community safety, roads & transport
Department of
Community Safety, Roads & Transport
FREE STATE PROVINCE

CSR&T/BID11/2026/27

ADVERTISEMENT AND APPOINTMENT OF A CONTRACTOR WITH MINIMUM OF CIDB LEVEL 6CE OR HIGHER , FOR THE SPOT REGRAVELLING OF SECONDARY ROAD S78 (R720) BETWEEN KOPPIES AND EDENVILLE WITHIN A 22KM GRAVEL ROAD FOR THE DEPARTMENT OF COMMUNITY SAFETY ROADS AND TRANSPORT FOR A PERIOD OF 6 MONTHS.

CIDB LEVEL REQUIRED: CIDB 6CE OR HIGHER

Name of Tenderer:.....

Bid Amount: .....

MAAA: .....

This tender closes at 11h00 on 15 DECEMBER 2026, at the SCM offices of the Department of Community Safety, Roads and Transport at 45 Charlotte Maxeke Street, Bloemfontein, 9300

LATE SUBMISSIONS WILL NOT BE CONSIDERED

Issued by:	**Prepared by:**
The Department of Community Safety, Roads and Transport 45 Charlotte Maxeke Street Perm building Bloemfontein 3201 Contact Name: SCM Offices Telephone:(051) 409 8891 or (051) 409 8899	**The Department of Community Safety, Roads and Transport** St Andrew Street Medfontein building Bloemfontein 3201 Contact Name: Roads Technical Telephone:(051) 409 8575





ADVERTISEMENT AND APPOINTMENT OF A CONTRACTOR WITH MINIMUM OF CIDB LEVEL 6CE OR HIGHER , FOR THE SPOT REGRAVELLING OF SECONDARY ROAD S78 (R720) BETWEEN KOPPIES AND EDENVILLE WITHIN A 22KM GRAVEL ROAD FOR THE DEPARTMENT OF COMMUNITY SAFETY ROADS AND TRANSPORT FOR A PERIOD OF 6 MONTHS.

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FOREWORD

This document consists of two sections, namely the **TENDER** and the **CONTRACT.**

THE TENDER consists of two parts, namely:

- **T1: Tendering Procedures** ..... Volume 1
- to be complied with by every Tenderer submitting a tender offer,

and

- **T2: Documents to be returned by the Tenderer** ..... Volume 1
- including the returnable schedules and forms to be completed by each Tenderer, some of which will eventually be incorporated into the contract between the successful Tenderer and the Employer.

THE CONTRACT consists of four parts, namely:

- **C1: Agreements and Contract Data** ..... Volume 1
- **C2: Pricing Data** ..... Volume 1
- **C3: Scope of Work** ..... Volume 1
  (Specifications and Project Specifications)

and

- **C4: Site Information** ..... Volume 1

ADVERTISEMENT AND APPOINTMENT OF A CONTRACTOR WITH MINIMUM OF CIDB LEVEL 6CE OR HIGHER , FOR THE SPOT REGRAVELLING OF SECONDARY ROAD S78 (R720) BETWEEN KOPPIES AND EDENVILLE WITHIN A 22KM GRAVEL ROAD FOR THE DEPARTMENT OF COMMUNITY SAFETY ROADS AND TRANSPORT FOR A PERIOD OF 6 MONTHS.

THE TENDER

PART T1 : TENDERING PROCEDURES

PART T1 : TENDERING PROCEDURES

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T1.1 TENDER NOTICE AND INVITATION TO TENDER

T1.1.1The Department of Community, Roads and Transport, Free State Provincial Government, invites tenders for **THE ADVERTISEMENT AND APPOINTMENT OF A CONTRACTOR WITH MINIMUM OF CIDB LEVEL 6CE OR HIGHER , FOR THE SPOT REGRAVELLING OF SECONDARY ROAD S78 (R720) BETWEEN KOPPIES AND EDENVILLE WITHIN A 22KM GRAVEL ROAD FOR THE DEPARTMENT OF COMMUNITY SAFETY ROADS AND TRANSPORT FOR A PERIOD OF 6 MONTHS.**

CSR&T/BID11/2026/27

T1.1.2 Tenderers should have a **CIDB** Contractor grading designation of **6CE OR HIGHER**.

T1.1.3 Tenderers must be registered with the **CIDB** in a ***CE*** class of construction works.

T1.1.4 **Preferences**

The Tender will be subjected to **specific goals** preferential procurement policy framework as amended.

Evaluation and Adjudication of bids: bid will be evaluated and adjudicated in terms of the Department of Community, Roads and Transport *Supply Chain Management Policy and Preferential Procurement Framework Act No. 5 of 2010. The 80/20 in preferential procurement points system as outlined in the bid document will apply. Preferential points will be given in terms of the Preferential Procurement Regulations, 2022.*

T1.1.5 **Tender Documents**

Queries relating to the issues of these documents may be addressed to:

Mr K. Koenane
Tel no. 051 409 8899
E-mail: koenanek@freetrans.gov.za

T1.1.6 A compulsory clarification meeting with representatives of the Employer will take place at the Fezile Dabi Regional office 10th Avenue, Industria, Kroonstad 9500, (-27.6736882, 27.2099037) on 02 DECEMBER 2026, at 11h00.

T1.1.7 The closing time, date and venue for receipt of tenders will be 11h00 on **15 DECEMBER 2026** at the Ground Floor of Perm Building, Chalotte Maxeke, Bloemfontein **NO LATE TENDERS WILL BE ACCEPTED.**

T1.1.8 Telegraphic, telephonic, telex, facsimile and late tenders will not be accepted. Requirements for sealing, addressing, delivery, opening and assessment of tenders are stated in the Tender Data.

1. PART A
2. INVITATION TO BID

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE (*FREE STATE DEPARTMENT OF COMMUNITY SAFETY, ROADS AND TRANSPORT*)					
BID NUMBER:	**CSR&T/BID11/2026/27**	CLOSING DATE:	**15 DECEMBER 2026**	CLOSING TIME:	**11:00**
DESCRIPTION	**ADVERTISEMENT AND APPOINTMENT OF A CONTRACTOR WITH MINIMUM OF CIDB LEVEL 6CE OR HIGHER , FOR THE SPOT REGRAVELLING OF SECONDARY ROAD S78 (R720) BETWEEN KOPPIES AND EDENVILLE WITHIN A 22KM GRAVEL ROAD FOR THE DEPARTMENT OF COMMUNITY SAFETY ROADS AND TRANSPORT FOR A PERIOD OF 6 MONTHS.**				
BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (*STREET ADDRESS*)					
45 Perm Building					
Charlotte Maxeke Street					
Bloemfontein					
9300					

BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO		**TECHNICAL ENQUIRIES MAY BE DIRECTED TO:**	
CONTACT PERSON	Mr. K. Koenane	CONTACT PERSON	Mr B Mayisela or Mr TJ Nkabinde
TELEPHONE NUMBER	082 059 9726	TELEPHONE NUMBER	078 332 9634 or 082 059 9740
FACSIMILE NUMBER		FACSIMILE NUMBER	
E-MAIL ADDRESS	koenanek@freetrans.gov.za	E-MAIL ADDRESS	Bongumusa.mayisela@gmail.com nkabindej@freetrans.gov.za

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						
SUPPLIER COMPLIANCE STATUS	TAX COMPLIANCE SYSTEM PIN:		**OR**	CENTRAL SUPPLIER DATABASE No:	MAAA	
SPECIFIC GOALS STATUS LEVEL VERIFICATION CERTIFICATE	TICK APPLICABLE BOX] ☐ Yes ☐ No		SPECIFIC GOALS STATUS LEVEL SWORN AFFIDAVIT		[TICK APPLICABLE BOX] ☐ Yes ☐ No	

[A SPECIFIC GOALS STATUS LEVEL VERIFICATION CERTIFICATE/ SWORN AFFIDAVIT (FOR EMES & QSEs) MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR SPECIFIC GOALS]

ARE YOU THE ACCREDITED EPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	☐Yes ☐No [IF YES ENCLOSE PROOF]	2.2 ARE YOU A FOREIGN BASED SUPPLIER FOR **THE GOODS /SERVICES /WORKS OFFERED?**	☐Yes ☐No [IF YES, ANSWER THE QUESTIONNAIRE BELOW]

QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS

IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?	☐YES☐ NO
DOES THE ENTITY HAVE A BRANCH IN THE RSA?	☐YES☐ NO
DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?	☐YES☐ NO
DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?	☐YES☐ NO
IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?	☐YES☐ NO

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 BELOW.

PART B
TERMS AND CONDITIONS FOR BIDDING

1.	**BID SUBMISSION:**
1.1.	BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
1.2.	**ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED–(NOT TO BE RE-TYPED) OR IN THE MANNER PRESCRIBED IN THE BID DOCUMENT.**
1.3.	THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2022, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.
2.	**TAX COMPLIANCE REQUIREMENTS**
2.3	BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
2.4	BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VERIFY THE TAXPAYER'S PROFILE AND TAX STATUS.
2.5	APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA.
2.6	BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
2.7	IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
2.8	WHERE NO TCS PIN IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.
2.9	NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE."

NB: FAILURE TO PROVIDE / OR COMPLY WITH ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID.

SIGNATURE OF BIDDER:.....

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

(Proof of authority must be submitted e.g. company resolution)

DATE: .....

T1.2 STANDARD CONDITIONS OF TENDER

The Conditions of Tender are the Standard Conditions of Tender as contained in Annexure F of the CIDB Standard for Uniformity in Construction Procurement.

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

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

Clause number	Wording
F.1	**GENERAL**
F.1.1	**Actions**
	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.
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 for the calling for expressions of interest, the following definitions apply :
	a) **comparative offer** means the Tenderer's financial offer after the factors of non-firm prices, all unconditional discounts and any other tendered parameters that will affect the value of the financial offer have been taken into consideration
	b) **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
	c) **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
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 read, copied and recorded. Writing 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 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 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.2 TENDERER'S OBLIGATIONS

F.2.1 Eligibility

Submit a tender offer only if the Tenderer complies with the criteria stated in the Tender Data and the Tenderer, or any of his principals, is not under any restriction to do business with Employer.

F.2.2 Cost of tendering

Accept that 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 satisfy 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 Site visit and clarification meeting

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

F.2.8 Seek clarification

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

F.2.9 Insurance

Be aware that the extent of insurance to be provided by the Employer (if any) may not be for the full cover required in terms of the Conditions of Contract identified in the Contract Data. The Tenderer is advised to seek qualified advice regarding insurance.

F.2.10 Pricing the tender offer

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

F2.10.2 Show VAT payable by the Employer separately as an addition to the tendered total of the prices.

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

F.2.10.4 State the rates and prices in Rand unless instructed otherwise in the Tender Data. The Conditions of Contract identified in the Contract Data may provide for part payment in other currencies.

F.2.11 Alterations to documents

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 Submit alternative tender offers only if a main tender offer, strictly in accordance with all the requirements of the tender documents, is also submitted. The alternative tender offer is to be submitted with the main tender offer together with a schedule that compares the requirements of the tender documents with the alternative requirements the Tenderer proposes.

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 a tender offer to provide the whole of the works, services or supply identified in the Scope of Work, 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 in black 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.2.14 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 date and 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 date and time stated in the Tender Data. Proof of posting shall not be accepted as proof of delivery. The Employer shall not accept tender offers submitted by telegraph, telex, facsimile or e-mail, unless stated otherwise in the Tender Data.

F.2.15.2 Accept that, if the Employer extends the closing date 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 date 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.

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 total of the prices or substance of the tender offer is sought, offered, or permitted.*** The total of the prices stated by the Tenderer shall be binding upon the Tenderer.

F.2.18 Provide other material

F.2.18.1 Provide, on request by the Employer, any other material that has a bearing on the tender offer, the Tenderer's commercial position (including notarized joint venture agreements), 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 clarification

Respond to a request for clarification received up to five working days prior to the tender closing time stated in the Tender Data and notify all Tenderers who drew procurement documents.

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 of the Tender Notice until seven days before the tender closing date stated in the Tender Data.
If, as a result a Tenderer applies for an extension to the closing date stated in the Tender Data, the Employer may grant such extension and, will then notify it to all Tenderers who drew documents.

F.3.3 Return late tender offers

Return tender offers received after the closing date or 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 opening 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, the total of his prices, preferences claimed and time for completion, if any, 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 above 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 who's 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, on opening and before detailed evaluation, whether each tender offer properly received:

a) meets 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) 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.

F.3.8.3 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

F.3.9.1 Check responsive tender offers for arithmetical errors, correcting them in the following manner:

a) Where there is a discrepancy between the amounts in figures and in words, the amount in words shall govern.

b) If a Bill of Quantities (or Schedule of Quantities or Schedule of Rates) applies 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.

c) 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 will be corrected.

d) ***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 a Bill of Quantities applies) to achieve the tendered total of the prices***.

F.3.9.2 Consider the rejection of a tender offer if the Tenderer does not correct or accept the correction of his arithmetical errors in the manner described above.

F.3.10 Clarification of a tender offer

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

F.3.11 Evaluation of tender offers

F.3.11.1 General

Appoint an evaluation panel of not less than three persons. Reduce each responsive tender offer to a comparative offer and evaluate it using the tender evaluation method that is indicated in the Tender Data and described below:

Method 1 : Financial offer **(N/A)**	1)	Rank tender offers from the most favourable to the least favourable comparative offer.
	2)	Recommend highest ranked Tenderer for the award of the contract, unless there are compelling and justifiable reasons not to do so.
Method 2 : Financial offer and preferences (N/A)	**1)**	**Score tender evaluation points for financial offer.**
	2)	**Confirm that Tenderers are eligible for the preferences claimed and if so, score tender evaluation points for preferencing.**
	3)	**Calculate total tender evaluation points.**
	4)	**Rank tender offers from the highest number of tender evaluation points to the lowest.**
	5)	**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.**
Method 3 : Financial offer and quality **(N/A)**	1)	Score quality, rejecting all tender offers that fail to score the minimum number of points for quality stated in the Tender Data.
	2)	Score tender evaluation points for financial offer.
	3)	Calculate total tender evaluation points.
	4)	Rank tender offers from the highest number of tender evaluation points to the lowest.
	5)	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.
Method 4 : Financial offer, quality and preferences	1)	Score quality, rejecting all tender offers that fail to score the minimum number of points for quality stated in the Tender Data.
	2)	Score tender evaluation points for financial offer.
	3)	Confirm that Tenderers are eligible for the preferences claimed, and if so, score tender evaluation points for preferencing.

	4) Calculate total tender evaluation points. 5) Rank tender offers from the highest number of tender evaluation points to the lowest. 6) 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.

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

F.3.11.2 **Evaluation Criteria**

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

F.3.13.1 Accept tender offer only if the Tenderer satisfies the legal requirements stated in the Tender Data.

F.3.13.2 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. Providing the Form of Offer and Acceptance does not contain any qualifying statements, it will constitute the formation of a contract between the Employer and the successful Tenderer as described in the Form of Offer and Acceptance.

F.3.14 Notice to unsuccessful Tenderers

After the successful Tenderer has acknowledged the Employer's notice of acceptance, notify other Tenderers that their tender offers have not been accepted.

F.3.15 Prepare contract documents

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,

c) other revisions agreed between the Employer and the successful Tenderer, and

d) the Schedule of Deviations attached to the Form of Offer and Acceptance, if any.

F.3.16 Issue final contract

Prepare and issue the final draft of contract documents to the successful Tenderer for acceptance as soon as possible after the date of the Employer's signing of the Form of Offer and Acceptance (including the Schedule of Deviations, if any).

Only those documents that the conditions of tender require the Tenderer to submit, after acceptance by the Employer, shall be included.

F.3.17 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.3.18 Provide copies of the contract

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.

T1.3 TENDER DATA

T1.3.1 GENERAL

The Conditions of Tender in Section T1.2 are the Standard Conditions of Tender as contained in Annex F of SANS 294 – *Construction Procurement Processes, Methods and Procedures* which contain references to the Tender Data for details that apply specifically to this tender. The Tender Data in this Section T.1.3 shall be read with the Standard Conditions of Tender in order to expand on the Tenderer's obligations and the Employer's undertakings in administering the tender process in respect of the project under consideration. The Tender Data hereafter shall have precedence in the interpretation of any ambiguity or inconsistency between it and the Standard Conditions of Tender. Each item of Tender Data given below is cross-referenced to the relevant clause in the Standard Conditions of Tender.

T1.3.2 TENDER DATA APPLICABLE TO THIS TENDER

Clause number	Wording
F1.	**GENERAL**
F.1.2	**Tender documents**

The tender documents issued by the Employer comprise of:

a) **VOLUME 1: PROJECT DOCUMENT**

This volume is the Project Document for the identified bid number CSR&T/BID11/2026/27 and contains the following sections:

THE TENDER

PART T1: TENDERING PROCEDURES

T1.1 TENDER NOTICE AND INVITATION TO TENDER
T1.2 STANDARD CONDITIONS OF TENDER
T1.3 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

PART C2: PRICING DATA

C2.1 PRICING INSTRUCTIONS
C2.2 BILL OF QUANTITIES

PART C3: SCOPE OF WORK

C3.1 STANDARD SPECIFICATIONS
C3.2 PROJECT SPECIFICATIONS
C3.3 PARTICULAR SPECIFICATIONS

PART C4: SITE INFORMATION

The following documents also form part of the tender and contract, but must be purchased by each of the Tenderers themselves:

b) **VOLUME 2**: ***General Conditions of Contract for construction works, Third edition 2015***, issued by the South African Institute of Civil Engineering.

c) **VOLUME 3**: ***The COTO Standard Specifications for Road and Bridge Works for State Road Authorities October 2020***, issued by the Committee of Land Transport Officials.

d) ***The Occupational Health and Safety Act No 85 and Amendment Act No 181 of 1993, and the Construction Regulations GNR.929 of 25 June 2014 (Government Gazette No 25207 of 18 July 2014, Notice No R1010),*** **together with all COVID related regulations.** This document is obtainable separately, and Tenderers shall obtain their own copies.

h) In addition Tenderers are advised, in their own interest, to obtain their own copies of the following acts, regulations and standards referred to in this document as they are essential for the Tenderer to get acquainted with the basics of construction management, the implementation of preferential construction procurement policies and participation of targeted enterprises and labour.

(i) The Construction Industry Development Board Act No 38 of 2000 and the Regulations in terms of the CIDB Act 38/2000, Government Notice No 692 of 9 June 2004, and amendments

(ii) SANS 10396:2003 Implementing Preferential Construction Procurement Policies using Targeted Procurement Procedures

(iii) SANS 1914:2003 Targeted Construction Procurement, Parts 1 to 6, dealing with Participation of Targeted Enterprises, Joint Ventures, Targeted Labour etc.

The Project Document and the drawings shall be obtained from the Employer or his authorized representative at the physical address stated in the Tender Notice, upon payment of the deposit stated in the Tender Notice.

F.1.4 **Communication and Employer's Agent**

The Employer's Agent is: Mr. VTN Ntaka

Address	:	26 Hartley Street, Laboratory Building, Hamilton Bloemfontein
Tel no	:	082 059 9720
	:	076 541 0687
e-mail	:	ntakav@freetrans.gov.za

The Engineer per GCC 2015 (3rd Edition): Mr. B Mayisela

Address : 10th Avenue, Industria, Kroonstad, 9500
Tel no : 078 332 9634
e-mail : bongumusa.mayisela@gmail.com

F2.1 Eligibility

F2.1.1 Only those Tenderers who have in their employ management and supervisory staff satisfying the requirements of the Scope of Work for labour intensive competencies for supervisory and management staff are eligible to submit tenders. NQF Level will be a minimum requirement for supervisors.

F2.1.2 The following Tenderers who are registered with the CIDB, or are capable of being so registered prior to the evaluation of submissions, are eligible to submit tenders:

a) contractors who have a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered for **6CE OR HIGHER** class of construction work; and

b) contractors registered as potentially emerging enterprises with the CIDB who are registered in one contractor grading designation lower than that required in terms of a) above

c) tenderers need to ensure that they are registered in the grading in which they tender if their tender price differs from the grading as specified

F2.1.3 Joint Ventures are eligible to submit tenders provided that:

a) every member of the joint venture is registered with the CIDB;

b) the lead partner has a contractor grading designation in the **6CE OR HIGHER** class of construction work;

c) 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 OR HIGHER** class of construction work.

