety file from time to time during a month, but at least once a month.

2.4 Notification of Intention to Commence Construction Work

The Principal Contractor must notify Department of Labour in writing of construction work as per section 4 of Construction Regulations and keep the stamped copy in the file.

3. STRUCTURE AND RESPONSIBILITIES

3.1 Overall Supervisions and Responsibility for Health and Safety

It is the Principal Contractor's responsibility to implement and maintain the health and safety plan approved by the Client.

The Chief Executive Officer (in terms of Section 16(1) of the OHS Act) of the Principal Contractor is to ensure that the Employer (as defined in the OHS Act) complies with the OHS Act.

The Principal Contractor's Chief Executive Officer may appoint any person reporting to him/her as Designated Person in terms of Section 16(2) of the OHS Act. Such Designated Person is responsible to assist the Chief Executive Officer to ensure that the Employer complies with the requirements of the OHS Act.

3.2 Operational Responsibilities for Health and Safety

The Principal Contractor must appoint designated competent employees and/or other competent persons to assist with the operational responsibilities for health and safety during the works. Appointments shall be guided/ structured by the legislation requirements and the scope of works to be performed by the contractor. It is acknowledged that the Principal Contractor may need to allocate more than one appointment to certain staff members. This practice may only take place if Health and Safety Standards would not be negatively affected. Should the Health and Safety Agent deem such practice as having a negative effect on Health and Safety Standards; then alternative arrangements will have to be made.

A part time Health and Safety Officer shall be appointed by the Principal Contractor subject to the following conditions:

- The person must either have completed a SAMTRAC (Safety Management Training Course), which is administered by NOSA, a 3 Week Health and Safety Management Course, which is administered by Lexis Nexus, National Diploma in Safety Management or another course approved by Client's Agent as a minimum requirement.
- The Health and Safety Officer must be registered with the South African Council for Project and Construction Management Professions (SACPCMP) or have proof of application for registration.

3.3 Appointment of Health and Safety Representative

Where the Principal Contractor employs more than 20 persons [including the employees of other contractors (sub-contractors)] he shall appoint one Health and Safety representative for every 50 employees or part thereof. General Administrative Regulation 6 requires that the election, appointment and subsequent designation of the Occupational Health and Safety representatives be executed in consultation with employee representatives or employees.

Occupational Health and Safety representatives shall be designated in writing and the designation must include the area of responsibility of the person and term of the designation.

Should the appointed representatives require any training, assistance or facilities, the Principal Contractor must provide these.

Health and Safety Representatives shall carry out his/ her duties as per Section 18 of the OHS Act. The Principal Contractor must ensure that the designated Occupational Health and Safety representatives conduct a weekly inspection of their respective areas of responsibility, using a checklist, and report thereon to the Principal Contractor.

Occupational Health and Safety representatives must be included in accident and/or incident investigations. Occupational Health and Safety representatives must attend all Occupational Health and Safety committee meetings.

3.4 Health and Safety Committees

The Principal Contractor must establish an Occupational Health and Safety committee consisting of all the designated Occupational Health and Safety representatives together with a number of management representatives. The members of the Occupational Health and Safety committee must be appointed in writing and copies of the appointments included in the Occupational Health and Safety file.

The Health and Safety committee shall be made up of the following:

- Contracts Director
- Construction Manager
- Construction Safety Officer
- Health and Safety Representatives (Own and Contractors)
- Management Members and Client Representatives
- Contractors Managers

The Occupational Health and Safety committee must meet as a minimum on a monthly basis and consider, at least, the following agenda items:

- Opening and welcome
- Members present, apologies and absent
- Minutes of previous meeting
- Matters arising from the previous meeting
- Occupational Health and Safety representatives' reports
- Incident and/or accident reports and investigations
- Incident, accident and/or injury statistics
- Other matters
- Endorsement of registers and other statutory documents by a duly authorised representative of the Principal Contractor
- Training:
 - Employee competence
 - Induction training
 - Certified skills
 - Toolbox talks
 - Emergency procedures
 - Any specific training needs
- General issues:
 - Traffic Management
 - Fire precautions
 - First aid
 - Welfare, etc

Minutes of the meetings shall detail the actions arising from the meeting, action by, completion dates, be copied to all attendees and to be displayed on the safety notice board/s for the information of all the employees. A copy of the Safety Committee Meeting minutes shall be forwarded to the Client if the Client cannot attend the meetings.

3.5 Occupational Health and Safety Policy

The Principal Contractor must prepare a health and safety policy which should be signed by the Chief Executive Officer must form a part of the Safety Plan. The policy must outline objectives and set out how they will be achieved and implemented. The health and safety policy should also be displayed at the site office.

3.6 Health and Safety Organogram

An organogram outlining the health and safety management as per appointments under the OHS Act and the Regulations must be provided by the Principal Contractor and be kept in the health and safety file. The Contractor must maintain the health and safety management organogram up-to-date.

2.7 Preliminary Hazard Identification and Risk Assessment

The Principal Contractor must allow for and cause a Site-Specific Hazard Identification and Risk Assessment exercise to be performed by a Competent Person before commencement of construction work based on the projects Baseline Hazard Identification and Risk Assessment. The risks assessed must form part of the Construction Phase Health and Safety Plan to be submitted by the contractor for approval by the Health and Safety Agent. The Risk Assessment must include:

- a) A list of hazards identified for the works;
- b) Health and safety effects from exposure to hazards;
- c) Risk rating and its methodology / matrix;
- d) Control / mitigation measures to identified hazards;
- e) Safe working procedures for the high risk tasks intended to eliminate, reduce and/or control the risks assessed;

The Principal Contractor must ensure that all Sub-Contractors are informed, instructed and trained by a Competent Person/s regarding hazards, risks and related safe work procedures before any work commences and thereafter at regular intervals as the risks change and as new risks develop.

The Principal Contractor shall allow for and be responsible for ensuring that all persons who could be negatively affected by construction operations are informed and trained according to the hazards and risks and are conversant with the Safe Work Procedures, control measures and other related rules (for example "tool box talk" strategy to be implemented).

Should the Health and Safety Agent or other Clients Representative identify alternative hazardous activities performed by the Principal Contractor or its Sub-Contractors on site for which a Risk Assessment was not performed, then the Principal Contractor will be required to perform such an exercise before continuing such work.

The risk assessment must be reviewed where changes are effected to the design and or construction that result in a change to the risk profile and when an incident has occurred.

2.8 Medical Fitness

The Principal Contractor and all Sub-Contractors must ensure that every employee on site has a valid medical certificate of fitness specific to the construction work to be performed and issued by an Occupational Health Practitioner in the form of Annexure 3 of Construction Regulations 2014.

2.10 Health and Safety Training

2.10.1 Induction

The Principal Contractor shall allow for and ensure that all site personnel undergo a site-specific health and safety induction training session before starting work. A record of attendance shall be kept in the health and

safety file. Induction training shall also include training on the risks associated with the works to be executed, safe work procedures and emergency procedures.

All visitors to the site must also be subjected to site-specific induction training highlighting items such as site safety and health risks, steps to follow in the event of emergency, restricted areas and on the site health and safety rules.

2.10.2 Awareness and Promotion

The Principal Contractor is required to have a promotion and awareness programme in place to create a health and safety culture within employees. The following are some of the methods that may be used:

- Toolbox talks (Weekly)
- Posters
- Notices and Sign

The following notices and signs are, where applicable, compulsory on the construction site as well as the Contractors' yards:

Area and/or activity where notice or sign is required	Notice or sign required in terms of
Display of notices and signs	General Safety Regulation 2B and SABS Code 1186
Entry	General Safety Regulation 2C(2)
First-aid	General Safety Regulation 3(6)
Toilets and change rooms	Facilities Regulation 2(5); 4(2)(f)
Storage of flammable materials	General Safety Regulation 4(8)(a)(i) and (ii) <i>(10(e) only applicable to Contractor's yards)</i>
Grinding wheels	Driven Machinery Regulation 8(1)(7)
Machinery	General Machinery Regulation 9 <i>(Schedule D)</i>
Explosive powered tools	Construction Regulation 21(2)(f)
Prohibition on smoking and eating or drinking at the workplaces where high risk substances [FR5 (1)] are stored or handled	Facilities Regulation 6(b)
Non-potable water	Facilities Regulation 7(b)
Traffic control signs	Department of Transport; Traffic Signs Manual, 2010, Chapter 8

2.10.3 Competency

The Principal Contractor shall ensure that his and other Contractors' employees appointed are competent and that all training required doing the work safely and without risk to health of their or other persons, has been successfully completed before work commences.

The Principal Contractor shall ensure that follow-up and refresher training is conducted on a regular basis as well as the contract work progresses and the work situation changes.

Records of all training must be kept on the health and safety file for auditing purposes.

2.10.4 Rules of conduct

Principal contractors, their sub-contractors and all employees under the control, including any visitor brought onto site must adhere to the following Rules of conduct on site.