F2.7 Site visit and clarification meeting

The arrangements for a compulsory clarification meeting are as stated in the Tender Notice and Invitation to Tender.

NOTE:NON-ATTENDANCE OF THIS MEETING WILL DISQUALIFY THE TENDER

(a) The Attendance List will be accepted as the official attendance of the clarification meeting. Signing the Attendance List of this meeting is the responsibility of the Tenderer attending the meeting and site inspection.

It is important for prospective Tenderers to note that the name of the company on the Attendance List will be accepted as the legitimate Tenderer, which was represented by the person who signed the Attendance List.

(b) Addenda of additional or changed contractual information will only be forwarded to Tenderers who attended the official site visit and clarification meeting.

F2.12. Alternative tender offers

Should a Tenderer wishes to submit an alternative tender offer, the only criteria permitted for such alternative tender offer is that it demonstrably satisfies the Employer's standards and requirements, the details of which may be obtained from the Employer's Agent.

Calculations, drawings and all other pertinent technical information and characteristics as well as modified or proposed Pricing Data must be submitted with the alternative tender offer to enable the Employer to evaluate the efficacy of the alternative and its principal elements, to take a view on the degree to which the alternative complies with the Employer's standards and requirements and to evaluate the acceptability of the pricing proposals. Calculations must be set out in a clear and logical sequence and must clearly reflect all design assumptions. Pricing Data must reflect all assumptions in the development of the pricing proposal.

Acceptance of an alternative tender offer will mean acceptance in principle of the offer. It will be an obligation of the contract for the Tenderer, in the event that the alternative is accepted, to accept full responsibility and liability that the alternative offer complies in all respects with the Employer's standards and requirements.

The modified Pricing Data must include an amount equal to 0% of the amount tendered for the alternative offer to cover the Employer's costs of confirming the acceptability of the detailed design before it is constructed.

F2.13 Submitting a tender offer

F2.13.5 Tender offers shall be submitted as an original only.

F2.13.7 **The Employer's address:**

The Head of Department
Department of Community Safety, Roads and Transport
PO Box 690
Perm Building
Charlotte Maxeke Street
BLOEMFONTEIN
9300

Location of tender box	:	**Ground Floor of** 45 Charlotte Maxeke Street, Perm Building, Bloemfontein
Identification details	:	**CSR&T/BID11/2026/27**
Contract no	:	
Description of project	:	**THE ADVERTISEMENT AND APPOINTMENT OF A CONTRACTOR WITH MINIMUM OF CIDB LEVEL 6CE OR HIGHER, FOR THE SPOT REGRAVELLING OF SECONDARY ROAD S78 (R720) BETWEEN KOPPIES AND EDENVILLE WITHIN A 22KM GRAVEL ROAD FOR THE DEPARTMENT OF COMMUNITY SAFETY ROADS AND TRANSPORT FOR A PERIOD OF 6 MONTHS.**

F2.15 Closing time

The closing date for submission of tender offers is as stated in the Tender Notice and Invitation to Tender.

F2.16 Tender offer validity

The tender offer validity period is ***90 calendar*** days from the closing date for submission of tenders.

F2.18 Provide other material

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

F2.23 Certificates

The following certificates need to be included in the Tender:

a) A valid Tax Pin or Clearance Certificate for the Tenderer or for each of the JV partners if tendered in a Joint Venture, issued by the South African Revenue Services;

b) The Tenderer's CIDB Registration Certificate or the Joint Venture's members' CIDB Registration Certificates with an indication of the senior partner.

F3.4 Opening of tender submissions

Tender submissions will be opened at 45 Charlotte Maxeke Street, Room 219, Perm Building.

F3.5 Two-envelope system

The two-envelope system will not be followed for this contract.

F3.11 Evaluation of tender offers

F3.11.1 Due to the nature of the tendering process, with negotiated rates, the tenders will be evaluated and the rates balanced to suit the particular Contractor's circumstance.

F3.11.2 **STAGE 1 - MANDATORY REQUIREMENTS**

✓ Attendance of briefing session

Briefing session will be held as per the details below and in addition the purpose is to give contractors clear requirements of the bid. Furthermore, it must be noted that, bidders who will not attend the briefing session as requested will be disqualified.

Date: 02 DECEMBER 2026
Venue: KROONSTAD ROADS OFFICE
Time: 11:00
Technical enquiries: Mr. B Mayisela (078 332 9634) or Mr. TJ Nkabinde (082 059 9740)
Email address: bonqumusa.mayisela@gmail.com / nkabindej@freetrans.gov.za
SCM enquiries: Mr. K. Koenane@ (082) 059 9726
Email address: koenanek@freetrans.gov.za

✓ A valid Tax Clearance Certificate, or a unique security Personal Identification number (PIN) issued by the South African Revenue Services (where Consortium / Joint Venture / Sub-Contractors are involved, each party to the association must submit a separate Valid Tax Clearance Certificate or a unique security personal Identification number);

✓ Bidders must return all fully completed and duly signed standard bidding documents (SBD), returnable schedules and Contract Data forms. These forms must be completed with a black inked(non-erasable) pen and attach all returnable documents.

- ✓ Bidders must be registered on the centralised supplier database-CSD print out must be attached or must provide a CSD registration number (MAAA.....)
- ✓ Bidders must attach a valid CIDB grading 6CE OR HIGHER Certificate.
- ✓ Letter of good standing
- ✓ In the case of a Joint Venture/ Consortium (any form of partnership) the Bidder must attach the following:
  - ➢ *A joint venture agreement duly signed by both parties, and*
  - ➢ *Certificate of Authority for Signature (Power of Attorney).*
  - ➢ *The CIDB grading calculated in the name of the JV must also be attached.*
  - ➢ *CSD in the name of the JV*

NB! Failure to comply with the mandatory requirements will lead to disqualification

F3.11.3 **STAGE 2 - Scoring quality (Functionality)**

Points for functionality will be allocated according to the table below.

Criterion	Description of criteria	Scoring	Points	Total Points Allocation
EXPERIENCE	Bidders must submit Copies of Appointment Letters and completion certificates for similar nature of work, (re-gravelling, repairs of drainage structures, upgrade from surface roads, rehabilitation of roads) and with traceable references to be attached as proof. Appointment Letters and completion certificates will only be considered valid if they meet the following criteria: • If on an official client letterhead, • If it refers to provision of similar goods or services provided. • Appointment letter and completion certificate must be of the same project. • Each of the appointment letters and completion certificate for the projects completed must be more than 2,5 million rands. • It must contain contact details, signed, and dated by authorised personnel. NB: ***In the case where completion certificates are signed by Consultants- the appointment letter of such consultant(s) by roads agency of state and any provincial, National, Municipality must be attached.***	5 and more Projects of similar nature.	10	**10**
		3-4 Projects of similar nature.	7	
		1-2 Projects of similar nature.	3	
		0 Projects of similar nature	0	
CAPACITY **NB**: Years of experience on the CV must be indicated by	**Contracts Manager:** Years of experience with traceable contact details in National Diploma in Civil Engineering. The Contracts	10 and above years in roads construction only, experience & qualifications on similar works	8	

correct dates (DD/MM/YYYY). Example: *01/07/2018 to 30/06/2023 (5 Years)*	Manager must be registered with ECSA. CV's and certified copies certified by SAPS not older than 3 months of qualifications must be attached of key staff for points to be allocated. Failure to attach will result in no points being allocated. ***NB: Attach employment contract of the member, signed by both parties. Please note submitted CVs will be accepted as project team members for the project duration. Should at the time of project execution the submitted personnel no longer available, the contractor shall replace the member with someone of the same credentials. For acceptance by the project manager.***	6 to less than 10 years roads experience and qualification on similar works	5	**8**
		3 to less than 6 years in roads construction only, experience & qualifications on similar works	2	
		Less than 3 years' experience No correct qualifications or not certified by SAPS Contract of employment not attached	0	
	Construction Manager / Site Agent: Years of experience and NQF6 in Civil Engineering. CV's and certified copies (SAPS) of qualifications must be attached of key staff for points to be allocated. Not older than 3 months. Failure to attach will result in no points being allocated. **MUST BE FULL TIME ON SITE!!!** ***NB: Attach employment contract of the member, signed by both parties. Please note submitted CVs will be accepted as project team members for the project duration. Should at the time of project execution the submitted personnel no longer available, the contractor shall replace the member with someone of the same credentials.***	5 or more years of experience in re-gravelling, blading, routine road maintenance, drainage and ancillary works.	7	**7**
		3 to less than 4 years of experience in re-gravelling, blading, routine road maintenance, drainage structures and ancillary works.	4	
		1 to less than 2 years of experience in re-gravelling, blading, routine road maintenance, drainage structures and ancillary works.	2	

		Less than 1-year experience No correct qualifications or not certified by SAPS Contract of employment not attached	0	
BIDDERS REGISTERED PLANT/EQUIPMENT IN THE FREE STATE PROVINCE (15) POINTS				
PLANT/ EQUIPMENT	Ownership of a plant is critical and Bidders must attach proof of (e-natis certificate of ownership in the name of the tenderer. In case of rental a lease agreement must be attached along with e-natis certificate of ownership of the lessor. In case of holding, company and its subsidiaries a memorandum of agreement must be attached for utilization of plant equipment. **NB: This criterion will be assessed as a pack. e.g (4x tipper trucks=3 and 3x tippers=0points)**	1 x Grader	4	**15**
		4 x Tipper Trucks 10m3	4	
		Rollers Grid roller = 3pts Sheep foot = 1pts Smooth Drum = 1pts	3	
		1 x Excavator or TLB	2	
		2 x Water tanker 11000L	2	
LOCALITY	*Locality as per CIPC registration (falsification of locality well lead to disqualification from participating in the contract). The business address should have remained the same since January 2016*	Free State based offices	5	**5**
		Outside Free State Province based offices	1	
MAXIMUM POSSIBLE SCORE				**45**

The Bids will be evaluated on Mandatory requirements, Functionality, whereby potential service providers are **expected to score minimum points of 27 out of 45 for functionality**. Failure to score the required minimum **score of 27 points**, then the bidder will be disqualified;

F3.11.4 **STAGE 3: PREFERENCIAL CLAIM POINTS IN TERMS OF PREFERENCIAL PROCUREMENT REGULATION SYSTEMS**

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

80/20

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

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest acceptable tender

POINTS ALLOCATED FOR SPECIFIC GOALS

Table 1: Specific goals for the tender and points claimed are indicated per the table below.
(Note to organs of state: Where either the 90/10 or 80/20 preference point system is applicable, corresponding points must also be indicated as such.
Note to tenderers: The tenderer must indicate how they claim points for each preference point system.)

The specific goals allocated points in terms of this tender	Number of points allocated (80/20 system) (To be completed by the organ of state)	Proof of documents to be attached	Number of points claimed (80/20 system) (To be completed by the tenderer)
Enterprise with ownership of 51% or more by person/s who are black person/s.	**6**	CIPC and Certified ID copies by SAPS within 3 months	
Enterprise with ownership of 51% or more by person/s who are women.	**7**	CIPC and Certified ID copies by SAPS within 3 months	
Enterprise with ownership of 51% or more by person/s who are youth.	**4**	CIPC and Certified ID copies by SAPS within 3 months	
Enterprise with ownership of 51% or more by person/s with disability.	**2**	CIPC, Certified ID copies and medical certificate by SAPS within 3 months	
Enterprise with ownership of 51% or more by military veterans	**1**	Military veteran profile (including force number, three references and detachment and commander)	
Total	**20**		

F3.13 Acceptance of tender offer

F3.13.1 **Tender offers will only be accepted if:**

a) the tender offer is signed by a person authorized to sign on behalf of the Tenderer;

b) the Tenderer submitted an original valid Tax Clearance Certificate issued by the South African Revenue Services;

c) Tenderer's declaration of compliance with the Occupational Health and Safety Act No 85 of 1993 and the Construction Regulations 2014 is included with his tender submission;

d) a Tenderer who submitted a tender as a Joint Venture has included an acceptable Joint Venture Agreement with his tender;

e) the Tenderer or a competent authorized representative of the contractor who submitted the tender has attended the compulsory clarification meeting or site inspection;

f) the Tenderer included with its tender the contractor's CIDB Registration Certificate (or certified copy thereof) as proof that it is registered in accordance with the Construction Industry Development Board Act No. 38 of 2000 and the Regulations 2003 promulgated in terms of the Act;

g) 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; and

h) the Tenderer has not:

   i) abused the Employer's Supply Chain Management System; or

   ii) failed to perform on any previous contract and has been given a written notice to this effect

i) 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.

F3.14 Provide copies of the contract

The Employer will provide the successful Tenderer, now the Contractor, with one copy of the complete, signed contract document.

THE ADVERTISEMENT AND APPOINTMENT OF A CONTRACTOR WITH MINIMUM OF CIDB LEVEL 6CE OR HIGHER , FOR THE SPOT REGRAVELLING OF SECONDARY ROAD S78 (R720) BETWEEN KOPPIES AND EDENVILLE WITHIN A 22KM GRAVEL ROAD FOR THE DEPARTMENT OF COMMUNITY SAFETY ROADS AND TRANSPORT FOR A PERIOD OF 6 MONTHS.

PART T2 : RETURNABLE DOCUMENTS

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T2.1 LIST OF RETURNABLE DOCUMENTS

The Tender Document must be submitted as a whole. All forms must be properly completed as required, and the document shall not be taken apart or altered in any way whatsoever.

All the certificates and forms to be provided with the tender are listed in the Tender Data under F2.23: Certificates, and under the returnable schedules and forms in T2.2 hereafter.

The list of returnable documents comprises the following :

1. All the certificates listed in the Tender Data under F2.23 : Certificates ;
2. All the returnable schedules and forms listed in T2.2.1 : Returnable Schedules Required for Tender Evaluation Purposes ;
3. All the returnable documents listed in T2.2.2 : Preferential Procurement Schedules and Affidavits that will be incorporated into the Contract ;
4. All the agreements and forms listed in T2.2.3: Forms to be completed by the successful Tenderer ;
5. All the forms and agreements in the Contract Data in C1.2, where some of the forms (agreements) need to be completed only by successful Tenderer ;
6. Pricing Data in C2.2 : Bill of Quantities.

T2.2 RETURNABLE SCHEDULES

T2.2.1 RETURNABLE SCHEDULES REQUIRED FOR TENDER EVALUATION PURPOSES

SECTION	DESCRIPTION
SCHEDULE A	RECORD OF ADDENDA TO TENDER DOCUMENTS .....
SCHEDULE B	CERTIFICATE OF AUTHORITY .....
SCHEDULE C	COMPULSORY ENTERPRISE QUESTIONNAIRE .....
SCHEDULE D	PLANT AND EQUIPMENT .....
SCHEDULE E	EXPERIENCE OF TENDERER .....
SCHEDULE F	TENDERER'S KEY PERSONNEL .....
SCHEDULE G	AMENDMENTS, QUALIFICATIONS AND ALTERNATIVES .....
SCHEDULE H	TENDERER'S HEALTH AND SAFETY PLAN AND DECLARATION ....
SCHEDULE I	TENDERER'S CERTIFICATE OF REGISTRATION WITH CIDB .....
SCHEDULE J	TAX CLEARANCE CERTIFICATE/S .....
SCHEDULE K	PREFERENCIAL PROCUREMENT REGULATIONS 2022 .....
SCHEDULE L	DECLARATION OF INTEREST .....

T2.2.2 PREFERENTIAL PROCUREMENT SCHEDULES AND AFFIDAVITS THAT WILL BE INCORPORATED INTO THE CONTRACT .....

T2.2.3 FORMS TO BE SUBMITTED BY THE SUCCESSFUL TENDERER .....

NOTE : The Tenderer is required to complete each and every schedule and form listed above to the best of his ability, as the evaluation of tenders and the eventual contract will be based on the information provided by the Tenderer.
Failure of a Tenderer to complete the schedules and forms to the satisfaction of the Employer will inevitably prejudice the tender and may lead to rejection on the grounds that the tender is not responsive.

The same applies to the Preferential Procurement Schedule in T2.2.2.

SCHEDULE A: RECORD OF ADDENDA TO TENDER DOCUMENTS

I / We confirm that the following communication/s, amending the tender documents, received from the Employer or his representative before the closing date for submission of this tender offer, have been taken into account in this tender offer:

Addendum no.	Date	Title or details
1		
2		
3		
4		
5		
6		
7		
8		

SIGNATURE: .....

SCHEDULE B: CERTIFICATE OF AUTHORITY

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

(i) COMPANY	(ii) CLOSE CORPORATION	(iii) PARTNERSHIP	(iv) JOINT VENTURE	(v) SOLE PROPRIETOR

(i)CERTIFICATE FOR COMPANY

I, ..., Managing Director of the Board of Directors of ....., hereby confirm that by resolution of the Board (copy attached) taken on ..... 20....., Mr./Ms. ....., acting in the capacity of ....., was authorized to sign all documents in connection with this tender and any contract resulting from it, on behalf of the company.

Managing Director: .....

(ii)CERTIFICATE FOR CLOSE CORPORATION

We, the undersigned, being the key members in the business trading as .... hereby authorise Mr/Ms ..... , acting in the capacity of ....., to sign all documents in connection with this tender ..... and any contract resulting from it, on our behalf.

NAME	ADDRESS	SIGNATURE	DATE

Note : This certificate is to be completed and signed by all of the key members upon whom rests the direction of the affairs of the Close Corporation as a whole.

(iii)CERTIFICATE FOR PARTNERSHIP

We, the undersigned, being the key partners in the business trading as, ... hereby authorize Mr./Ms. ..... acting in the capacity of ....., to sign all documents in connection with this tender and any contract resulting from it, on our behalf.

NAME	ADDRESS	SIGNATURE	DATE

Note : This certificate is to be completed and signed by all of the key partners upon whom rests the direction of the affairs of the Partnership as a whole.

(iv) CERTIFICATE FOR JOINT VENTURE

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

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

NAME OF FIRM	ADDRESS	AUTHORIZING SIGNATURE, NAME AND CAPACITY
Lead partner		

Note: This certificate is to be completed and signed by all of the key partners upon whom rests the direction of the affairs of the Partnership as a whole.

(v) CERTIFICATE FOR SOLE PROPRIETOR

I, ..., hereby confirm that I am the sole owner of the business trading as .....

Signature of sole owner : .....

REGISTRATION CERTIFICATE / AGREEMENT / ID DOCUMENT

Important note to Tenderer:

Registration Certificates for Companies, Close Corporations and Partnerships, or Agreements and Powers of Attorney for Joint Ventures, or ID documents for Sole Proprietors, all as referred to in the foregoing forms and in T2.1, must be attached here.

SCHEDULE C : ` COMPULSORY ENTERPRISE QUESTIONNAIRE

The following particulars must be furnished. In the case of a Joint Venture, separate enterprise questionnaires in respect of each partner must be completed and submitted.

Section 1: Name of enterprise:
Section 2: VAT registration number:
Section 3: CIDB registration number:
Section 4: Particulars of sole proprietors and partners in partnerships:

Name*	Identity number*	Personal income tax number*

* Complete only if sole proprietor or partnership and attach separate page if more than 3 partners

Section 5: Particulars of companies and close corporations

Company registration number .....

Close corporation number .....

Tax reference number .....