YOU MAY NOT:

- * Partake, possess or sell drugs or alcoholic beverages on site. Any employee or visitor whose action and demeanour show symptoms of possible narcosis or drunkenness shall be removed from site.
- * Indulge in practical jokes, horseplay, fighting or gambling.
- * Destroy or tamper with safety devices, symbolic signs or wilfully and unnecessarily discharge fire extinguishers.
- * Bring onto site or have in your possession a firearm, lethal weapon.
- * Assault, intimidate or abuse any other person.
- * Operate construction equipment (vehicles or plant) without the necessary training and authorisation.
- * Display insubordination toward any supervisor, foreman or Manager in respect to carrying out of properly issued instructions or orders for health and Safety reasons.
- * Enter any area where you have no business unless authorised to do so by the person in charge.
- * Negligently, carelessly or wilfully cause damage to property of others.
- * Refuse to give evidence or deliberately make false statements during investigations.

2.11 General Record Keeping

The Principal Contractor and all Sub Contractors shall keep and maintain Health and Safety records to demonstrate compliance with this Specification, with the OHS Act 85/1993; and with the Construction Regulations (2014). The Principal Contractor shall ensure that all records of incidents/accidents, training, inspections; audits, etc. are kept in a health & safety file held in the site office.

Then Principal Contractor must ensure that every Sub Contractor opens its own health & safety file, maintains the file and makes it available on request.

2.12 Construction Vehicles and Mobile Plant

Construction vehicles and mobile plant must be:

- ❖ Of acceptable design and construction
- ❖ Maintained in good working order
- ❖ Used in accordance with their design and intention for which they were designed
- ❖ Operated and/or driven by trained, competent and authorised operators/drivers
- ❖ Must be driven at the site at a speed limit on site shall be 40 Km/h in normal circumstances and 20Km/h through deviations unless otherwise specified.
- ❖ No unauthorised persons to be allowed to drive construction vehicles and mobile plant
- ❖ Provided with safe and suitable means of access
- ❖ Fitted with amber lights and must be clearly labelled "Construction Vehicle" in a conspicuous position and reflective colour
- ❖ Fitted with adequate signalling devices to make movement safe including reversing
- ❖ Excavations and other openings must be provided with sufficient barriers to prevent construction vehicles and mobile plant from falling into in
- ❖ Provided with roll-over protection
- ❖ Fitted with two head and two tail lights that is in good working condition whilst operating under poor visibility conditions; and
- ❖ Used for transporting persons must have seats firmly secured and sufficient for the number of persons being transported
- ❖ Operators and drivers of construction vehicles and mobile plant must be in possession of a valid medical certificate declaring the operator and/or driver physically and psychologically fit to operate or drive construction vehicles and mobile plant
- ❖ No loose tools, material etc. is allowed in the driver and/or operators compartment/cabin nor in the compartment in which any other persons are transported
- ❖ No person may ride on construction vehicles and mobile plant except for in a safe place designed and provided for this purpose
- ❖ The construction site must be organized to facilitate the movement of construction vehicles and mobile plant in such a manner that pedestrians and other vehicles are not endangered. Traffic routes to be suitable, sufficient in number and adequately demarcated
- ❖ Construction vehicles and mobile plant left unattended after hours adjacent to roads and areas where there is traffic movement must be fitted with lights, reflectors or barricades to prevent moving traffic from a sudden emergency, or to come into contact with the parked construction vehicles and mobile plant

- ❖ In addition, construction vehicles and mobile plant left unattended after hours must be parked with all buckets, booms etc. full lowered, the emergency brakes engaged and, where necessary, the wheels chocked, the transmission in neutral and the motor switched off and the ignition key removed and stored safely
- ❖ Employees near construction vehicles / operators to wear reflective safety vests
- ❖ All construction vehicles and mobile plant daily inspection records must be kept in the health and safety file.

2.13 Health & Safety Audits, Monitoring and Reporting

The Client's Health and Safety Agent shall at least once a month during the duration of the contract conduct Health and Safety Audits of the work operations. The audit shall be consisting of a full audit of physical site activities and well as an audit on the administration of health and safety. Copies of the audit reports will be forwarded to the Principal Consultant and the Project Manager and other site stake holders within seven days. It must be kept in the site health and safety file. The Health and Safety Agent may at any time visit the site for an Audit without prior notification to the contractor.

The Principal Contractor must allow for and conduct similar audits on all Sub-Contractors appointed by the Principal Contractor and forward copies of all reports to the Health and Safety Agent within seven working days of completion of the audits and file copies on the site health and safety file.