Section 6: Record of service of the state

Indicate by marking the relevant boxes with a cross, if any sole proprietor, partner in a partnership or director, manager, principal shareholder or stakeholder in a company or close corporation is currently or has been within the last 12 months, in the service of any of the following:

- ☐ a member of any municipal council
- ☐ a member of any provincial legislature
- ☐ a member of the National Assembly or the National Council of Province
- ☐ a member of the board of directors of any municipal entity
- ☐ an official of any municipality or municipal entity
- ☐ an employee of any provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act 1 of 1999)
- ☐ a member of an accounting authority of any national or provincial public entity
- ☐ an employee of Parliament or a provincial legislature

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

Name of sole proprietor, partner, director, manager, principal shareholder or stakeholder	Name of institution, public office, board or organ of state and position held	Status of service (tick appropriate column)	
		Current	Within last 12 months

Note: Insert separate page if necessary

Section 7: Record of spouses, children and parents in the service of the state

Indicate by marking the relevant boxes with a cross, if any spouse, child or parent of a sole proprietor, partner in a partnership or director, manager, principal shareholder or stakeholder in a company or close corporation is currently or has been within the last 12 months, been in the service of any of the following:

- ☐ a member of any municipal council
- ☐ a member of any provincial legislature
- ☐ a member of the National Assembly or the National Council of Province
- ☐ a member of the board of directors of any municipal entity
- ☐ an official of any municipality or municipal entity
- ☐ an employee of any provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act 1 of 1999)
- ☐ a member of an accounting authority of any national or provincial public entity
- ☐ an employee of Parliament or a provincial legislature

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

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

Note: Insert separate page if necessary

The undersigned, who warrants that he/she is duly authorized to do so on behalf of the enterprise:

i) confirms that neither the name of the enterprise or the name of any partner, manager, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears on the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004;

ii) confirms that no partner, member, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears, has within the last five years been convicted of fraud or corruption;

iii) confirms that I / we are not associated, linked or involved with any other tendering entities submitting tender offers and have no other relationship with any of the Tenderers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest;

iv) confirms that the contents of this questionnaire are within my personal knowledge and are to the best of my belief both true and correct.

Signed _____ Date _____

Name _____ Position _____

Enterprise name _____

SCHEDULE D: PLANT AND EQUIPMENT

The following are a list of major items of relevant equipment that I / we presently own and will have available for this contract if my / our tender is accepted.

(a) Details of major equipment that is owned by me / us and immediately available for this contract.

DESCRIPTION *(type, size, capacity etc.)*	QUANTITY	YEAR OF MANUFACTURE

Attach additional pages if more space is required.

(b) Details of major equipment that will be hired, or acquired for this contract if my / our tender is accepted

DESCRIPTION *(type, size, capacity etc.)*	QUANTITY	HOW ACQUIRED	
		HIRE/ BUY	SOURCE

Note: Attach additional pages if more space is required

The Tenderer undertakes to bring onto site without additional cost to the Employer any additional plant not listed but which may be necessary to complete the contract within the specified contract period.

SIGNATURE: .....

ATTACH THE PLANT AND EQUIPMENT LIST/S HERE

SCHEDULE E: EXPERIENCE OF TENDERER

The following is a statement of work of similar nature recently successfully executed by myself / ourselves:

EMPLOYER: CONTACT PERSON AND TELEPHONE NUMBER	CONSULTING ENGINEER: CONTACT PERSON AND TELEPHONE NUMBER	NATURE OF WORK	VALUE OF WORK (inclusive of VAT)	DATE COMPLETED OR EXPECTED TO BE COMPLETED

SIGNATURE: .....

ATTACH THE LIST HERE IF SEPARATE LIST IS PROVIDED

SCHEDULE F: TENDERERS' KEY PERSONNEL

NAME	POSITION	NQF QUALIFICATION

SIGNATURE: .....

ATTACH COPIES OF NQF CERTIFICATES FOR LABOUR INTENSIVE CONSTRUCTION OF RELEVANT SUPERVISORS

SCHEDULE G: AMENDMENTS, QUALIFICATIONS AND ALTERNATIVES

The Tenderer should record any amendments and alternatives he may wish to make to the tender documents in this schedule. Alternatively, a Tenderer may state such amendments and alternatives in a covering letter to his tender and reference such letter in this schedule.

The Tenderer's attention is drawn to clause F3.3 if the Standard Conditions of Tender referenced in the Tender Data regarding the Employer's handling of material deviations and qualifications.

These amendments and qualifications, if accepted by the Employer, will be incorporated in the Form of Offer and Acceptance, Schedule of Deviations.

(a)AMENDMENTS AND QUALIFICATIONS

PAGE	CLAUSE OR ITEM NO	PROPOSED AMENDMENT AND QUALIFICATIONS

[Notes: (1) Amendments to the General and Special Conditions of Contract are not acceptable;
(2) The Tenderer must give full details of all the financial implications of the amendments and qualifications in a covering letter attached to his tender.

(b) ALTERNATIVES

PROPOSED ALTERNATIVE	DESCRIPTION OF ALTERNATIVE

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

(2) In the case of a major alternative to any part of the work, a separate Bill of Quantities, programme, etc, and a detailed statement setting out the salient features of the proposed alternatives must accompany the tender.

(3) Alternative tenders involving technical modifications to the design of the works and methods of construction shall be treated separately from the main tender offer.]

SIGNATURE: .....

ATTACH ALTERNATIVES HERE

SCHEDULE H: CONTRACTOR'S HEALTH AND SAFETY PLAN AND DECLARATION

In terms of Clause 4(4) of the OHSA 1993 Construction Regulations 2003 (referred to as "the Regulations" hereafter), a Contractor may only be appointed to perform construction work if the Employer is satisfied that the Contractor has the necessary competencies and resources to carry out the work safely in accordance with the Occupational Health and Safety Act No 85 of 1993 and the OHSA 1993 Construction Regulations 2003.

To that effect a person duly authorized by the Tenderer must complete and sign the declaration hereafter in detail.

Declaration by Tenderer

1. I the undersigned hereby declare and confirm that I am fully conversant with the Occupational Health and Safety Act No 85 of 1993 (as amended by the Occupational Health and Safety Amendment Act No 181 of 1993), and the OHSA 1993 Construction Regulations 2003.
2. I hereby declare that my company has the competence and the necessary resources to safely carry out the construction work under this contract in compliance with the Construction Regulations and the Employer's Health and Safety Specifications.
3. I hereby undertake, if my tender is accepted, to provide, before commencement of the works under the contract, a suitable and sufficiently documented Health and Safety Plan in accordance with Regulation 5(1) of the Construction Regulations, which plan shall be subject to approval by the Employer.
4. I confirm that copies of my company's approved Health and Safety Plan, the Employer's Safety Specifications as well as the OHSA 1993 Construction Regulations 2003 will be provided on site and will at all times be available for inspection by the Contractor's personnel, the Employer's personnel, the Engineer, visitors, and officials and inspectors of the Department of Labour.
5. I hereby confirm that adequate provision has been made in my tendered rates and prices in the Bill of Quantities to cover the cost of all resources, actions, training and all health and safety measures envisaged in the OHSA 1993 Construction Regulations 2003, including the cost for specific items that may be scheduled in the Bill of Quantities.
6. I hereby confirm that I will be liable for any penalties that may be applied by the Employer in terms of the said Regulations for failure on my part to comply with the provisions of the Act and the Regulations as set out in Regulation 30 of the Regulations.
7. I agree that my failure to complete and execute this declaration to the satisfaction of the Employer will mean that I am unable to comply with the requirements of the OHSA 1993 Construction Regulations 2003 and accept that my tender will be prejudiced and may be rejected at the discretion of the Employer.
8. I am aware of the fact that, should I be awarded the contract, I must submit the notification required in terms of Regulation 3 of the OHSA 1993 Construction Regulations 2003 before I will be allowed to proceed with any work under the contract.

SIGNATURE: .....

CONTRACTOR'S SAFETY PLAN

The Tenderer shall attach to this page (or submit it separately) the Contractor's Health and Safety Plan as required in terms of Regulation 5 of the Occupational Health and Safety Act 1993 Construction Regulations 2014, including COVID 19 OHS regulations 2020, and referred to in Form K.

The Contractor's Health and Safety Plan shall cover at least the following aspects as applicable:

1. Safety of subcontractors (Refer Construction Regulations 2003 Clause 5: Principal Contractors and Contractors)

    - Methods to ensure the approval, implementation and maintenance of all health and safety aspects regarding his subcontractors.

2. Monitoring the health and safety on the construction site on a regular basis (Refer Clause 6: Supervision of Construction Work)

    - Details of the Construction Supervisor and his appointed assistants (if any);
    - Details of the Construction Safety Officer, full-time or part-time;
    - Details of the suitability and competency of the Construction Supervisor and ConstructionSafety Officer regarding health and safety aspects of the construction works.

3. Assessment of risks on the construction site (Refer Clause 7: Risk Assessment)

    - Details of a proper risk assessment on which his health and safety plan is based;
    - Ways in which all construction employees are informed, instructed and trained regarding the work procedures and the related hazards.

4. Risk items (Refer Clauses 8 to 28: Risk items to be addressed)

    - Details of the design, management, responsibilities, worker training, work methods, procedures, maintenance and any other requirements necessary for him and his subcontractor, if applicable, to work safely and in a healthy environment as stipulated in these clauses.

Contractor's OHS Management System checklist

1.OHS Policy and Management

		Yes		No
1.1	Is there a written company health and safety policy?			
1.2	Does the company have an OHS Management System?			
1.3	Is there a company OHS Management Manual or Plan?			
1.4	Are health and safety responsibilities clearly identified for all levels of staff?			

2.Safe Work Practices and Procedures

		Yes		No
2.1	Has the company prepared safe operating procedures or specific safety instructions relevant to its operations?			
2.2	Does the company have any permit to work systems?			
2.3	Is there a documented incident investigation procedure?			
2.4	Are there procedures for maintaining, inspecting and assessing the hazards of plant operated/owned by the company?			
2.5	Are there procedures for storing and handling hazardous substances?			
2.6	Are there procedures for identifying, assessing and controlling risks associated with manual handling?			

3.**OHS Training**

		Yes		No
3.1	Is health and safety training conducted in the company?			
3.2	Is a record maintained of all training and induction programs undertaken for employees in the company?			

4.**Health and Safety Workplace Inspection**.

		Yes		No
4.1	Are regular health and safety inspections at worksites undertaken?			
4.2	Are standard workplace inspection checklists used to conduct health and safety inspections?			
4.3	Is there a procedure by which employees can report hazards at workplaces?			

5.**Health and Safety Consultation**.

		Yes		No
5.1	Is there a workplace health and safety committee?			
5.2	Are employees involved in decision making over OHS matters?			
5.3	Are there employee elected health and safety representatives?			

6.**OHS Performance Monitoring.**

		Yes		No
6.1	Is there a system for recording and analyzing health and safety performance statistics?			
6.2	Are employees regularly provided with information on company health and safety performance?			
6.3	Has the company ever been convicted of an occupational health and safety offence?			

7. **Does your company's health and safety plan contain the following elements?**

		Yes		No
7.1	Description of the contract			
7.2	OHS Structure of work undertaken under this contract			
7.3	Induction and safety training			
7.4	Safe work practices and procedures for specific work undertaken			
7.5	Risk assessments for specific works undertaken			
7.6	Workplace inspection schedule for duration of contract			
7.7	OHS consultative processes to be followed			
7.8	Emergency procedure for this specific contract			
7.9	Incident recording and investigation on procedures			
7.10	Health and safety performance monitoring arrangements to be implemented during contract			

SCHEDULE I: CONTRACTOR'S CERTIFICATE OF REGISTRATION WITH CIDB

[The Tenderer shall attach hereto the Contractor's Certificate of Registration with CIDB. Failure to submit the certificate with the tender document will lead to the conclusion that the Tenderer is not registered with the CIDB and therefore not eligible to tender].

SCHEDULE J: TAX CLEARANCE REQUIREMENTS

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 African Revenue Service (SARS) to meet the bidder's tax obligations.

1. In order to meet his requirement bidders are required to complete in full the attached form TCC 001 "Application for a Tax Clearance Certificate" and submit it to any SARS branch office nationally. The Tax Clearance Certificate Requirements are also applicable to foreign bidders / individuals who wish to submit bids.

2. SARS will then furnish the bidder with a Tax Clearance Certificate that will be valid for a period of 1 (one) year from the date of approval.

3. The original Tax Pin or Tax Clearance Certificate must be submitted together with the bid. Failure to submit the original and valid Tax Clearance Certificate will result in the invalidation of the bid. Certified copies of the Tax Clearance Certificate will not be acceptable.

4. In bids where Consortia / Joint Venture / Sub-contractors are involved, each party must submit a separate Tax Clearance Certificate.

5. Copies of the TCC 001 "Application for a Tax Clearance Certificate" form are available from any SARS branch office nationally or on the website www.sars.gov.za.

5. Applications for the Tax Clearance Certificates 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.

6. Tax pin document with updated information can be attached to verify the validity of SARS bid status

PRICING SCHEDULE – FIRM PRICES
(PURCHASES)

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: CRS&T/BID11/2026/27
Closing Time 11:00am	Closing date: 15 DECEMBER 2026

OFFER TO BE VALID FOR 90 DAYS FROM THE CLOSING DATE OF BID.

ITEM NO.	QUANTITY	DESCRIPTION	BID PRICE IN RSA CURRENCY ** (ALL APPLICABLE TAXES INCLUDED)

- Required by: .....
- At: .....
- Brand and model .....
- Country of origin .....
- Does the offer comply with the specification(s)? *YES/NO
- If not to specification, indicate deviation(s) .....
- Period required for delivery .....
  *Delivery: Firm/not firm
- Delivery basis .....

Note:All delivery costs must be included in the bid price, for delivery at the prescribed destination.

** "all applicable taxes" includes value- added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies.

***Delete if not applicable**

SBD 4

BIDDER'S DISCLOSURE

1. PURPOSE OF THE FORM

1.1 Any person (natural or juristic) may make an offer or offers in terms of this invitation to bid. In line with the principles of transparency, accountability, impartiality, and ethics as enshrined in the Constitution of the Republic of South Africa, 1996 (Constitution), and further expressed in the various applicable legislation, it is required for the bidder to make this declaration in respect of the details required hereunder.

1.2 If a person is listed in the Register for Tender Defaulters and/or the List of Restricted Suppliers, that person will automatically be disqualified from the bid process.

2. Bidder's declaration

2.1 Is the bidder, or any of the directors / trustees / shareholders / members / partners of the bidder employed by an organ of state, as defined in section 239 of the Constitution? **YES/NO**

2.2 If YES, furnish particulars of the names, individual identity numbers, in the table below:

Full Name	Identity Number	Name of State institution

2.3 Do you, or any person connected with the bidder, have a relationship with any person who is employed by the procuring institution? **YES/NO**

2.3.1 If so, furnish particulars:

.....

.....

2.4 Does the bidder or any of its directors/trustees/shareholders members/partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise, whether or not they are bidding for this contract?**YES/NO**

2.4.1 If so, indicate all companies registered in the CSD in the table below:

Supplier registration number (MAAA)	Status (active/inactive/deleted)

Failure to disclose all CSD-registered active companies linked to all Directors will lead to disqualification.

2 GENERAL DECLARATION

I,....., the undersigned, in submitting the accompanying bid, do hereby make the following statements that I certify to be true and complete in every respect:

2.1 I have read and I understand the contents of this disclosure.

2.2 I understand that the accompanying bid will be disqualified if this disclosure is found to be false.

2.3 The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor.

2.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.

2.5 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.

2.6 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.

2.7 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, 1998 (Act No. 89 of 1998) and or may be referred to law enforcement agencies for criminal investigation and or may be restricted from conducting business with the state for a period not exceeding 10 years in terms of the Prevention and Combating of Corrupt Activities Act, 2004 (Act No. 12 of 2004) or any other applicable legislation.

I CERTIFY THAT THE ABOVE IS CORRECT.

I ACCEPT THAT THE PROCURING INSTITUTION MAY REJECT THE BID OR TAKE APPROPRIATE ACTION AGAINST ME IF THIS DECLARATION IS FALSE.

.....	.....
Signature	Date
.....	.....
Designation	Name of bidder

SCHEDULE K: **SBD 6.1**

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

This preference form must form part of all bids invited. It contains general information and serves as a claim form for preference points for (SPECIFIC GOALS) Status Level of Contribution

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

---

1. GENERAL CONDITIONS

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

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

1.2

a) The value of this bid is estimated to exceed/not exceed R50 000 000 (all applicable taxes included) and therefore the 80/20 preference point system shall be applicable; or

b) The 80/20 preference point system will be applicable to this tender.

(*delete whichever is not applicable for this tender*).

1.3 Points for this bid shall be awarded for:

(a) Price; and

(b) SPECIFIC GOALS Status Level of Contributor.

1.4 The maximum points for this bid are allocated as follows:

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

1.5 Failure on the part of a bidder to submit proof of SPECIFIC GOALS Status level of contributor together with the bid, will be interpreted to mean that preference points for SPECIFIC GOALS status level of contribution are not claimed.

1.6 The purchaser reserves the right to require of a bidder, either before a bid is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the purchaser.

DEFINITIONS

In these Regulations, unless the context indicates otherwise, any word or expression to which a meaning has been assigned in the Act must bear the meaning so assigned—

(a) "**Highest acceptable tender**" means a tender that complies with all specifications and conditions of tender and that has the highest price compared to other tenders;

(b) "**Lowest acceptable tender**" means a tender that complies with all specifications and conditions of tender and that has lowest price compared to other tenders;

(c) "**price**" means an amount of money tendered for goods or services, and includes all applicable

taxes less all unconditional discounts;

(d) **"Rand value"** means the total estimated value of a contract in Rand, calculated at the time of the tender invitation;

(e) This gazette is also available free online at www.gpwonline.co.za 4 No. 47452 GOVERNMENT GAZETTE, 4 November 2022

(f) **"Specific goals"** means specific goals as contemplated in section 2(1)(d) of the Act which may include contracting with persons, or categories of persons, historically disadvantaged by unfair discrimination on the basis of race, gender and disability including the implementation of programmes of the Reconstruction and Development Programme as published in Government Gazette No. 16085 dated 23 November 1994;

(g) **"tender"** means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;

(h) **"tender for income-generating contracts"** means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and "the Act" means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

2. POINTS AWARDED FOR PRICE

THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

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

80/20

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

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest acceptable tender

3. POINTS AWARDED FOR SPECIFIC GOALS

3.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:

3.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—

(a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or

(b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable

preference point system, then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

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

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

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

The specific goals allocated points in terms of this tender	Number of points allocated (80/20 system) (To be completed by the organ of state)	Proof of documents to be attached	Number of points claimed (80/20 system) (To be completed by the tenderer)
Enterprise with ownership of 51% or more by person/s who are black person/s.	**6**	CIPC and Certified ID copies by SAPS within 3 months	
Enterprise with ownership of 51% or more by person/s who are women.	**7**	CIPC and Certified ID copies by SAPS within 3 months	
Enterprise with ownership of 51% or more by person/s who are youth.	**4**	CIPC and Certified ID copies by SAPS within 3 months	
Enterprise with ownership of 51% or more by person/s with disability.	**2**	CIPC, Certified ID copies and medical certificate by SAPS within 3 months	
Enterprise with ownership of 51% or more by military veterans	**1**	Military veteran profile (including force number, three references and detachment and commander)	
Total	**20**		

SCHEDULE L

DECLARATION WITH REGARD TO COMPANY/FIRM

3.3. Name of company/firm.....

3.4. Company registration number: .....

3.5. TYPE OF COMPANY/ FIRM

Partnership/Any form of partnership / Consortium
One-person business/sole propriety
Close corporation
Public Company
Personal Liability Company
(Pty) Limited
Non-Profit Company
State Owned Company

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

i) The information furnished is true and correct;

ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;

iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;

iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –

(a) disqualify the person from the tendering process;

(b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;

(c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;

(d) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and

(e) forward the matter for criminal prosecution, if deemed necessary.

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

SURNAME AND NAME: .....

DATE:.....

ADDRESS:.....

.....

.....

CSR&TBID11/2026/27
CONTRACT NO.

THE ADVERTISEMENT AND APPOINTMENT OF A CONTRACTOR WITH MINIMUM OF CIDB LEVEL 6CE OR HIGHER , FOR THE SPOT REGRAVELLING OF SECONDARY ROAD S78 (R720) BETWEEN KOPPIES AND EDENVILLE WITHIN A 22KM GRAVEL ROAD FOR THE DEPARTMENT OF COMMUNITY SAFETY ROADS AND TRANSPORT FOR A PERIOD OF 6 MONTHS.