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Annex C3.6.3 Construction Environmental Management Plan

PES1 General

The Contract shall be conducted in accordance with the principles of Integrated Environmental Management (IEM) "in an environmentally and socially responsible manner" (DEAT 1992). This section details the controls and procedures necessary to achieve this goal.

The Contractor will be required to comply with the Project Environmental Specifications contained in this section. Should any conflict arise between the specifications contained in this section, and any other specification, the Project Environmental Specifications shall prevail.

The specifications detailed in this section relate to those construction activities which could have an adverse impact on the environment and which therefore require mitigation measures.

Items have been included in the Preliminary and General section of the Bill of Quantities to reflect compliance with the Project Environmental Specifications. Where no item is provided in the Bill of Quantities, the Contractors rates will be deemed to be inclusive of any costs incurred for compliance with the Project Environmental Specification.

PES2 Working Area

An area of the site will be defined by the Employer's Agent for use by the contractor. This area will include the designated areas listed below and the contractor will not be permitted access beyond this defined area, except for the security personnel will be required to patrol a wider area to prevent informal settlements.

Within the defined working area mentioned above, certain areas will be specifically designated by the Employer's Agent for the following activities:

- site camp
- stockpiling and storage of construction materials

In order to minimise the potential for erosion, vehicle access between the above-mentioned areas will be restricted to corridors defined by the Employer's Agent, and multiple access tracks across the veld will not be permitted. Should excessive vehicle tracks be made, the Contractor shall be required to rehabilitate the extra tracks at his own cost. Rehabilitation shall involve ripping of the compacted earth to a depth of 150mm to loosen the earth, and grass seeding according to specification.

PES3 Site Camps

Where site camps are to be established the topsoil is to be removed to the base of the A-horizon or to a depth of 150mm, whichever is the greater, and stockpiled according to the SANS specifications.

The site shall be located more than 20m from watercourses. Runoff from the site must be prevented from entering the watercourse or wetland.

Site camps and surrounds are to be maintained in a clean orderly and presentable condition at all times.

Waste water from kitchen and ablution facilities shall be led to soak pits and shall not be discharged to rivers or streams.

Tanks for fuels oils etc. shall be bunded with earth berms adequate to contain any possible spills.

After completion of the Works the contractor shall restore the area used by him to its former condition, including removal of rubble and foundations, and to the satisfaction of the Employer's Agent.

PES4 Sanitation

Adequate toilet facilities are to be provided within 200m of the Works. All toilets shall be maintained by the Contractor in a clean sanitary condition to the satisfaction of the Employer's Agent. Toilets shall not be located on flood plains where the possibility of flooding exists.

Contractors shall instruct their staff and sub-contractors that they must use the toilets provided and not the veld, bush or streams.

PES5 Refuse

The site is to be kept clean, neat and tidy to the Employer's Agent's satisfaction. The Contractor shall provide bins at the Work sites and shall be responsible for disposal of refuse and waste generated by his staff on a daily basis. Domestic litter or construction waste may not be left lying about on site.

Refuse and construction waste shall be disposed of at an approved dump site.

No burning of refuse is permitted.

PES6 Dust

Dust is regarded as a nuisance when it reduces visibility, soils private property or is aesthetically displeasing. Dust also reduces the value of grazing grasses and retards plant growth.

Dust generated by construction related activities must therefore be minimised.

The Contractor shall control dust over the site of the Works, on access roads/tracks, on stockpiles and spoil sites or borrow pits.

Control of dust shall involve spraying with water. The quantities of water used should not be large enough or applied with sufficient force to generate run off which could result in soil erosion. A water cart shall be provided by the Contractor to control dust levels.

PES7 NOISE

Noise levels are to be kept within reasonable norms as determined by the Employer's Agent, taking into account the context of the rural setting.

Silencers shall be fitted to all machinery and vehicles shall be well maintained.

The Contractor shall inform residents of any excessive noise that is anticipated due to construction activities, for example blasting for excavation. This notice shall be given at least 2 days before the event generating higher noise levels.

Any complaints received by the Employer's Agent regarding noise will be recorded and communicated to the Environmental Control Officer.

PES8 Social Disruption

The Contractor's staff shall in no way be a nuisance to residents in the vicinity of construction activities. Any complaints received by the Employer's Agent will be addressed and the relevant persons will face suspension from the project.

No access to private property will be allowed.

PES9 Informal Settlements

The Contractor shall require his security personnel to patrol the entire site (not just the site of current operations as defined in PES3), and report any sign of informal shack development within three hours of commencement of such activity.

PES10 Traffic

Traffic, especially heavy vehicle traffic, has the potential to draw complaints from other road users and neighbours. The Contractor will be expected to address any complaints received.

The Contractor shall instruct his drivers, suppliers, plant operators and any other vehicle operators travelling to and from the site as a result of the construction contract, that vehicles will be expected to comply with all roads ordinances, particularly with regard to;

- Speed limits
- Preventing Overloading
- Roadworthiness
- Securing of loads
- Covering of any loads that could generate dust
- Avoiding spillage of liquids, sand, soil or other material

General consideration and courtesy to other road users will also be expected of drivers.

PES11 Overhead Power Lines

Where work is being carried out in the vicinity of overhead power lines, the Contractor is responsible for ensuring that all persons working in such areas are aware of the relatively large distance that high voltage electricity can 'short' to earth when large masses of steel such as steel pipes or machinery are close to power lines. The Contractor's attention is drawn to OHSA (1993) which gives safe clearances for various voltages.

PES12 Removal Of Protected Plants From Site

Certain species of indigenous plants that occur on the site are protected by law. A horticulturist has been designated the responsibility for relocating these plants from the "Working Area" prior to the Contractor moving on site.

No removal of any plants from beyond the Working Area will be permitted. The Contractor shall be responsible to ensure that no unauthorized removal of plants is allowed. In the event of removal of legally protected species, the persons responsible shall be liable for prosecution under the relevant provincial ordinance. Security Staff will report any infringements related to this.

The Contractor shall confirm with the ECO that the horticulturist has removed the said plants from the Working Area before the Contractor moves on site.

PES13 Fire Prevention And Control

The Contractor and his staff are expected to be very conscious of fire risks. The Contractor shall hold fire prevention talks with staff to create an awareness of the risks of fire. Regular reminders to staff on this issue are required.

The Contractor shall at all times ensure that fires do not start or spread within the site or the environs thereof as a result of the Works or the actions of employees. In the event of such fire the Contractor shall immediately employ such plant and labour as is at his disposal and shall take all other necessary action to bring any such fire under control, all at his own cost.

A fire extinguisher must be on hand whenever welding or any other spark generating activity is conducted.

In addition, rubber beaters are to be on hand at all work stations at all times as these represent the quickest form of response to fire.

No fires may be made other than for the purpose of cooking. Cooking fires must be contained in a fire drum and be in a designated area approved by the Employer's Agent. All fires are to be extinguished with water once they have served their purpose.

No fire is to be left unattended at any time.

No burning of grassland to clear is permitted.

No cutting of timber for firewood will be allowed.

No fires are to be allowed when the Fire Danger Index is high (46 and above) ie. fire alert stage yellow.

The Contractor shall be liable for all costs and damages resulting from fire and fire fighting.

PES14 Environmental Training

The Contractor shall be responsible for conducting Environmental Training amongst his employees to ensure that they have the necessary knowledge to comply with the Environmental Specifications. Employees should be made aware of the Environmental Specifications and the reasons for them.

PES15 Work Stoppage

The Employer's Agent shall have the right to order work to be stopped in the event of significant infringements of the Environmental Specifications until the situation is rectified in compliance with the specifications. In this event the Contractor shall not be entitled to claim for delays.

This clause shall apply in the case of infringements of a nature whereby full remediation of circumstances arising from the infringement will not be possible at a later date. For example mixing topsoil with subsoil; activities that are polluting or may cause pollution of water.

PES16 Environmental Monitoring

The Employer's Agent will monitor the Contractor's performance in relation to the Environmental Specifications on a daily basis. He will be assisted in this regard by the Environmental Control Officer.

The ECO shall inspect the site on a regular basis. After each ECO site visit a report will be submitted to the Employer's Agent and RAY NKONYENI Municipality. The content of these reports will be made known to the Contractor by the Employer's Agent. Any infringement of the Environmental Specification will be indicated in the report. These reports will also aim to anticipate problems which may arise so that the Contractor can be alerted to potential environmental risks and take appropriate action.

PES17 Measurement And Payment

The Tendered rates shall be deemed to cover all costs associated with the compliance with the Environmental Specification.

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Annex C3.6.4 Drawings

1. Bound into this Document

<u>Drawing Number</u>	<u>Description</u>
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2. Issued Separately

<u>Drawing Number</u>	<u>Description</u>
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NOTE:

Originals of reduced drawings are available for inspection at the offices of the Engineer, or copies may be purchased by arrangement with the Engineer. No claims for misunderstanding reduced drawings will be considered.

Part C4: Site Information

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C4.1. Geotechnical Investigation

The Geotechnical Report has been undertaken. Bidders who require a copy of the Report are required to liaise with the Engineer for access to the geotechnical report.