1. **THE CONTRACT**
2.
3.
4. **PART C1 :AGREEMENTS AND CONTRACT DATA**
5. **PART C2 : PRICING DATA**
6.
7.
8.
9.

10.

11. PART C1 : AGREEMENTS AND CONTRACT DATA

CONTENTS

SECTION	DESCRIPTION	PAGE
C1.1	FORM OF OFFER AND ACCEPTANCE	C1-3
C1.2	CONTRACT DATA	C1-7

12.
13.

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:

THE ADVERTISEMENT AND APPOINTMENT OF A CONTRACTOR WITH MINIMUM OF CIDB LEVEL 6CE OR HIGHER, FOR THE SPOT REGRAVELLING OF SECONDARY ROAD S78 (R720) BETWEEN KOPPIES AND EDENVILLE WITHIN A 22KM GRAVEL ROAD FOR THE DEPARTMENT OF COMMUNITY SAFETY ROADS AND TRANSPORT FOR A PERIOD OF 6 MONTHS.

The Bidder, identified in the Offer signature block below, has examined the documents listed in the Bid Data and addenda thereto as listed in the Returnable Schedules, and by submitting this Offer has accepted the Conditions of Bid.

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

THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF 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 Bidder before the end of the period of validity stated in the Bid Data, whereupon the Bidder becomes the party named as the Contractor in the Conditions of Contract identified in the Contract Data.

For the Bidder:	Witness:
..... Signature	..... Signature
..... Name	..... Name
..... Capacity	

Name and address of organization: .....

Signature and Name of Witness .....

..... Signature

..... Name

..... Date

ACCEPTANCE

▪ .....**By signing this part of this Form of Offer and Acceptance, the Employer identified below accepts the Bidder'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 Bidder's Offer shall form an agreement between the Employer and the Bidder 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 Bid Data and any addenda thereto as listed in the Bid Schedules as well as any changes to the terms of the Offer agreed by the Bidder 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 authorized representative(s) of both parties.

The Bidder shall within two weeks after receiving a completed copy of this Agreement, including the Schedule of Deviations (if any), contact the Employer's agent (whose details are given in the Contract Data) to arrange the delivery of any 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 fulfill 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 Bidder receives one fully completed original copy of this document, including the Schedule of Deviations (if any). Unless the Bidder (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.

For the Employer:

.....
Signature

.....
Name

.....
Capacity

Name and address of organisation: .....

.....

.....

Signature and name of witness: . . . . . .

Signature

. . . . . .

Name

Date: . . . . . .

Schedule of Deviations

Notes:

1. The extent of deviations from the Bid documents issued by the Employer prior to the Bid closing date is limited to those permitted in terms of the Conditions of Bid,

2. A Bidder'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 Bid documents and which it is agreed by the Parties becomes and obligation of the contract shall also be recorded here,

4. Any change or addition to the Bid documents arising from the above agreements and recorded here, shall also be incorporated into final draft or the Contract,

1. Subject . . . . . .

   Details . . . . . .

2. Subject . . . . . .

   Details . . . . . .

By the duly authorised representatives signing this Schedule of Deviations, the Employer and the Bidder agree to and accept the foregoing Schedule of Deviations as the only deviations from and amendments to the documents listed in the Bid Data and addenda thereto as listed in the Bid Schedules, as well as any confirmation, clarification or changes to the terms of the offer agreed by the Bidder 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 Bid documents and the receipt by the Bidder of a completed signed copy of this Agreement shall have any meaning or effect in the contract between the parties arising from this Agreement.

For the Bidder:For the Employer:

.....Signature.....

.....Name.....

.....Capacity.....

Name and address of organisation:Name and address of organisation:

.....

.....

.....

..... Witness Signature.....

..... Witness Name.....

..... Date.....

Confirmation of Receipt

The Bidder, (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 Schedule of Deviations (if any) today:

the ..... (day) of .....(month)

20 .....(year) at ..... (place)

For the Contractor:. . . . . .

Signature

. . . . . .

Name

. . . . . .

Capacity

Signature and name of witness:

. . . . . .

Signature

. . . . . .

Name

C1.2 CONTRACT DATA

CONTENTS

SECTION	DESCRIPTION	PAGE
C1.2.1	CONDITIONS OF CONTRACT	C1-8
C1.2.2	CONTRACT SPECIFIC DATA	C1-10
C1.2.3	DATA PROVIDED BY THE TENDERER	C1-16

C1.2.1 CONDITIONS OF CONTRACT

GENERAL CONDITIONS OF CONTRACT

This Contract will be based on the "General Conditions of Contract for Construction Works – 3rd Edition 2015", issued by the South African Institution of Civil Engineering. (Short title: "General Conditions of Contract 2015").

It is agreed that the only variations from the General Conditions of Contract 2015 are those set out hereafter under "Contract Specific Conditions".

CONTRACT SPECIFIC CONDITIONS

1. GENERAL

These Contract Specific Conditions (CSC) form an integral part of the Contract. The Contract Specific Conditions shall amplify, modify or supersede, as the case may be, the General Conditions of Contract 2015 (3rd Edition) to the extent specified below, and shall take precedence and shall govern.

The clauses of the Special Conditions hereafter are numbered "CSC" followed in each case by the number of the applicable clause or subclause in the General Conditions of Contract 2015 (3rd Edition), and the applicable heading, or (where a new special condition that has no relation to the existing clauses is introduced) by a number that follows after the last clause number in the General Conditions, and an appropriate heading.

2. AMENDMENTS TO THE GENERAL CONDITIONS OF CONTRACT

CSC 2.3Specific Approval of the Employer required

- *"The Engineer or Contractor must obtain special approval or consent from the Employer for the decisions in the following clauses:*

Clauses 2.2.3, 3.1.2, 3.2.1, 3.2.4, 4.7, 4.12.1,4.11.2, 5.7.3, 5.8.1, 5.10.1, 5.11.2, 5.11.3, 5.12.1, 5.13.2, 5.14.1, 5.16.1, 6.3.2, 6.4, 6.5.1, 6.6.1, 6.10.1, 6.10.6, 6.11, 7.8.2.2, 8.2.2.2, 10.1.5."

3.1 *Add the following*

- *"after approval by the Employer"*

C1.2.2CONTRACT SPECIFIC DATA

ITEM No:	REFERENCE TO:	CLAUSE	INFORMATION
1	Contractor	1.1.1.9	.....
2	Defects Liability Period	1.1.1.13	12 Months from issuing of Certificate of Practical Completion
3	Practical Completion	1.1.1.14	The time for achieving Practical Completion is calculated from commencement date to the time when the entire road is ready for public use without posing risk to users.
4	Employer	1.1.1.15	Free State Provincial Government represented by Head of Department: Department of Community Safety, Roads and Transport
5	Employer's Agent (Engineer)	1.1.1.16	Department of Community Safety, Roads and Transport
6	Address of the Employer	1.2.1.2	Physical: 45 Charlotte Maxeke Street Bloemfontein 9300 Postal: P.O Box 690 Bloemfontein 9300 Telephone No: (051) 409 8575
7	Address of the Contractor	1.2.1.2	Physical Address:..... ..... Postal Address: .... Telephone Number (Office): ..... Facsimile Number (Office): ..... E-mail Address (Office): .....

8	Commencement of Work	5.2	Within 14 days after site hand over, contractual obligations, compliance with Construction Regulations 2014 and Environmental Compliance
9	Documentation required before commencement of the Works	5.3.1	Health & Safety Plan (Refer to CR 2014) Revised Programme & Cash flow Projection (Refer to Clause 5.6) Security (Performance and retention guarantee 6.2) not compulsory. Insurance (CAR Construction All Risk to Clause 8.6)
10	Time to submit the documentation required before commencement of the Works	5.3.2	14 Days for all above documents excluding the Construction permit
11	Completion of the Works	5.6.2.1	6 Months starting from the date of site hand over
12	Special non-working times	5.8	Sundays and all public holidays as well as year-end builder's break.
13	Suspension of Works	5.11	Planned Annual allocated budget available can be reduced at the Employer's discretion. In the event that annual budget is reduced or exhausted, the Contractor shall not be allowed to stop the Works and or claim interest on the unpaid Works. **No claim shall be submitted to the Department once the budget is depleted.**
14	Penalty for failing to complete the Works on time	5.13.1	**R10 000** per calendar day R0 to R50 million project value **R15 000** per calendar day R51million to R100 million project value **R50 000** per calendar day R101 million to unlimited project value
16	Security	6.2.1	Performance Guarantee is optional, and on this contract it will be deducted on the payment certificate.
17	Dayworks	6.5.1.2.3	Refer to A1.2.3.11 of the Specifications (Ordering of day work)
18	Rates and Prices are final and binding	6.8	All rate items on the Bill of Quantity must be priced in Rand value except only where the rate is stipulated as **Rate Only** item. Items that will be priced not with Rand value will be termed or taken as incomplete tender and will be disqualified. Rather price Zero Rand for any uncounted action
19	Contract Price Adjustment	6.8.2	Not Applicable.
21	Materials on Site	6.10.1.5	80% Of materials delivered on site
22	Retention Money	6.10.3	10% Of Contract Amount. Two retention Guarantees of 50% each of the value of the retention money are compulsory as part of documentation to be submitted within 14 days after the commencement date; one will be handed back on completion

			and the other **12 months** after completion. There will be no retention monies deducted on interim certificates.
23	Quality of materials and workmanship	7.2	The source of supply of all materials including all stone, sand, gravel, water or soil or any other natural material required in the execution of the Works shall be located by the Contractor. The quality of the material relies solely to the Contractor. **No material shall be used until it has been approved by the Engineer**
24	Defects	7.8	In the event of the Contractor not completing all the outstanding work within the period specified by the Employer in terms of the contract, the Employer shall have the right to extend the Period of Maintenance by the additional time taken by the Contractor to complete such outstanding work to the satisfaction of the Employer. The full retention applicable to the Period of Maintenance shall apply to such extension.
25	Insurances	8.6	• (CAR Construction All Risk). • Public Liability (R10 million per claim). • SASRIA (Special Risk). • COIDA (Letter of Good Standing).
27	Other Insurances	8.6.1.5	R0-00
28	Dispute Resolution	10.5.1	Dispute Adjudication Board (DAB), Mediation,
29	Rules for Adjudication and Members	10.5.3	Only Three members required
30	Dispute Resolution	10.7.1	Adjudication (If there are no agreements, then court proceeding will be preferred)
31	Tender Validity Period		90 days
32	Scope	B.1	THE ADVERTISEMENT AND APPOINTMENT OF A CONTRACTOR WITH MINIMUM OF **CIDB LEVEL 6CE OR HIGHER** , FOR **THE SPOT REGRAVELLING OF SECONDARY ROAD S78 (R720)** BETWEEN **KOPPIES AND EDENVILLE** WITHIN A **22KM GRAVEL ROAD** FOR THE DEPARTMENT OF COMMUNITY SAFETY ROADS AND TRANSPORT FOR A **PERIOD OF 6 MONTHS.**
34	Targeted Local labour	B.3	1. Minimum Labour Employment is 12 for EPWP and should be appointed with a minimum of six months at an EPWP payment rate of **R240/day**. 2. The employment demographics are as follows: • Youth – 55% • Women – 60% • Disabled – 2% Labour target must be achieved as planned, failure to this will

			lead into penalties
36	Skills Development	B.5	Members of Community must also be trained in Labour Intensive Works
37	Approved Professionals, officials or agents	B.6	All the approved and submitted CV for professionals during tendering/ bidding stage must be available on site during the project implementation. Failure to bring at least 80% of all professionals that were presented via CV's during the bidding process will lead to termination of the Contract. Should it be found that people / professionals' CV used were only for tendering purpose the appointment will be terminated. During the signing of the Contract document all CV's for professionals submitted and the valid Employment Contract must be re-submitted as a Special Condition of this Contract. Failure to adhere to this will result in appointment termination. Any replacement of professional, should be replaced by an employee with equivalent experience and qualifications, subject to approval by the client.
38	Skills Developments	B.7	0.2% Of the contract amount to the maximum of R2,000,000.00 to be allocated and pay out to CIDB for external entity identified by the CIDB

.....

SIGNATURE

C1.2.3 DATA PROVIDED BY THE TENDERER

Clause 6.8.3 of the GCC:

Special materials	Unit on which variation will be determined *	Rate or price for the base Month (excluding VAT) **

Notes:

* Indicate whether the material will be delivered in bulk or in containers.

** The price for special materials is only the price for the material and does not include the cost of transport, labour or any other costs. When called upon to do so, the Tenderer shall substantiate the above prices with acceptable documentary evidence.

.....

SIGNATURE

PART C2 PRICING DATA

DEPARTMENT OF COMMUNITY SAFETY, ROADS AND TRANSPORT

THE ADVERTISEMENT AND APPOINTMENT OF A CONTRACTOR WITH MINIMUM OF CIDB LEVEL 6CE OR HIGHER, FOR THE SPOT REGRAVELLING OF SECONDARY ROAD S78 (R720) BETWEEN KOPPIES AND EDENVILLE WITHIN A 22KM GRAVEL ROAD FOR THE DEPARTMENT OF COMMUNITY SAFETY ROADS AND TRANSPORT FOR A PERIOD OF 6 MONTHS.

C2 –PRICING DATA

C2.1 PRICING INSTRUCTIONS

This Bill of quantities forms part of the contract documents and must be read in conjunction with all the other documents comprising the contract documents. For the purposes of this bill of quantities, the following words shall have the meanings hereby assigned to them.

Unit	:	The unit of measurement for each item of work as defined in the standard specifications or the project specifications.
Quantity	:	The number of units of work for each item.
Rate	:	The payment per unit of work for which the tenderer tenders to do the work.
Amount	:	The product of the quantity and the rate tendered for an item.
Lump Sum:		An amount tendered for an item, the extent of which is described in the schedule of quantities, the specifications or elsewhere, but of which the quantity of work is not measured in units.

Bill of Quantities

1 Measurement and payment shall be in accordance with the relevant provisions of the COTO Standard Specifications for Road and Bridge Works for South African Road Authorities (2020 Edition), subject to the following amendments and additions:

2 The units of measurement described in the Bill of Quantities are metric units. Abbreviations used in the Bill of Quantities are as follows:

mm	=	millimetre
m	=	metre
km	=	kilometre
m2	=	square metre
m2.pass	=	square metre-pass
ha	=	hectare
m3	=	cubic metre
m3.km	=	cubic metre-kilometre
l	=	litre
kl	=	kilolitre
MPa	=	megapascal
h	=	hour
kg	=	kilogram
t	=	ton (1000 kg)
No.	=	number
sum	=	lump sum
MN	=	meganewton
MN.m	=	meganewton-metre
P C sum	=	Prime Cost sum
Prov sum	=	Provisional sum

%	=	per cent
kW	=	Kilowatt
man-month	=	Man per Month
man-shift	=	Man per Shift
Person.Month	=	Person per Month

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

Unit: The unit of measurement for each item of work as defined in the COTO Standard Specifications for Road and Bridge Works for South African Road Authorities (2020 Edition),Quantity:The number of units of work for each item.

Rate: The agreed payment per unit of measurement.

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

Lump sum: An agreed amount for an item, the extent of which is described in the Bill of Quantities but the quantity of work of which is not measured in any units.

4 Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance is made for waste. Attention is directed to the provisions of clause 1220 of the standard specifications regarding the measurements of quantities for payment. Except where specified otherwise than in clause 1220, the net measurement or mass of the finished work in place shall be taken for payment, and any volume or mass of work in excess of that prescribed, shall be excluded.

5 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 several items. Such prices and rates shall cover all costs and expenses that may be required in and for the execution of the work described, and for all the risks, obligations and responsibilities specified in the general conditions of contract, special conditions of contract, standard specifications and project specifications shall be considered as provided for collectively in the items of payment given in the bill of quantities.

Such prices and rates shall also cover full compensation for completing and maintaining, during the defects liability period, all the work shown on the drawings and specified in the standard specifications and project specifications and the cost of all general risks, liabilities, and obligations set forth or implied in the Contract Data, as well as overhead charges and profit. Reasonable prices shall be inserted, as these will be used as a basis for assessment of payment for additional work that may have to be carried out.

6 A price or rate is to be entered against each item in the Bill of Quantities, whether the quantities are stated or not. An item against which no price is entered shall not be paid for but will be considered to be covered by other prices or rates elsewhere in the Bill of Quantities.

If the tenderer should group a number of items together and tender one lump sum for each group of items, this single tendered lump sum shall apply to that group of items and not to each individual item, or should he indicate that full compensation for any item has been included in the rate for another item, the rate for the item included in another item shall be deemed to be nil.

The tendered lump sums and rates shall be valid irrespective of any change in the quantities during the execution of the contract

7 Reasonable compensations will be received where no pay item appears in respect of work required in terms of the Contract, which is not covered in any other pay item.

8 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 under each item appear in the scope of work, Reference shall, inter alia, be made to the drawings, standard specifications, project specifications, general conditions of contract and special conditions of contract for more detailed information regarding the extent of work entailed under each item.

9. The item numbers appearing in the Bill of Quantities refer to the corresponding item numbers in the COTO Standard Specifications for Road and Bridge Works for South African Road Authorities (2020 Edition),. Item numbers prefixed by the letter B refer to payment items described under part B of the project specifications, those with C to payment items described under part C, and so on for further parts of the project specifications.

Item numbers in schedule B of the schedule of quantities are, in addition, preceded by the number of each separate part of schedule B of the schedule of quantities, e.g. payment item 62.02 described in the standard specifications (clause 6210), when used in part 3 of schedule B of the schedule of quantities, would be numbered 3/62.02, and if this payment item had been amended in part B of the project specifications, the payment item would be indicated as 3/B62.02.

10 The quantities set out in the schedule of quantities are only approximate quantities. The quantities of work finally accepted and certified for payment, and not the quantities given in the schedule of quantities, will be used to determine payments to the Contractor

The validity of the contract shall in no way be affected by differences between the quantities in the schedule of quantities and the quantities finally certified for payment. Work is valued at the rates or lump sums tendered, subject only to the provisions of sub clause 1209 (a) of the standard specifications.

11 The amount of work or the quantities of material stated in the schedule of quantities shall not be considered as restricting or extending the amount of work to be done or quantity of material to be supplied by the Contractor

12 The statement of quantities of material or the amount of work in the schedule of quantities shall not be regarded as authorization for the Contractor to order material or to execute work. The Contractor shall obtain the Engineer's detailed instructions for all work before ordering any materials or executing work or making arrangements in this regard

13 The provisions of clause10.1 of the general conditions of contract shall apply to provisional sums and prime cost sums.

14 Subject to the conditions stated in paragraph 15 below, the rates and lump sums filled in by the tenderer in the schedule of quantities shall be final and binding with regard to submitting the tender, and may not be adjusted should there be any mistakes in the extensions thereof and in the total sums appearing in the tender. Should there be any discrepancies between the tender sum and the correctly extended and totalled bill of quantities, the tendered sum will be regarded as being correct, and the Employer shall have the right to make adjustments to the tender rates to reconcile the tender sum with the total of the bill of quantities. In such an event the Contractor will be consulted but, failing agreement between the parties, the decision of the Employer shall be final and binding. Adjustment of the tender rates will take place prior to the signing of the contract. In their own interest tenderers must make doubly sure of the correctness of their tendered rates, the extensions and the tender sum.

15 A tender may be rejected if the unit rates or lump sums for some of the items in the schedule of quantities are, in the opinion of the Employer, unreasonable or out of proportion, and if the tenderer fails, within a period of seven (7) days of having been notified in writing by the Employer to adjust the unit rates or lump sums for such items, to make such adjustments.

16 Those parts of the contract to be constructed using labour-intensive methods have been marked in the bill of quantities with the letters LI in a separate column filled in against every item so designated. The works, or parts of the works so designated are to be constructed using labour-intensive methods only. The use of plant to provide such works, other than plant specifically provided for in the scope of work, is a variation to the contract. The items marked with the letters LI are not necessarily an exhaustive list of all the activities, which must be done by hand, and this clause does not over-ride any of the requirements in the generic labour intensive specification in the Scope of Works.

17 Payment for items which are designated to be constructed labour-intensively (either in this schedule or in the Scope of Works) will not be made unless they are constructed using labour-intensive methods. Any unauthorized use of plant to carry out work, which was to be done labour-intensively will not be condoned, and any works so constructed will not be certified for payment.

C2.2 BILL OF QUANTITIES

C1.2GENERAL REQUIREMENTS AND PROVISIONS

C1.3CONTRACTOR'S SITE ESTABLISHMENT AND GENERAL OBLIGATIONS

C1.4FACILITIES FOR THE ENGINEER

C1.5ACCOMMODATION OF TRAFFIC

C1.6CLEARING AND GRUBBING

C1.7LOADING AND HAULING

C3.2CULVERTS

C4.4COMMERCIAL MATERIALS

C5.1ROADBED

C11.9FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS

G1000GUIDELINES FOR SUBCONTRACTING AND LABOUR ENHANCEMENT

Koppies - Edenville S78 (R720)
Bill of Quantities

GENERAL REQUIREMENTS AND PROVISIONS

ITEM	DESCRIPTION	UNIT	QUANTITY	Rate	BILLED
C1.2	GENERAL REQUIREMENTS AND PROVISIONS				
C1.2.4	Stakeholder liaison	month	6		
C1.2.5	Safety:				
C1.2.5.1	Health and safety plan	Prov sum	1	R25 000,00	R25 000,00
C1.2.5.2	Implementation of health and safety plan	month	6		
BC1.2.11	(i) Laboratory Tests for Engineer's Quality assurance/ acceptence Control	Prov sum	1	R720 000,00	R720 000,00
	(ii) Contractor's handling cost and profit in respect of Sub-item BC1.2.11(i)	%	720000		
BC 1.2.13	(i) Occupational Health and Safety Agent for Engineer's quality assurance/acceptence control	Prov sum	1	R390 000,00	R390 000,00
	(ii) Contractor's handling cost and profit in respect of sub-item BC1.2.13(i)	%	390000		
Total Carried Forward					

CONTRACTOR'S SITE ESTABLISHMENT AND GENERAL OBLIGATIONS

Item	Description	Unit	BILLED	Rate	SCHEDULED VALUE
C1.3	CONTRACTOR'S SITE ESTABLISHMENT AND GENERAL OBLIGATIONS				
C1.3.1	The Contractor's general obligations:				
C1.3.1.1	Fixed obligations	Lump sum	1		
C1.3.1.3	Time-related obligations	month	6		
C1.3.2	Contract sign boards	m²	12		
Total Carried Forward To Summary					

Item	Description	Unit	BILLED	Rate	SCHEDULED VALUE
C1.4	FACILITIES FOR THE ENGINEER				
C1.4.1	Site accommodation:				
C1.4.1.13	Rented housing paid for by the Contractor	Prov sum	1	R60 000,00	R60 000,00
C1.4.1.14	Contractor's handling costs, profit and all other charges in respect of item C1.4.1.13	%	60000		
C1.4.3.31	Rain gauge	No	3		
C1.4.3.36	Measuring wheel	No	2		
C1.4.3.37	First aid kit	No	2		
C1.4.4	Prime cost items:				
C1.4.4.1	Cell phones costs, including pro-rata rentals, for calls made in connection with contract administration	PC sum	1	R9 000,00	R9 000,00
C1.4.4.2	Handling costs and profit in respect of item C1.4.4.1	%	R9 000,00		
C1.4.4.5	The provision of internet connectivity and WiFi data for Engineer's site staff	PC sum	1	R9 000,00	R9 000,00
C1.4.4.6	Handling costs and profit in respect of item C1.4.4.5	%	R9 000,00		
C1.4.8	Site security measures for the Engineer's facilities:				
C1.4.8.1	Supply and installation of all required security measures at the Engineer's site offices and laboratories	Lump sum	1		
C1.4.8.2	Provision of security guards / watchmen and an armed response service at the Engineer's site offices and laboratories	month	6		
C1.4.8.3	Supply and installation of all required security measures at the Engineer's site accommodation	Lump sum	1		
C1.4.8.4	Provision of security guards / watchmen and an armed response service at the Engineer's site accommodation	month	6		
Total Carried Forward					

Item	Description	Unit	BILLED	Rate	SCHEDULED VALUE
C1.5	ACCOMMODATION OF TRAFFIC				
C1.5.2	Accommodation of vehicular traffic	month	6		
C1.5.5	Maintenance of temporary deviations:				
C1.5.5.9	Grading of temporary deviations and existing roads used as detours	km	6		
C1.5.5.10	Watering of temporary deviations and existing roads used as detours	kℓ	1690		
C1.5.5.11	Other road maintenance work ordered by the Engineer	Prov sum	1	R20 000,00	R20 000,00
C1.5.5.12	Handling cost, profit and all other charges in respect of item C1.5.6.11	%	R20 000,00		
C1.5.6	Removal of temporary deviations	km	6,0		
C1.5.7	Temporary traffic control facilities:				
C1.5.7.1	Delineators including mounting bases and ballast:				
	(b) Double sided, reversible left or right (800 x 200)	No	300		
C1.5.7.2	Traffic cones, minimum height 750 mm	No	10		
C1.5.7.3	Flagmen	man-shift	264		
C1.5.7.4	Traffic controllers	man-shift	132		
C1.5.8	Traffic safety officer	man-month	6		
C1.5.9	Traffic safety vehicle	month	6		
C1.5.11	Provision of safety equipment for visitors				
C1.5.11.1	Provision of reflective safety vests for visitors	No	10		
C1.5.12	Additional traffic accommodation facilities ordered by the Engineer:				
C1.5.12.1	Provision of additional traffic accommodation facilities	Prov sum	1	R10 000,00	R10 000,00
C1.5.12.2	Handling cost, profit and all other charges in respect of item C1.5.12.1	%	R10 000,00		
Total Carried Forward					

CLEARING AND GRUBBING

Item	Description	Unit	BILLED	Rate	SCHEDULED VALUE
C1.6	CLEARING AND GRUBBING				
C1.6.1	Clearing:				
C1.6.1.1	Clearing with machines and some hand labour where necessary	ha	10		
Total Carried Forward To Summary					

Item	Description	Unit	BILLED	Rate	SCHEDULED VALUE
C1.7	LOADING AND HAULING				
C1.7.1	Loading:				
C1.7.1.1	Loading from stockpile using machines and some hand labour where necessary	m^3	18225		
C1.7.2	Hauling:				
C1.7.2.1	Hauling material for use in the Works and off-loading it on the site of the Works:				
	(a) Soil, gravel, crushed stone and pavement layer material	m^3-km	109350		
C1.7.2.2	Hauling material to spoil and off-loading it at a designated spoil area:				
	(a) Cleared and grubbed material (organic matter and all other unsuitable or waste material)	m^3-km	54675		
	(b) Soil and gravel material	m^3-km	38273		
	(c) Boulders and hard material	m^3-km	16403		
Total Carried Forward To Summary					

Item	Description	Unit	BILLED	Rate	SCHEDULED VALUE
C3.2	CULVERTS				
C3.2.1	Excavation for culvert structures:				
C3.2.1.1	Excavating in all material situated within the following depth ranges below the surface level:				
	(a) 0 m to 1,5 m	m³	307		
C3.2.1.2	Excavating soft material 0 m to 1,5 m below the surface level using labour enhanced construction methods, or instructed	m³	46		
C3.2.1.3	Excavating intermediate material 0 m to 1,5 m below the surface level using labour enhanced construction methods,	m³	107		
C3.2.1.4	Extra over sub-item C3.2.1.1 for excavation in hard or boulder material, irrespective of depth	m³	154		
C3.2.2	Backfilling:				
C3.2.2.1	Using the excavated material	m³	92		
C3.2.2.2	Using imported selected material:				
	(a) From commercial sources (state type)	m³	50		
C3.2.3	Concrete pipe culverts:				
C3.2.3.2	On Class B bedding (type and diameter indicated)	m	55		
C3.2.7	Cast-in-situ concrete and formwork:				
C3.2.7.1	In Class A bedding, screeds, concrete backfill and the encasing for pipes, including formwork, (class of concrete indicated)	m³	100		
C3.2.10	Reinforcement:				
C3.2.10.3	Welded steel fabric	kg	752		
C3.2.16	Brickwork (engineering bricks):				
C3.2.16.2	230 mm thick	m²	88		
C3.2.17	Plaster 15 mm	m²	50		
Total Carried Forward To Summary					

COMMERCIAL MATERIALS

Item	Description	Unit	BILLED	Rate	SCHEDULED VALUE
C4.4	COMMERCIAL MATERIALS				
C4.4.2	Commercial materials identified by the Contractor from commercial, private or other non-commercial suppliers:				
C4.4.2.1	Pavement layer material:				
	(c) – (e) Type G5a material	m^3	18225		
Total Carried Forward To Summary					

Item	Description	Unit	BILLED	Rate	SCHEDULED VALUE
C5.1	ROADBED				
C5.1.1	Roadbed construction and compaction:				
C5.1.1.1	Compaction of in-situ material to 90 % of MDD	m^3	4050		
C5.1.4	Removal of unsuitable material to spoil:				
C5.1.4.2	In layer thicknesses exceeding 200 mm:				
	(b) Unstable material	m^3	16200		
C5.1.5	In-situ treatment of roadbed in hard material:				
C5.1.5.1	In-situ treatment by ripping	m^3	4050		
C5.1.6	Roller-pass compaction:				
C5.1.6.1	Grid rollers	m^2	27000		
C5.1.6.2	Pad foot vibratory rollers	m^2	27000		
C5.1.6.3	Smooth drum vibratory rollers	m^2	27000		
Total Carried Forward To Summary					

Item	Description	Unit	Quantity	Rate	Amount R
C5.3	ROAD PAVEMENT LAYERS				
C5.3.1	Compiling and implementing M&U plans for the construction of all the pavement layers	No	1,00		
C5.3.2	Construction of pavement layers:				
C5.3.2.1	Construction of layers using conventional construction methods:				
	(g) Gravel wearing course layer (150mm thick) compacted to 95 % of MDD	m^3	23 100,00		
C5.3.5	Breaking down oversize layer material on the road:				
C5.3.5.1	By normal grid rolling as per clause A5.3.7.3b)	m^2-pass	20 000,00		
Total Carried Forward To Summary					

FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS

Item	Description	Unit	BILLED	Rate	SCHEDULED VALUE
C11.9	FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS				
C11.9.1	Finishing the road and road reserve:				
C11.9.1.2	Shaping of open earth drains	km	30		
Total Carried Forward To Summary					

Item	Description	Unit	BILLED	Rate	SCHEDULED VALUE
G1000	GUIDELINES FOR SUBCONTRACTING AND LABOUR ENHANCEMENT				
G10.01	Project Liaison Committee costs	Prov sum	1	R48 000,00	R48 000,00
	(a) Handling cost and profit in respect of Item G10.01 above	%	R48 000,00		
G10.02	Community Liaison Officer salary	Prov sum	1	R144 000,00	R144 000,00
	(a) Handling cost and profit in respect of Item G10.02 above	%	R144 000,00		
G10.03	Training:				
	(a) General training of potential ABE™s	Prov sum	1	R150 000,00	R150 000,00
	(b) Training of the temporary workforce:				
	(i) Technical training	Prov sum	1	R150 000,00	R150 000,00
	(iii) OHS Training	Prov sum	1	R150 000,00	R150 000,00
	(c) Handling cost and profit in respect of Items G10.03 (a) (b) (i) (ii) (iii)	%	R450 000,00		
Total Carried Forward To Summary					

Koppies - Edenville S78 (R720)

SUMMARY OF SECTIONS

Section	Description	Amount
C1.2	GENERAL REQUIREMENTS AND PROVISIONS	
C1.3	CONTRACTOR'S SITE ESTABLISHMENT AND GENERAL OBLIGATIONS	
C1.4	FACILITIES FOR THE ENGINEER	
C1.5	ACCOMMODATION OF TRAFFIC	
C1.6	CLEARING AND GRUBBING	
C1.7	LOADING AND HAULING	
C3.2	CULVERTS	
C4.4	COMMERCIAL MATERIALS	
C5.1	ROADBED	
C5.3	ROAD PAVEMENT LAYERS	
C11.9	FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS	
G1000	GUIDELINES FOR SUBCONTRACTING AND LABOUR ENHANCEMENT	
SUBTOTAL		
Add 15% VAT		
TOTAL		

THE ADVERTISEMENT AND APPOINTMENT OF A CONTRACTOR WITH MINIMUM OF CIDB LEVEL 6CE OR HIGHER , FOR THE SPOT REGRAVELLING OF SECONDARY ROAD S78 (R720) BETWEEN KOPPIES AND EDENVILLE WITHIN A 22KM GRAVEL ROAD FOR THE DEPARTMENT OF COMMUNITY SAFETY ROADS AND TRANSPORT FOR A PERIOD OF 6 MONTHS.

Part C3 Specification for the Work

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PART B: AMENDMENTS TO STANDARD SPECIFICATIONS

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PART C3SCOPE OF WORKS

SECTION C3.1STANDARD SPECIFICATIONS

The standard specifications on which this contract is based are the **"Standard Specifications for Road and Bridge Works for State Road Authorities – October 2020 Edition"** prepared and drafted by COTO.

The following SANS specifications are also referred to in this document and the Contractor is advised to obtain them from Standards South Africa (a division of SABS) in Pretoria

SANS 1914-1 to 6 (2002):Targeted Construction Procurement

SANS 1921-1 (2004):	Construction and Management Requirements for Works Contracts Part 1: General Engineering and Construction Works and where accommodation of traffic is involved.
SANS 1921-2 (2004):	Construction and Management Requirements for Works Contracts; and Part 2: Accommodation of Traffic on Public Roads Occupied by the Contractor.

All references to SABS Standards which are replaced with corresponding SANS Specifications, have to be read in their new format.

SECTION C3.2:PROJECT SPECIFICATIONS

The Project Specifications, consisting of two parts, form an integral part of the Contract and supplements the Standard Specifications.

PART A contains a general description of the works, the site and the requirements to be met.

PART B contains variations, amendments and additions to the Standard Specifications and, if applicable, the Particular Specifications.

In the event of any discrepancy between a part or parts of the Standardized or Particular Specifications and the Project Specification, the Project Specification shall take precedence. In the event of a discrepancy between the Specifications, (including the Project Specifications) and the drawings and / or the Bill of Quantities, the discrepancy shall be resolved by the Engineer before the execution of the work under the relevant item (in the form of Addendum).

PART A: GENERAL

PS1 EMPLOYER'S OBJECTIVES

The Employer's general objective is to do special maintenance on the road **S78 (R720)** between **Koppies** and **Edenville** to a safe standard for public use.

- The project offers employment opportunities and upliftment of the local community.
- This project has the following particular objectives:
  - To improve mobility and access to transportation facilities within the area.
  - Create employment for local labour.
  - To provide training for local labour in social as well as in labour intensive construction skills.

PS2LOCATION OF THE WORKS

Refer to the locality plan included in Part C4 of this document.

SECTION 1.2: GENERAL REQUIREMENTS AND PROVISIONS

BA1.2.3GENERAL

Replace Clause A1.2.3 with the following:

"The General Conditions of Contract for Construction Works, 3rd Edition 2015, published by the South African Institute of Civil Engineering, together with the Special Conditions of Contract, forming part of the contract, will be applied".

All references in the COTO Standard Specifications have been amended accordingly to reflect the appropriate General Conditions of Contract relevant for the Contract. Each COTO clause reference is tabulated in Table 1.2/1 below (context of reference is also given) together with the relevant equivalent clause in the SAICE General Conditions of Contract for Construction Works applicable for this contract. All references to the "schedule of quantities" in the Standard Specifications shall be amended to the "Bill of Quantities".

Whereas every effort has been made to include all of the affected clauses in the table, there may be some omissions. In every case, however, the SAICE General Conditions of Contract for Construction Works, as amended by the Special Conditions of Contract in Part C1.2: Contract Data of this Volume, shall apply and the Contractor shall be responsible for the interpretation of the equivalent clause.

TABLE 1.2/1

REFERENCES IN COTO STANDARD SPECIFICATIONS TO THE RELEVANT SAICE GENERAL CONDITIONS OF CONTRACT FOR CONSTRUCTION WORKS 2015

COTO Standard Specifications for Road and Bridge Works for South African Road Authorities (Draft Standard) (October 2020)		SAICE General Conditions of Contract for Construction Works 3rd Edition 2015	
Clause no.	**Description or Reference**	**Clause no.**	**Description or Reference**
A1.2.3.4	Extension of time for delays caused by rainfall	5.12	Extension of time for Practical Completion
A1.2.3.5	Handing-over of the site of the works	5.4	Access to site
A1.2.3.7	Legal and Contractual requirements and responsibility to the public and Employer	4.3	Legal Provisions
A1.2.3.10	Notices, signs and advertisements	4.5	Notices and Fees
A1.2.3.11	Ordering of daywork	6.5	Dayworks
A1.2.3.14	Remedial Work	7.9	Urgent remedial work
A1.2.3.19	Temporary drainage and dewatering	8.1& 8.2	Protection of works & Care of the works
A1.2.7.1	Programme of work	5.6	Programme

PS3EXTENT OF THE WORKS

This section of the Project Document is a basic outline of the works, and does not limit the work to be carried out under this contract.

The works required under this contract consist of the following activities:

- **Establishment on site**
- **Accommodation of traffic**

  The road will be constructed in full-widths. By by-passes where necessary will be required for accommodation of traffic during construction.

- **Re-gravelling using G5**

PS4NATURE OF GROUND AND SUBSOIL CONDITIONS

Ground and subsoil conditions will be evaluated during the construction phase.

PS5CONSTRUCTION AND MANAGEMENT REQUIREMENTS

PS5.1Quality Assurance (QA)

The Contractor will be solely responsible for the production of work that complies with the Specifications. To this end it will be the full responsibility of the Contractor to institute an appropriate Quality Assurance (QA) system on site.

The Engineer (Client representative) 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.

With the nature of this project not including services of consultants, the contractors Quality Assurance system is to include and accommodate the employer's quality assurance/acceptance systems.

PS5.2Management and disposal of water and surplus material

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.

The Contractor shall dispose of all excess or unsuitable material at approved spoil sites.

The Contractor shall be responsible for all arrangements necessary to obtain such spoil sites.

PS5.3Management of the environment

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 Engineer 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 Engineer.

(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.

PS6SITE FACILITIES

PS6.1Contractor's camp site office and depot

The Contractor is responsible for providing a suitable site for the contract site office and to provide accommodation for his personnel and labourers.

Prior to establishment, the Contractor must obtain the approval of and permission from the local Moqhaka/Ngwathe Local Municipality regarding the site office.

PS6.2Accommodation 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. Only chemical toilets will be allowed where temporary facilities have to be provided.

PS6.3Power supply, water and other services

The Contractor shall make his own arrangements concerning the provision of electrical power, water and all other services at the site office. No direct payment will be made for the provision of electricity, water and other services.

The cost thereof shall be deemed to be included in the rates and amounts tendered for the various items of work for which these services are required, or in the Contractor's Preliminary and General items as the case may be.

PS6.4Security

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.

PS7REQUIREMENTS FOR ACCOMMODATION OF TRAFFIC

PS7.1General

The Contractor will be responsible for the safe and easy passage of public traffic next to or adjacent to the construction site.

PS7.2Basic 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, traffic lights, delineators, flagmen and speed control measures are effective and that courtesy is extended to the public at all times.

Failure to maintain road signs, warning signs, traffic lights or flashing lights, etc. in a good condition shall constitute ample reason for the Engineer to suspend the work until the road signs, etc. have been reinstituted to specification.

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 provide and grant access to persons whose properties fall within or adjoin the area in which he is working.

PS7.3Traffic Safety Officer

The Contractor shall appoint a suitable 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 Section 1.5 and shall also be in compliance with the Occupational Health and Safety Act 1993 and the Construction Regulations 2014.

PS8OCCUPATIONAL HEALTH AND SAFETY

PS8.1General 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 2014 issued on February 2014 by the Department of Labour.

PS8.2Health and Safety Specifications and Plans

(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 Particular Specifications. (Included in Section C3.3)

(b) Bidder's Health and Safety Plan

The Contractor shall submit within 14 days after the commencement date his own documented Health and Safety Plan he proposes to implement 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) detail 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.

Note: 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.

PS8.3Cost of compliance with the OHS Act and 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.

PART B: MATTERS RELATING TO THE STANDARD SPECIFICATIONS

C3.2Specification for the Work

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.

   All materials shall comply with the specifications as set out in the COTO Standard Specifications for Road and Bridge Works for State Road Authorities October 2020.

SECTION 1.2 : GENERAL REQUIREMENTS AND PROVISIONS

B1.2.7.1PROGRAMME OF WORK

Add the following after the title :

"The Contractor shall include with his tender a preliminary programme. 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 adverse weather conditions and special non-working days as specified in the Project Specifications and in the Contract Data.

It is essential that the construction programme, which shall conform in all respects to Clause 5(6) of the General Conditions of Contract, 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."

(a) General

Insert the following at the beginning of the clause:

"The Contractor shall submit his programme at the closing of the tender together with his billed tender document. The programme shall be in the form of a bar chart (Gantt chart) or any other time-activity form acceptable to the Engineer, and shall clearly show:

i) The proposed rate of progress in order to complete the works within the required period as tendered, showing the various activities, their durations and proposed resourcing levels (major plant and labour) for each element of the works. Sufficient detail shall be provided to enable the Engineer to be able to gauge construction progress. All activities, including establishment on site, trimming and finishing and the completion of all minor ancillary works are to be included in the programme.

ii) The sequence of activities and any dependencies (time or resource related) between them.

iii)The critical path activities.

iv) Key dates in respect of work to be carried out, or information, etc., to be provided, by others.

v)Other information specifically required by the Engineer.

When compiling his programme, the Contractor shall, inter alia, take into consideration and make allowance for :

i)Unexpected weather conditions and their effects.

ii)Known physical conditions or artificial obstructions.

iii)The accommodation and safeguarding of public traffic.

iv) Restrictions of the total length of deviation open to traffic at any one time. Simultaneous work on adjacent sections shall not be allowed.

v)All special non-working days as defined in Part C1.2: Contract Data.

vi) All training, especially safety training, to be completed before an activity is commenced.

The following details shall be submitted together with the programme:

i) The number of working hours per day, working days per week, assumed holiday or shut down periods on which the programme is based.

ii) The overall labour and major plant resource levels on which the programme is based.

iii) The detailed traffic accommodation proposals on which the programme is based (road or lane closures, lengths of sections to be worked, timing etc.).

iv) A budget forecast of the value of completed work, excluding CPA and contingencies but including VAT, month by month, for the full contract period.

These additional items shall also be revised when any revision is made to the programme. Failure to comply with these requirements entitles the Engineer to use a programme based on his own assumptions to evaluate claims for extension of time for completion of the works, or for additional compensation.

Minor revisions to the approved programme may be introduced from time to time by mutual agreement between the Contractor and the Engineer. Should the Engineer believe that a major revision of the programme is required, the Contractor will be notified in writing and an updated programme shall be submitted within two weeks of receipt of such notification.

It should be noted that it is in the Contractor's interest to provide a comprehensive programme giving as much information as possible about the times allowed for the various activities as well as resource or other limitations affecting the programme, since the approved programme may be used to evaluate any claims in terms of the General Conditions of Contract for extension of time.

The Contractor shall submit to the Engineer, at least three working days before each monthly site meeting, copies of the following:

i) The contract programme with progress charts and programme graphs updated to reflect the actual progress to date.

ii) A summary of progress on site over the month preceding the site meeting. The report shall be in the form of a detailed narrative to the contract programme.

iii) Details of activities running late, indicating what steps have been or will be taken to ensure that the work is completed within the specified time.

iv)A report on all labour, plant and materials on site.

v) All other appendices to the monthly site meeting minutes as required by the Employer."

B1.2.8WORKMANSHIP AND QUALITY CONTROL

Add the following after the title:

"The Contractor shall implement a quality assurance system in accordance with ISO 9001 and appoint a quality manager who shall ensure that members of the Contractor's staff comply with the requirements of the quality system. The quality system and the methods used to implement it shall be described in a quality plan produced by the Contractor. The quality manager shall be resident on site full time. No construction activities shall take place on site before the Engineer approves the quality plan".

a)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 Engineer.

The Contractor may establish his own laboratory on site, or he may employ the services of an independent commercial laboratory. 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.

Add the following:

"The Contractor shall submit the quality assurance system he proposes using to the Engineer, for his approval, within two weeks of the site handover. Once accepted by the Engineer the Contractor shall not deviate from it unless written notification of proposed changes has similarly been submitted and approved. The system shall record the lines and levels of responsibility and indicate the method by which testing procedures will be conducted.

b)Acceptance control

add the following:

The process control test results submitted by the Contractor for approval of materials and workmanship may be used by the Engineer for acceptance control.

However, before accepting any work, the Engineer 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 under Section 20 in the Bill of Quantities, but tests that failed to confirm compliance with the specifications, will be for the account of the Contractor.

An acceptance control system will be set up by the Engineer (Employer), which will include scheduled checks of the contractor's quality control system by means of various schedules to be submitted in a weekly and/or in a monthly basis.

The schedules will include but not limited to the following:

- Quality acceptance control testing

- Electronic Daily Diaries which include photographic evidence of work done submitted on a daily basis.
- Hard copy daily diaries prepared for signing on a weekly or bi-weekly basis.
- Inspection requests submitted electronically and backed up with hard copies for signing on site. (Requests to be submitted 24hr in advance)
- Monthly labour and Progress reports."

Add the following:

"The Contractor's place of testing and laboratories shall be subject to inspection and approval by the Engineer.

No routine levelling or material testing will be executed by the Engineer on behalf of the Contractor. The Engineer will only check the levels and laboratory test results of the Contractor after the information has been submitted to him in writing. The Engineer may however perform acceptance control testing.

No work executed will be measured for payment unless the results submitted have been checked and approved."

B1.2.8.2ACCEPTANCE QUALITY CONTROL

Remove the second, third and fourth sentences and replace with the following:

The engineer may carry out testing at the cost of the Employer in either the Engineer's laboratory or one approved by him.

An acceptance control system will be set up by the Engineer (Employer), which will include scheduled checks of the contractor's quality control system by means of various schedules to be submitted in a weekly and/or in a monthly basis.

The schedules will include but not limited to the following:

- Quality acceptance control testing
- Electronic Daily Diaries which include photographic evidence of work done submitted on a daily basis.
- Hard copy daily diaries prepared for signing on a weekly or bi-weekly basis.
- Inspection requests submitted electronically and backed up with hard copies for signing on site. (Requests to be submitted 24hr in advance)
- Monthly labour and Progress reports.

BA1.2.8.3CERTIFICATE OF PRACTICAL COMPLETION OF THE WORKS

Notwithstanding that there might be natural or programmed sections of the works that will result in them being completed in their entirety before other sections, no consideration shall be given to the issuing of practical completion certificates for portions of the works. The use of any completed roadway or portions of the work, whether for unhindered use by the public or for accommodation of traffic while other portions are being constructed, shall not constitute use or occupation by the Employer.

In addition to the listed specified items of work and regardless of the degree of beneficial occupation by the Employer, the works shall be considered for practical completion only if the following criteria also have been met:

i) The estimated cost to complete the outstanding work is less than 2% of the tendered value of work plus the cost of any variation or extra work orders, but excluding CPA and VAT.

ii) The written list of outstanding items of work can be completed within 28 days of the list having been accepted in writing by the Contractor.

iii) Any information in the Contractor's possession, which is required by the Engineer and has been requested in writing, has been supplied.

iv) All road work and storm water drainages have been completed in accordance with the project specification.

The contents of this General Conditions of Contracts, together with the above amendment, shall be applied equally to the issue of a Certificate of Practical Completion.

BA.1.2.8.4INFORMATION FURNISHED BY THE EMPLOYER

Add the following new clause:

"Quantities regarding the distribution and extent of repair work items were compiled and calculated to the best of the Engineer's knowledge and available information at the time of the design and could be subject to significant variations at the construction stage. Such variations shall, however, not form grounds for a claim by the Contractor in terms of the General Conditions of Contract."

BA 1.2.3.4EXTENSION OF TIME FOR DELAYS CAUSED BY RAINFALL

Change the existing heading of clause BA 1.2.3.4 to read as above and wherever the expression "rainfall" is encountered replace it with "inclement weather"

Delete the entire clause and replace with the following:

"For the purposes of calculating an extension of time due to climatic conditions in terms of clause 5(12)(2) of the General Conditions of Contract, the number of days more than the number of working days anticipated to be lost due to climatic conditions shown in Table B1215/1 shall be taken into account:

TABLE B1215/1

ANTICIPATED DAYS LOST DUE TO INCLEMENT WEATHER CONDITIONS

EXPECTED NUMBER OF WORKING DAYS LOST			
Month	Days	Month	Days
January	3	July	2
February	3	August	3
March	3	September	3
April	3	October	3
May	2	November	3
June	2	December	3

The following climatic conditions can be classified as inclement weather conditions:

- Cold weather conditions,
- Windy conditions,
- Misty conditions,
- Excessive dust storms, and
- Rainy conditions (more than 10 mm rain per day).

The Engineer will certify a day lost due to the above climatic conditions or inclement weather conditions only if:

(a) no work on the critical path (delay in critical path) according to the latest approved programme for completion of the works could be carried out during that specific working day or if

(b) only 30% or less of the work force and plant planned for that specific day, could work.

The extension of time as a result of inclement weather and/or abnormal climatic conditions will be calculated monthly as being equal to the absolute value of the number of days certified by the Engineer as lost due to climatic conditions, less the number of days in Table B1215/1. The total extension of time for the contract will be the sum of the monthly extensions.

Extension of time for portions of a month shall be calculated *pro-rata*.

If approved extensions of time extend the completion date beyond the start of the Contractor's holiday in December, the holiday period shall not be considered as working days, as defined in the Contract Data. Any remaining extension of time at this date shall be calculated from the first statutory working day in January the following year, provided that the contractor has shown in his programme that he intends to close during the traditional Christmas / New Year break."

$$V = (Nw - Nn) + [(Rw - Rn) \times X]$$

V = Delay due to rain in calendar days in respect of the calendar month under consideration.
Nw = Actual number of days during the calendar month on which a rainfall of Y mm or more per day has been recorded.
Rw = Actual rainfall in mm for the calendar month under consideration.
Nn = Average number of days in the relevant calendar month, as derived from existing rainfall records provided in the Contract Documentation, on which a rainfall of Y mm or more per day has been recorded.
Rn = Average total rainfall in mm for the calendar month, as derived from existing rainfall records supplied in the Contract Documentation.
X = 20

BA1.2.3.5HANDING-OVER OF THE SITE OF THE WORKS

Add the following :

"Upon the handing-over of the site the Contractor shall immediately assume responsibility for the road reserve within the limits of this contract as set out in the specifications.

Prior to the commencement of work the Contractor and the Engineer shall together carry out a joint inspection of the road section. During such an inspection, notes shall be made of all damaged fences, guardrails, signs and any other notable problems or features that exist at the time of hand-over. The following matters should be agreed at the time of handing-over:

i)The limits, lengths, widths and areas of construction.

ii)The location of kilometer markers and reference beacons

iii) The location of stockpile areas and the responsibilities of the Contractor with regard to the road reserve area and the stockpile sites (fencing, re-establishment, height of stockpile, etc.).

iv) The method of accommodation of public traffic with regard to safety, sight distances, interference with existing road signs and road markings both within the work area and providing advance warning before the work area.

v) The method of construction and supervisory control measures."

BA1.2.3.6LEGAL PROVISIONS

Add the following new paragraph:

"The Contractor shall take note of the new Construction Regulations 2003 recently promulgated under the Occupational Health and Safety Act (Act 85 of 1993) and it's Regulations, in particular the Construction Regulations 2017 No. R. 1010 promulgated 18 July 2003 as well as the COVID 19 Occupational Health and Safety Measures in Workplaces COVID 19 (C19 OHS), 2020, issued by the department of Employment and Labour. The Contractor shall in terms of sub clause 5(1) of these regulations provide a comprehensive health

and safety plan detailing the hazards identified on this project and the procedures required to mitigate, reduce and/or control the said hazards.

The scope of the work to be carried out under this contract is indicated, but not limited to, this section and in other sections of this document and on the drawings and shall include the health and safety specification.

The Contractor shall at all times be responsible for full compliance with the approved plan as well as the Construction Regulations."

BA 1.2.3.10 NOTICES, SIGNS AND ADVERTISEMENTS

Delete the last sentence and replace with the following:

"All signboards erected in accordance with the drawings or as approved advertisements for the Contractor's establishment, shall be removed at the same time as the de-establishment of the Contractor's camp. Payment under sub-item 13.01 for the final installment of 15% of the tendered lump sum shall not be made unless all the advertisements, notices and temporary signs have been removed."

C1.2GENERAL REQUIREMENTS AND PROVISIONS

PART C:MEASRUREMENT AND PAYMENT

Add the following new payment items:

ITEM UNIT

B1.2.11(i) Laboratory tests for Engineer's quality assurance acceptance control .....**Provisional (Prov. Sum)**

B1.2.11(ii) Contractor's handling cost and profit in respect of sub-item B1.2.11(i) .....**Percentage (%)**

Quality assurance control testing will be carried out by an external laboratory as nominated by the Engineer.

Any payment claimed under this provisional sum item shall be certified on the engineer's receipt of the Contractor's submitted tax invoice(s) as received from the Engineer's selected external laboratory. No payment will be considered without an attached associated tax invoice.

The tendered percentage is a percentage of the amount actually spent under the provisional sum item, for the Contractor's handling cost and profit in respect of sub-item B1.2.11(i)."

B1.2.13(i) Occupational Health and Safety Agent for Engineer's quality Assurance/ acceptance control .....**Provisional (Prov. Sum)**

B1.2.13(ii) Contractor's handling cost and profit in respect of sub-item B1.2.13(i) .....**Percentage (%)**

The tendered percentage is a percentage of the amount actually spent under the provisional sum item, for the Contractor's handling cost and profit in respect of sub-item B1.2.13(i)."

SECTION 1.3: CONTRACTOR'S SITE ESTABLISHMENT AND GENERAL OBLIGATIONS

A1.3.3.1 Construction camps

The Contractor shall make his own arrangements for the use of any property outside the road reserve for erection of the construction camp/s, as well as for the provision of adequate means of access, security and the installation and supply of water, electricity and telephone services required by the Contractor.

A1.3.3.2 Housing

The Contractor shall not erect any housing or other accommodation facilities on the site in urban areas and shall make all the necessary arrangements for accommodation of his personnel and site staff off the site.

A1.3.3.3 Maintenance of the Contractor's facilities

The Contractor shall maintain the construction camps and all the Contractor's other facilities in a clean, neat and tidy condition for the duration of the Contract. The Contractor shall also maintain all the access roads to the Contractor's site facilities including any publicly or privately owned roads that the Contractor is making use of. Depending on the initial condition of the access roads this may entail repairing any potholes and edge breaks of surfaced roads or the re-gravelling of the road and subsequently the regular watering, blading and rolling of the surface to maintain a firm surface without excessive corrugations and loose materials. The Contractor shall ensure that the access roads to the Contractor's facilities are always in a safe and passable condition for normal cars under all weather conditions.

A1.3.3.4 Contractor's own security arrangements

The Contractor shall provide all the security measures required for the Contractor's own facilities and equipment on the Site of the Works, including quarries, borrow pits, and for the traffic accommodation site facilities and equipment, as he deems necessary.

A1.2.3.21 Water

The Contractor shall make his own arrangements for procuring, transporting, storing, distributing and applying the water needed for construction and other purposes, except where otherwise specified.
Obtaining water from streams, rivers, dams or boreholes shall be subject to the Contractor obtaining the required permit from the relevant authority.
Obtaining water from a municipal or other water supply authority shall be subject to the Contractor entering into a supply agreement with the relevant supply authority.
The suitability of water for construction purposes shall be determined in accordance with the acceptance parameters given in the following clauses of this Standard Specification:

- Water for earthworks and pavement layers
- Water for stabilisation of pavement layers –
- Water for diluting bitumen emulsion –
- Water for grout
- Water for shotcrete
- Water for concrete structures
- Water for cementitious repair mortar or concrete
- Water for sprayed concrete

A1.2.3.17 Site security

The Contractor is responsible for keeping unauthorised persons off the Site of the Works in accordance with the requirements of the Conditions of Contract. The Contractor shall therefore carefully assess the security measures of whatever nature that may be required at the location of the Engineer's site office and laboratory, the Contractor's offices, stores and workshops, the Site of the Works including quarries, borrow pits, stockpile sites and manufacturing yards as well as any traffic accommodation site facilities and equipment which may be placed on the approaches to / exits from the Site of the Works.

C1.3 CONTRACTOR'S SITE ESTABLISHMENT AND GENERAL OBLIGATIONS
PART C: MEASUREMENT AND PAYMENT

(i) Preamble

The tendered rate for each item shall include full compensation for providing, operating, maintaining and decommissioning upon completion, of all the construction equipment, labour, tools, incidentals and supervision to carry out the activity or construct the works in the item, unless otherwise stated.
Any prime cost or provisional sums shall be paid in accordance with the provisions of the Conditions of Contract. The charge or mark-up tendered or allowed for is a percentage of the amount actually paid under the prime cost or provisional sum. This percentage shall cover all the Contractor's handling, supervision, profit and liability costs to provide the services in the prime cost or provisional sum item. **(ii) Items that will not be measured separately**
There are no activities mentioned in this section that are not measured in this Section.

(iii) Items to be measured and paid for using items specified elsewhere in the specifications

There are no payment related items mentioned in this Section that are measured in other Sections of the specifications. **(iv) Items specifically for this Section of the specifications.**

Item	Description	Unit
C1.3.1	**The Contractor's general obligations**	
C1.3.1.1	Fixed obligations	lump sum
C1.3.1.3	Time-related obligations	month

The lump sums under items C1.3.1.1 and the contract rate per month for item C1.3.1.3 shall together include full compensation for all the Contractor's costs, charges, overheads and profits in respect of all the Contractor's General Obligations as specified in Clause A1.3.2.

The unit of measurement for item C1.3.1.1 is the lump sum. The lump sum shall include full compensation for the fixed part of the Contractor's general obligations, i.e. that part which is substantially fixed and is not a function of the value of the Works or of the time required for the completion of the Contract.

Payment of this lump sum will be made in three instalments, as follows:

- The first instalment, 50 % of the lump sum, will be paid after the Contractor has completed the establishment of the construction camps, site offices, laboratories and housing, has provided the personnel, staff and equipment required to commence the Works in accordance with all the specified requirements and has made a substantial start with construction of the Works in accordance with the approved programme.

- The second instalment, 35 % of the lump sum, will be paid when the value of the Work done reaches one half of the Contract Amount, excluding contingencies and price adjustments in terms of the Contract Documentation.
- The third and final instalment, 15 % of the lump sum, will be paid when the Works have been completed and taken over by the Employer.

A1.5 ACCOMMODATION OF TRAFFIC

The Contractor may not commence any part of the Works until adequate provision has been made for the accommodation of vehicular, nonmotorised and pedestrian traffic. And shall provide and maintain access to all public and private properties which fall within or adjoin the Works at all times.

A1.5.3.3 Lane width

The clear width of any traffic lane which is provided along any section of a detour, a temporary deviation or any partial / half width construction area shall not be less than 3,5 m. If a lane width less than 3,5 m then temporary width restriction warning signs shall be erected at approved locations along the narrow section of the detour, temporary deviation or partial / half width construction areas.

A1.5.3.5 Legal requirements

All traffic accommodation arrangements shall also conform to the specifications and provisions given in the latest edition of the South African Road Traffic Signs Manual (SARTSM) and all other current legislation and regulations.

A1.5.3.6 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 payment items. Such road signs shall conform to the requirements given in Volume 2 of the SARTSM and/or specified in the Contract Documentation or by the Engineer in writing. 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 instruct the Contractor to arrange for advertising in the press, on the local radio stations and/or for other forms of publicity.

A1.5.3.7 Penalty events

Whenever the Contractor fails or refuses to take the necessary steps to ensure the safety and convenience of the public and/or to accommodate the traffic, pedestrians and non-motorised traffic and maintain the temporary detours, deviations, traffic accommodation facilities and traffic safety devices correctly in accordance with all the requirements and specifications given in the Contract Documentation, the Contractor shall be subject to the following penalty conditions:

A1.5.3.9 Right of way

The travelling public shall have the right of way on public roads, existing roads used as detours and on all temporary deviations for the entire contract period. The Contractor shall make use of approved methods to control the movement of the construction equipment and vehicles so as not to constitute a hazard on the road or impede the public right of way.

A1.5.3.10 Safety of the travelling public and the Contractor's employees

The safety of the travelling public, and of the Contractor's and the Engineer's employees is of paramount importance and shall take priority over all aspects of the Works. The Contractor shall be responsible for the safe and easy passage of all vehicular, non-motorised and pedestrian traffic past and/or over the Works in a manner which will protect the road users, pedestrians, the Contractor's employees and the Engineer's employees.

A1.5.3. 11 Services

Services affected by temporary deviations shall be located, protected and relocated in a similar manner as services affected by the permanent Works as specified in Clause A2.1.3.2 of Chapter 2. The requirements given in the Contract Documentation shall also be applicable to any services affected by the construction of temporary deviations.

A1.5.3.12 The use of public roads by the Contractor

The Contractor shall have the right to use public roads, including any detours and temporary deviations open to public traffic, subject to the provisions and restrictions specified in Clause A4.1.7.1 of Chapter 4 and in the Contract Documentation.

A1.5.3.14 Vertical clearance

The minimum vertical clearance over any section of a temporary deviation shall be 5,2 m. If the minimum vertical clearance is less than 5,2 m then approved warning signage shall be erected at approved locations on the overhead obstruction itself as well as in advance of the obstruction. The advance warning signs shall be erected at distances of 1,0 km, 400 m and 200 m in advance of the overhead obstruction.

A1.5.6.3 Traffic safety vehicle

The traffic safety vehicle to be used for transporting, placing, relocating and removing the traffic accommodation facilities and the traffic safety devices shall be a truck with a load capacity of at least 5 tons fitted with:

A1.5.6.4 Traffic safety officer's vehicle

The traffic safety officer's vehicle shall be provided for his sole use to enable him to carry out his supervisory duties.

A1.5.7.3 Accommodation of traffic where the road is constructed in half or partial widths

Where, for reasons related to traffic, geometric or other restraints, the provision of a detour, or the construction of a temporary deviation alongside or in close proximity to the roadworks, is not possible or impracticable, the Contractor shall construct the Works on a half or partial width of the existing road so as to allow public and construction traffic to use that remainder of the road surface which is currently not under construction.

A1.5.7.8 Informing to the road users

The Contractor shall on a continual basis, and at least one week prior to a major event, inform the road users of the intended road Works, construction period and accommodation of traffic arrangements through press releases in local and provincial newspapers and via local radio channels.
Any temporary road closures required for blasting operations, or for any other reason, shall also be advertised on sign boards erected in appropriate positions along the section of road to be closed at least fourteen calendar days prior to each closure.

A1.5.7.9 Lighting of construction access points during night work

Where work is required to be done during the night the Contractor shall make adequate provision for additional lighting to ensure that all vehicle and equipment entry and exit points are adequately lighted. The Contractor shall provide floodlights to ensure that a minimum 200 lux lighting level is provided at all these areas. The floodlights must be mounted on masts at least 9m high to ensure that they illuminate the required areas without being directed into the vision of oncoming drivers.

A1.5.7.12 Traffic safety officer

The Contractor shall appoint a knowledgeable, experienced and conscientious person as his traffic safety officer who shall be responsible for the arrangements and maintenance of all accommodation of traffic measures required for the duration of the contract. The Contractor shall submit details of the person's qualifications, training and experience to the Engineer for comment before appointing him.

CHAPTER 3: DRAINAGE

3.2 CULVERTS

A3.2.3.1 Types of culverts

For the purposes of this specification, the term "culverts" shall mean culverts constructed from

a) Reinforced concrete floors and roofs and reinforced concrete walls, hereinafter referred to as "rectangular concrete culverts". The reinforced concrete floors and/or roofs may be either cast in situ or prefabricated units constructed elsewhere;

b) Reinforced concrete floors and roofs and reinforced brickwork walls, hereinafter referred to as "rectangular brickwork culverts". The reinforced concrete floors and/or roofs may be either cast in situ or prefabricated units constructed elsewhere;

c) Prefabricated reinforced concrete pipes with circular sections, hereinafter referred to as "concrete pipe culverts";

d) Prefabricated reinforced concrete culverts other than pipe culverts hereinafter referred to as "prefabricated portal culverts", generally of combined wall and roof prefabrication. The reinforced floors may be either cast in situ or prefabricated units constructed elsewhere. These culverts are generally of rectangular construction;

e) Prefabricated corrugated metal pipes and pipe arches, hereinafter referred to as "metal culverts".

f) U-PVC pipes with circular section, hereinafter referred to as "U-PVC culverts"

g) Other types of culverts not included above, if required, shall be specified in the Contract Documentation

A3.2.5 MATERIALS

A3.2.5.1 General material specifications

The material specifications are the required specifications for the materials as placed and/or processed in its final position.

It is the Contractor's responsibility to ensure that the materials delivered to the site shall meet these specified requirements.

Prior to the manufacture of any prefabricated units by the Contractor's manufacturer, the manufacturer shall submit his Quality Plan to the Engineer to verify that all prefabricated units will be manufactured in full compliance with the relevant SANS requirements. No prefabricated units shall be ordered until the Engineer has satisfied himself that the proposed units have been or will be manufactured to the required specifications and tolerances as well as the load bearing requirements. In particular the manufacturer shall check each prefabricated portal culvert unit for steel cover compliance, and random checking of units shall not be accepted. The Engineer's representative may visit the factory at any stage to ascertain adherence to the quality plan. Should the manufacturer fail to adhere to their Quality Plan the Engineer may exercise the right to reject the use of products from the manufacturer concerned. No claim from the Contractor for any resultant cost or delay due to such rejection, and due to procurement from a new manufacturer, shall be entertained.

Materials removed under this Section from existing works, except where excavated materials are specified to be reused or disposed of, or except where provision has been made in Part C for their reuse or specific disposal, shall be deemed to be the property of the Contractor.

A3.2.5.2 Culvert materials

a) In situ concrete

All concrete work shall be carried out in accordance with the requirements of Section A13.4 of Chapter 13 of these specifications, read together with the provisions of Clause A3.1.5.4.

b) Prefabricated portal culverts and prefabricated in/outlet, floor and roof slabs units

The prefabricated units shall comply with the requirements of SANS 986.

For durability requirements, all durability testing shall be done in accordance with Clause A20.1.5 for testing and Clause A20.1.7 for assessment in Chapter 20 and shall fall within the severe category. For units within the 5,0 km zone from the coast the very severe category shall be used and increased cover shall be as specified by the Engineer.

Portal and rectangular prefabricated units shall be transported and handled with sufficient care to prevent stressing, cracking or damage to the unrestrained elements of the units. Cracks or damage shall constitute adequate reason for rejection by the Engineer or required confirmation by the manufacturer of their serviceability.

All broken, bent, chipped, cracked, dented, corroded or otherwise damaged or substandard units shall be repaired to the Engineer's specification or, where this is not acceptable or does not comply to the SANS specification, they shall be removed and replaced with undamaged units, at the Contractor's cost.

Slab units which are thinner than the specified thickness, or which may exhibit signs of substandard work shall be removed and replaced with units which conform to the specifications.

c) Prefabricated concrete pipe culvert units

Prefabricated concrete pipe culvert units shall comply with the requirements of SANS 677. Pipes with ogee joints shall be provided, unless otherwise specified.

All broken, bent, chipped, cracked, dented, corroded or otherwise damaged or substandard units shall be repaired to the Engineer's specification or, where this is not acceptable or does not comply with the relevant SANS specification, they shall be removed and replaced with undamaged units, at the Contractor's cost.

d) Brickwork

Bricks shall be engineering bricks conforming to the requirements of SANS 227. Bricks may be manufactured on site or elsewhere. The limit for water absorption in the 24 hour immersion test shall be 8 % maximum.
All bricks shall be unbroken, except where required as closers.

e) Plaster

Plaster shall consist of one part of CEM I class 32.5 cement to four parts of approved fine sand, and shall conform to the requirements of SANS 2001.

f) Manhole covers, grid inlets, frames, etc.

Manhole covers and frames, grid inlets and accessories of metal, or non metal composition shall be supplied and/or manufactured in accordance with the details shown on the drawings and be of the size and type indicated. Frames, grid inlets and covers which are of project specific requirements shall be manufactured and installed as indicated on the drawings, and all steel elements shall be galvanised in accordance with SANS 121. Frames, grids/gratings covers and accessories of cast iron, synthetic or composite materials shall comply with the requirements of SANS 558, SANS 1115, or SANS 50124 and be of the strength class, size and type specified, Before fixing cast iron manhole covers and frames, they shall be dipped in an approved preservative and gratings and frames painted with two coats of bituminous paint.

g) Corrugated metal culvert units

Corrugated metal culverts shall either be supplied fully assembled; or as unassembled nestable arch or circular segments, in which case they shall be assembled in accordance with the manufacturers specifications. The manufacturer's specifications shall be provided to the Engineer prior to the start of any assembly.

Metal culverts shall be supplied with inlet and outlet ends finished by one of the following two methods, whichever is shown on the drawings or has been specified:

Where no concrete inlet and outlet structures but only beveled pipe ends are required, inlet and outlet units shall be beveled to suit the skew angle of the culverts and the side slope of the fill and pavement. Such beveled units shall be machined and shall receive full corrosion protection treatment after such machining.

Where in situ concrete inlet and outlet structures are required, the ends of the culvert units shall be cut to the required plan skew angle (if any) and provided with anchor bolts projecting radially around the edge as shown on the drawings for bonding the metal culvert into the concrete inlet and outlet structures.

The Contractor shall not store any nestable culvert units on the site in such a manner that moisture can accumulate between the contact faces of the nested units, as this may adversely affect the spelter coating and render the units liable to rejection. Any units damaged by corrosion shall, if not rejected, be repaired by cleaning all affected areas and applying at least two coats of an approved zinc-rich epoxy primer which complies with the requirements of SANS 926, in accordance with the manufacturer's instructions, or as directed by the Engineer.

Uneven joints, distorted shapes, deviations from a straight centre line, irregular or diagonally ruptured sides, loose rivets, rivets not in line or irregularly spaced, poorly finished rivet heads, illegible trade marks, or a lack of rigidity.

h) Protective coating for metal culverts

Metal culverts shall have a protection coating as specified in the Contract Documentation or indicated on the drawings, and may be of galvanized, aluminized or polymer coatings to the specified thickness. Where soil or water conditions are likely to cause excessive corrosion of metal culverts, the Engineer may prescribe that prefabricated units be protected by the application of a mastic asphalt protective coating. The coating shall be applied to either the inside, the outside or to both sides of the metal culvert units as may be directed by the Engineer.

The mastic asphalt shall contain fibres and filler and shall be supplied as a spray or brush-grade material as prescribed.

The surfaces to be protected shall be cleaned to remove all moisture, dirt, all, paint, grease, alkalis, rust, mill scale or other deleterious matter.

The material shall be thoroughly mixed until all fibres and filler are uniformly distributed.

Spray-grade mastic shall be applied by means of an airless gun and shall be of a suitable consistency without the addition of a harmful amount of thinners.

Brush-grade mastic shall be applied with an ordinary roofing brush, with the second coat being applied at right angles to the first coat.

The final film thickness measured on the crest of corrugations shall be a minimum of 1,3 mm or such other thickness as may be specified.
Care shall be taken not to damage the protective coating, and all damage to the coating shall be repaired before the culvert is put to use.

i) U-PVC culverts

U-PVC culverts shall comply to the requirements of SANS 791 for solid wall pipes (category-heavy duty), and shall have socketed ends should joining be required.

j) Alternative culvert materials

Alternate culvert materials, if any, shall be specified and detailed in the Contract Documentation.

A3.2.5.3 Skewed ends

Where culverts are to be constructed at a skew angle, the prefabricated culvert units at the inlet and outlet of the culvert shall be supplied with skew ends by the manufacturer, if required. The cutting of skew ends on the site shall not be allowed.

Prefabricated portal and rectangular culverts placed on a skew shall be constructed with cast in-situ skewed ends as shown on the drawings. Insitu skew ends are to be constructed simultaneously with the wingwalls and headwalls.

A3.2.5.4 Prefabricated energy dissipaters in outlet structures

Where shown on the drawings, the Contractor shall supply and install in the outlet structures, prefabricated reinforced concrete energy dissipaters of class C25/30-20 concrete with dimensions as shown on the drawings. All concrete work shall comply with the requirements of Section A13.4 of Chapter 13.

A3.2.5.5 Fine granular material

Wherever the use of fine granular material is specified in this section for the bedding of the prefabricated concrete floor slabs of the culverts, it shall mean sand or other cohesionless material, all of which shall pass through a 7,0 mm sieve and not more than 10 % of which shall pass through a 0,15 mm sieve.

A3.2.7 EXECUTION OF THE WORKS

A3.2.7.1 Construction methods

Where clearing and/or grubbing and the removal of trees is specified by the Engineer, it shall be executed as specified in Section A1.6 of Chapter 1.

Prefabricated culverts shall be installed by either -

The "trench method", where the units are laid in a trench excavated below the existing ground level or in a trench excavated in constructed subgrade and, if necessary, subbase layers, or, in the case of an existing road, in a trench excavated through all road layers;

or

The "embankment method", where the units are laid approximately on the existing ground surface or on a prepared bedding and the subgrade is then constructed on either side and over the culvert.

If lengthening of existing culverts are specified such lengthening shall generally be according to the "embankment method". The Contractor shall at all times ensure that the existing drainage is at all times maintained and any damage caused as a result of blocked culverts during construction shall be repaired at the Contractor's cost.
All new prefabricated culverts/portals shall be installed by the “trench method”, unless specified otherwise by the Engineer.

The bottom of the excavation for culverts that are to be replaced or lengthened shall be inspected by the Engineer prior to the placing of the bedding material.

Where the material is found to be unsuitable, it shall be removed to a depth specified by the Engineer and then replaced with selected material compacted to at least 93 % MDD in layers not exceeding 150 mm thickness.

Design invert levels of drainage culverts shall be verified on site by the Engineer with the assistance of the Contractor before installation of new or lengthened culverts may commence.

In all cases where soft founding material is classified as suitable for bedding construction, the in-situ material shall be scarified, moistened and compacted to a depth of 150 mm below founding level to 90 % or 93 % MDD, as specified by the Engineer. The depth of preparation and compaction of founding material shall be as indicated on the drawings or as specified by the Engineer.

The larger sizes of portal or rectangular culverts shall normally be constructed by the embankment method. Surface drainage shall be controlled by the construction of temporary earth berms and drainage diversion channels.

The Contractor shall strictly comply with all the appropriate statutory safety provisions in regard to trench excavations.

A3.2.7.2 Excavation for construction by trench method

a) Classification of Materials

All excavation classification of materials in this Section shall be as specified in Clause A3.1.7.1.

b) Excavation

All excavations for culverts shall be excavated in the position and to the required dimensions. Overbreak in width or depth, unless specified by the Engineer, shall be in filled by the Contractor and shall not be measurable for payment.

In the case of culverts to be constructed by the trench method, the Contractor shall first construct the fill, subgrade and, if necessary, the subbase to such level as will provide a minimum cover, above the proposed level of the top of the culvert. Road base layers shall not be constructed before the culvert and backfill have been completed. Before trench excavation may commence, the minimum height of fill construction over the top of a proposed concrete culvert shall be 100 mm or such greater height as may be indicated on the drawings, whichever is the greater for metal culverts, this minimum height shall be 0,25 times the diameter of the pipes, or 0,25 times the span of pipe arches. The Contractor may then commence excavating the trench for the culvert from the downstream end. Excavation less than 1,5 m deep shall be done either by using labour enhanced construction methods or by using conventional construction methods, as specified and measured in the schedule of quantities. Excavations shall be continuously monitored and assessed for stability and safety and if any risk of instability is evident the Contractor shall not proceed with culvert excavation until safe working conditions have been re-established. The Engineer should be informed of all the actions taken in this regard.

The amount by which the excavation is to exceed the proposed level of the invert of the culvert shall be sufficient to allow the type and thickness of bedding material to be placed as specified or as indicated on the drawings.

The minimum amount by which the excavation shall be deeper than the proposed level of the bottom of the culvert floor slab shall be 75 mm in the case of culverts with prefabricated invert slabs. In the case of culverts with cast in situ invert slabs, the excavation shall exactly accommodate the floor slab.
Notwithstanding the above, the base layer shall not be constructed before the culvert and the backfill have been completed.

c) Width of excavation

The width of excavations shall be sufficient to allow the bedding, proper construction and backfilling of culverts. The width of the excavation for each size of culvert shall be as shown on the drawings or as may be prescribed by the Engineer in writing.

d) Excavation by hand

Where the circumstances prevent the use of mechanical excavators due to possible damage to existing works and soft material can only be removed by hand tools, the Engineer shall authorise the excavation by hand should he be satisfied that the Contractor had been unable to prevent the necessity for excavation by hand by proper planning and precautionary measures. Payment for this hand excavation shall be made under excavation using labour enhanced construction methods in terms of B3.2.7.2.

e) Drainage of excavations

The Contractor shall, in terms of Clause A1.2.3.19 of Chapter 1, apply suitable, effective drainage and dewatering methods for preventing the ingress of water into the excavation and to keep them dry.

Drainage methods, with the exception of pumping, shall be maintained until the backfilling has been completed. Between various construction stages, pumping may be interrupted in consultation with the Engineer.

Any draining or pumping of water shall be done in a manner to preclude the concrete or materials or any part thereof from being eroded.

A3.2.7.3 Preparation for construction by the embankment method

Where culverts are to be constructed by the embankment method as defined in Clause A3.2.7.1 the Contractor shall level the existing ground by excavating, filling and compacting as may be necessary so as to provide exactly the required slope and a uniform density over the entire length of the culvert. Where excavation is required for the founding of culverts, such excavation shall be done in accordance with Clause A3.2.7.2.

The finished level of the ground for the bedding of the culvert shall be not lower than 75 mm in the case of culverts with prefabricated invert slabs.
In the case of culverts with cast in situ invert slabs, the level shall exactly accommodate the floor slab.

A3.2.7.4 Unsuitable founding conditions

Where the bottom of the trench does not provide a suitably firm foundation for the culvert on account of soft, unstable, or otherwise unsuitable material being encountered, the unsuitable material shall be excavated to a depth below the bottom of the culvert as may be indicated by the Engineer. The Contractor shall excavate the unsuitable material to the depth indicated and shall replace it with an approved material properly compacted to provide a firm foundation layer.

The width of the excavation and foundation later shall be as prescribed by the Engineer, but in the case of culverts to be constructed by the embankment method, the width shall be wider by at least one culvert diameter on each side of the culvert or set of culverts.

Other special construction methods may be shown on the drawings or specified in the Contract Documentation in specific cases.

A3.2.7.5 Disposal of excavated material

Where excavated material does not comply with the requirements for backfilling material as specified hereinafter or is surplus to backfilling requirements, such excavated material shall be removed from the site and disposed of in approved spoil areas or at such other places as directed by the Engineer.

Material suitable for use in the works, however, shall be used as prescribed by the Engineer.

Payment for such material will be made as for excavation under item C3.2.1, and also under the appropriate item for such part of the works as may be constructed from such material.

All excavated material shall be subject to the load and haul provisions specified in Section A1.7 of Chapter 1.

A3.2.7.6 Construction of culverts

a) General requirements

The construction of culverts shall be commenced at one end of the culvert, the position of which shall be fixed as shown on the drawings or as prescribed by the Engineer.

Units which have been deformed or cracked, or which are not constructed to the required lines, levels and grades, or which become displaced in the process of the work or during the contract period, shall be removed and replaced by the Contractor at his own cost.

Prefabricated slabs shall be lifted and handled by means of approved lifting devices only. During such procedures all relevant safety regulations shall be adhered to. Lifting eyes shall be caulked with a suitable mortar after the units have been installed. All lifting holes shall be filled with cement mortar and covered with class 3 geotextile.

The Contractor shall exercise due care not to damage, overstress or displace any culvert or prefabricated slab with his own traffic or compaction equipment. Where loads exceeding those prescribed in the appropriate statutory provisions are likely to pass over completed culverts, the Contractor shall provide additional cover over the culverts so as to ensure that the design stresses on the culverts will not be exceeded.

All concrete work shall be carried out in accordance with the provisions of Section A13.4 of Chapter 13 of these specifications.

b) Rectangular concrete and brickwork culverts

i) Cast in situ floor slabs

Cast in situ floor slabs shall be constructed to the dimensions and at the locations as shown on the drawings or as may be prescribed by the Engineer. They shall be reinforced with steel reinforcement as detailed on the drawings. Joints of the types detailed on the drawings shall be formed in the floor slabs, as well as between the floor slabs and the inlet and outlet structures.
Where specified by the Engineer a screed layer shall be cast to the specified dimensions and details, prior to casting the floor slab.
In addition, longitudinal construction joints as shown on the drawings between the invert slabs of each the barrels of multiple culverts are required. Allowance for Class F1 surface finish and soft board in these joints is made in the schedule of quantities. No payment shall be made for formwork on the outside edges of invert slabs (closest to the excavated face).

ii) Prefabricated floor slabs

A layer of fine-grained material at least 75 mm thick shall be placed on the bottom of the excavation or backfilled bedding, levelled, compacted and trimmed to line and grade, to form a bed to receive the prefabricated slabs.

The slabs shall be carefully placed on the prepared bed, true to line and grade, and so bedded that they will be uniformly supported over their whole area on the bedding.

iii) Concrete walls for concrete culverts

Cast in situ concrete walls shall be constructed to the dimensions and at the locations as shown on the drawings or as may be prescribed by the Engineer. They shall be reinforced with steel reinforcement as detailed on the drawings. Joints of the types detailed on the drawings shall be formed in the walls, and between the wall and the inlet and outlet structures.

iv) Brickwork walls for brickwork culverts

Culvert walls constructed from engineering bricks shall be to the dimensions as shown on the drawings or as may be prescribed by the Engineer. Brickwork may be reinforced with steel or wire reinforcement, if and as detailed on the drawings.

Brickwork shall be built in English bond in a mortar consisting of one part of CEM I class 32.5 cement and six parts of sand, or in stretcher bond where its thickness does not exceed 115 mm. It shall be well and regularly bonded without any false headers. All engineering bricks shall be unbroken, except where required as closers. Engineering bricks shall be well wetted before laying and each brick shall be pressed into its bed so as to leave a finished joint not exceeding 10 mm in thickness. All joints shall be filled solid with mortar, and joints for exposed faces shall be pointed as the work proceeds.

Where pipes enter brickwork, such pipes shall be thoroughly caulked into the wall and rendered with mortar.

v) Plaster for brickwork culverts

Where the plastering of brickwork is required, all joints shall be well raked out and the brick face thoroughly wetted before plaster is applied. Plaster shall not be less than 12 mm or more than 20 mm thick. Plaster finish shall be smooth and even and shall not show any trowel marks. Unless otherwise specified, all plaster shall be finished with a steel trowel.

Plaster shall be cured for at least 48 hours, where after installation of roof slabs may commence.

vi) Cast in situ roof slabs

Cast in situ roof slabs shall be constructed to the dimensions and at the locations as shown on the drawings or as may be prescribed by the Engineer. They shall be reinforced with steel reinforcement as detailed on the drawings. Joints of the types detailed on the drawings shall be formed in the roof slabs, coinciding with similar joints in the floor slabs, and between the roof slabs and the inlet and outlet structures.

vii) Prefabricated roof slabs

The prefabricated concrete roof slabs shall be placed accurately and symmetrically on the concrete walls, with a thin layer of mortar of one part of CEM I class 32.5 cement and six parts of sand between the contact surfaces to ensure a firm and uniform support.

The units shall be butted end to end with butt joints, which joints shall be covered with two layers of grade 3 geotextile as specified in Section A12.11 of Chapter 12, pre-impregnated with a bituminous emulsion, or a similar approved material. The strip of geotextile shall be at least 150 mm wide and placed symmetrically over the joint. The units shall first be treated with a primer of 60 % bitumen
emulsion over the width of the strip of geotextile.

Where two or more roof slabs are placed side by side to form a multi-barrel culvert, the space between the slabs, if any, shall be filled with concrete up to the level of the top of the slab. Alternatively, such joints shall be sealed as for butt joints.

A3.2.7.7 Laying and bedding of prefabricated culverts

a) Concrete pipe culverts

Prefabricated concrete pipe culverts shall be laid on Class A, B, C or D bedding as shown on the drawings or as specified. The pipe ends shall be laid hard up against each other so as to obtain tight joints. Ogee pipes shall be laid with their spigot ends pointing downstream. The joints shall be sealed on the outside with two layers of bitumen-impregnated grade 3 geotextile as specified in Section A12.11 of Chapter 12.

The insides of the culverts shall be smooth and without any displaced joints. All pipes shall be laid true to line and level.

i) Class A bedding

The pipe shall be laid with its bottom part on a C20/25-20 concrete bedding cradle of specified thickness below the lower part of the pipe, which concrete shall extend upwards on both sides of the pipe to a specified portion of its height, as shown on the drawings.

Before concreting, the pipes shall be supported on suitably shaped cradles at the correct level. No longitudinal construction joints on the horizontal plane will be permitted.

ii) Class B and Class C beddings

The pipe shall be laid on a bedding cradle of compacted selected granular material as specified. The bedding shall extend upwards on both sides of the pipe to a specified portion of its height, as shown on the drawings. Grooves for thickened pipe ends, if applicable, shall be formed in the bedding cradle for pipe sockets and couplings, to ensure that each pipe is fully supported throughout the length of its barrel on the bedding cradle.

iii) Class D bedding

The pipe shall be laid on the in situ material in the excavation bottom after the bottom has been hand trimmed to support the pipe along the entire length of its barrel in accordance with the details shown on the drawings. Wherever necessary, the in situ material shall first be stabilised in accordance with the details shown on the drawings or as prescribed by the Engineer. Grooves for thickened pipe ends, if applicable, shall be formed in the trench bottom for pipe sockets and couplings, to ensure that each pipe is fully supported throughout the length of its barrel on the bedding cradle.

iv) Rock foundation

Where rock, shale or other hard material is encountered on the bottom of excavations, the installation of pipes on Class B bedding shall proceed as follows:
The material below the pipe shall be excavated and replaced with a bed of sand or approved gravel or soil to a depth as shown on the drawings or prescribed by the Engineer. Such material shall be classed as backfill for purposes of payment.

The backfill material shall be watered and compacted to provide a firm earth foundation. Class B bedding shall then be prepared as described in Clause A3.2.7.7a)(ii).

v) Concrete casing

Where shown on the drawings or specified by the Engineer, pipes shall be fully encased in concrete according to class and dimensions as shown on the drawings or as ordered by the Engineer. Supports shall be provided close to the pipe ends to support the pipes during the placing of concrete. The concrete shall be so placed as to fill all spaces below and around the pipe completely.

Poker vibrators shall be used for this purpose. Concrete casing shall be cast in one continuous operation until completed.

b) Prefabricated portal culverts

i) Cast in situ floor slabs

Cast in situ floor slabs shall be constructed to the dimensions and at the locations as shown on the drawings or as may be prescribed by the Engineer. They shall be reinforced with steel reinforcement as detailed on the drawings. Joints of the types detailed on the drawings shall be formed in the floor slabs, as well as between the floor slabs and the inlet and outlet structures.
Where specified by the Engineer a screed layer shall be cast to the specified dimensions and details, prior to casting the floor slab.

In accordance with the drawings, transverse construction joints are required in cast in situ concrete invert slabs for portal culverts. In addition, longitudinal construction joints as shown on the drawings between the invert slabs of each the barrels of multiple culverts are required. Allowance for Class F1 surface finish and soft board in these joints is made in the schedule of quantities. No payment shall be made for formwork on the outside edges of invert slabs (closest to the excavated face).

ii) Prefabricated floor slabs

A layer of fine-grained material at least 75 mm thick shall be placed on the bottom of the excavation or backfilled bedding, levelled, compacted and trimmed to line and grade, to form a bed to receive the prefabricated slabs. The slabs shall be carefully placed on the prepared bed, true to line and grade, and so bedded that they will be uniformly supported over their whole area on the bedding.

iii) Placing the portal portions of culverts

The portal portions of portal and rectangular culverts shall be placed accurately and symmetrically on the floor slabs, with a thin layer of mortar of one part of CEM I class 32.5 cement and six parts of sand between the contact surfaces to ensure a firm and uniform support.

The units shall be butted end to end with butt joints, which joints (both horizontally and vertically) shall be covered externally with two layers of grade 3 geotextile as specified in Section A12.11 of Chapter 12, pre-impregnated with a bituminous emulsion, or a similar approved material. The strip of geotextile shall be at least 150 mm wide and placed symmetrically over the joint. The units shall first be treated with a primer of 60 % bitumen emulsion over the width of the strip of geotextile.

Where two or more culverts are placed side by side to form a multi-barrel culvert, the space between the culverts shall be filled with concrete up to the level of the top of the culvert.

c) Metal culverts

The excavation shall be trimmed to the shape of the invert of the culvert and a bed of fine granular material not less than 75 mm thick shall be placed, compacted and shaped to enable the culverts to be bedded as shown on the drawings.

Where rock is encountered, the depth of excavation shall extend to a depth of at least 200 mm below the invert of the culvert, and shall be filled with granular material as before.

The culverts shall be assembled and installed in accordance with the manufacturer's recommendations as specified by the Engineer. Where these specifications are inconsistent with the manufacturer's recommendations, these specifications shall have preference. Anchor bolts shall be installed at the ends of metal pipe culverts in accordance with the manufacturer's instructions to bond them into inlet and outlet head walls, which head walls shall be constructed as soon as possible after installation of the culverts.

No concrete bedding or casing shall be used in the installation of metal culverts.

Where prescribed, the inner invert of metal culverts with diameters or spans exceeding 1 500 mm which are laid on steep grades shall be protected with a layer of concrete with dimensions and class as shown on the drawings.

A3.2.7.8 Extension of existing culverts

Where an existing portal or rectangular culvert requires extension, the new section shall be constructed at the same grade and, where it joins the existing structure, at the same level as the existing structure.

Any sections of existing wing walls, approach slabs and head walls, which may obstruct any new work, shall be demolished and removed. Existing culvert ends shall not be damaged, but should damage occur, the repair work shall be done before the placement of any fresh concrete or construction of the new culverts. Loose material shall be removed and joint faces thoroughly cleaned to the satisfaction of the Engineer.

Joining shall be done in accordance with Clause A3.2.7.13. After completion of the extension of a culvert, new approach slabs, head walls, wing walls, catchpits, etc, shall be constructed in accordance with the drawings and Clause A3.2.7.11.

A3.2.7.9 Construction of culverts in half widths in existing roads

If necessary for accommodation of traffic or for any other reasons, or if so specified by the Engineer, culverts shall be constructed in half widths.

Unless otherwise prescribed, the downstream section shall be constructed first. The end of the excavation adjoining the traffic lane shall be properly supported and shored up to prevent displacement or collapse from occurring. The necessary warning signs and barriers shall be erected in accordance with the requirements of Section A1.5 of Chapter 1. No such work may be commenced with before safety barriers and traffic signs have been erected.

Where the culvert is constructed in an existing road and it has been so prescribed by the Engineer, each of the pavement layers at least shall be benched and recompacted during backfilling. The depth of benching shall equal the respective layer thicknesses, and the width shall be at least 150 mm.

A3.2.7.10 Backfilling of culverts

After the culverts have been constructed as described in Clauses A3.2.7.6 and A3.2.7.7, backfilling shall be carried out as follows:

No backfilling of a brickwork or in situ concrete structure may be done for a period of at least 7 days after the structure has been completed, unless otherwise specified or directed by the Engineer. No backfilling of a brickwork structure may be done until the roof slab has been installed.
The material used for the backfilling of those portions of culverts subject to traffic loads shall be selected material of at least subbase quality or such other lower quality as may be permitted by the Engineer. Where the excavated material is not of adequate quality, selected material shall be imported for this purpose. The Contractor shall, in advance, ascertain from the Engineer as to which portions will require selected-quality material for backfilling.

Backfilling alongside and over all culverts shall be placed at optimum moisture content and compacted in layers not exceeding 150 mm after compaction, to a density of at least the density required for the material in adjoining layers of fill, subgrade and subbase. The density of backfilling in excavations made in natural ground shall be at least 93 % of MDD.

Backfilling shall be carried out simultaneously and equally on both sides of a culvert to prevent unequal lateral forces from occurring.

Whenever specified or as may be specified by the Engineer, a wet or a stiff mixture of soil cement in lieu of a compacted gravel placed between the side of the culvert and the excavation up to the top of the culvert shall be used.

The wet mixture of soil cement shall consist of an approved soil or gravel mixed with 5,0 % of CEM II class 32.5 cement and only sufficient water to give a consistency that will permit the soil cement to be placed with vibrators, so that all voids between the culverts and the sides of excavations and between culverts in the case of multi-barrel culverts will be properly filled. A stiff mixture of soil cement shall contain 3,0 % of CEM II class 32.5 cement and just sufficient water for it to be placed and compacted like ordinary backfill material. The height to which the soil cement backfill shall be taken shall be as prescribed by the Engineer or shown on the drawings, and any remaining backfill shall be carried out as described
above with selected material.

The material used for soil cement shall preferably be a sandy material but may contain larger particles up to 38 mm, and it shall not have a plasticity index exceeding 10. Detrimental percentages of silt or clay shall be avoided, and where the excavated material is not of adequate quality,
the material shall be obtained from an approved source.

The soil cement shall be mixed on the site with suitable concrete mixers, and the water and cement contents shall be carefully controlled. Should the Contractor provide adequate quality control mechanisms for hand mixing, the Engineer may approve alternative mixing methods. The material shall be placed and then thoroughly compacted so that all voids are filled as described above. At culvert ends stones shall be packed to prevent the soil cement from flowing beyond the required limits.

CHARPTER 4: EARTHWORK & PAVEMENT LAYERS: MATERIALS

SECTION 4.1: BORROW MATRIALS

A4.1.5.7 Requirements for types G4 to G6 materials for the pavement layers

Gravel, natural occurring or modified or processed, types G4 to G6 materials shall be classified according to the requirements in the Table A4.1.5-4. (Refer to COTO document).

A4.1.5.12 Wearing course gravel material

Gravel material other than calcrete for the wearing course of an unsealed road shall comply with the requirements in Table A4.1.5-11.

Table A4.1.5-11: Requirements for gravel wearing course material other than calcrete (1)

Property	Requirement	
	Rural and urban roads	Mine or forest haul roads for heavy vehicles
Description of material	Natural gravel or crushed material except calcrete	
Maximum particle size	37,5 mm	50 mm
Oversize index (I0)	N/A	≤ 5%
Grading coefficient (Gc)	15 – 35	20 – 35
Shrinkage product (Sp)	100 – 240	100 – 240
PI on the P0,425 fraction	6 – 12	6 - 12
Strength (CBR at % of MDD)	CBR ≥ 15 % at 95 %	CBR ≥ 25 % at 95 %
Treton impact value	20 % – 65 %	20 % – 65 %
Io = Percent retained on 37,5 mm sieve. Gc = (Percent passing 28 mm sieve – percent passing 2,0 mm sieve) x percent passing 5,0 mm sieve/100. Sp = Linear shrinkage x percent passing 0,425 mm sieve.		

SECTION 4.4: COMMERCIAL MATERIALS

A4.4.3.1 Employer identified commercial materials

a) Materials from commercial suppliers

The Employer may identify and include test results of compliant materials from commercial suppliers in the Contract Documentation. However, the Contractor shall still be responsible for sourcing the material and for ensuring the sufficiency in quantity and quality of the material intended for use in the contract.

The Employer will usually not conclude any arrangements with these commercial suppliers, and the Contractor shall enter into negotiations with them and conclude contracts for the price, payments, rate of supply and the like.

Once the Contractor has chosen one or more of the commercial suppliers identified by the Employer, further dealings with the supplier and procuring the material shall be undertaken by the Contractor.

b) Materials from private or non-commercial suppliers

The sources and results of any material testing of materials from private or non-commercial suppliers that have been identified by the Employer, will be included in the Contract Documentation. This information is indicative as to the sufficiency in quality and quantity of the material.

The Contract Documentation shall also specify the arrangements made with the suppliers and specifically those that the Contractor must comply with, and any further negotiations that the Contractor shall conclude.

A4.4.3.2 Contractor identified suppliers or sources

When no commercial sources are identified by the Employer in the Contract Documentation or if so instructed, the Contractor shall identify compliant material sources. The Contractor can also identify compliant commercial or private / non-commercial material sources, or material from the Contractor's own sources, other than those identified by the Employer for utilisation in the works as an alternative material source.

Proof of the approvals and authorisation by the appropriate authorities for the commercial or private / non-commercial sources identified by the Contractor, as applicable, shall be provided by the Contractor.

The Contractor shall be responsible for all contractual and legal matters pertaining to ordering, loading, delivering and paying for materials obtained from the Contractor identified commercial or private / non-commercial suppliers.

The Contractor shall also ensure compliance by the suppliers of commercial or private / non-commercial materials that the necessary negotiations have been concluded with other interested and affected parties, as well as any land acquisitions, royalty payments and any special conditions imposed by these parties. If required, the Contractor shall submit proof or confirmation of all approvals and agreements before delivering any commercial materials to the site.

When the Contractor is responsible to procure commercial materials, test results of the natural material as prescribed shall be submitted to the Engineer to assess. The Engineer shall then declare the material fit for use before it can be sourced.

CHARPTER 5: EARTHWORK & PAVEMENT LAYERS CONSTRUCTIONS

SECTIONS 5 .1: ROADBED

BA5.1.3.1 ROADBED MATERIAL INVESTIGATION

The geotechnical information provided in the Contract Documentation for the roadbed reports the results of site investigations including the excavation of test pits and/or drilling, and laboratory tests conducted by or on behalf of the Employer. This provides information as to the quality of the roadbed material and the type of roadbed treatment required.

The Engineer shall give final instructions regarding any additional investigation and testing requirements and the treatment of the roadbed materials prior to the commencement of the programmed roadbed construction period. If any undocumented roadbed conditions are found during construction, the Engineer shall be notified immediately so that any further instructions that may be required, can be issued.

The road prism must be surveyed and correctly staked before any roadbed related operations commence to ensure that the correct extent of roadbed is demarcated for treatment.

Add the following:

'Visual assessments for existing road conditions have been done of the gravel roads, it is envisaged that ground conditions are favourable. However additional testing of suspect ground conditions will be conducted in certain areas and roadbed treatment adjusted accordingly."

A5.1.3.2 Roadbed construction

The Contractor shall take due cognizance when programming roadbed construction as to whether the work may be able to be carried out as fullwidth construction or if the work may only be able to be done as partial-width construction or carried out under other restrictive conditions.

A5.1.3.3 Ground improvement or specialist roadbed treatment

The various types of ground improvement specified for the roadbed are:

- Geotechnical grouting,
- Jet grouting,
- Compaction grouting,
- Dynamic compaction,
- Rapid impact compaction,
- Vibro-compaction,
- Underpinning,
- Preloading and monitoring, and
- Geosynthetics

A5.1.5 MATERIALS

A5.1.5.1 Remove unwanted material

Prior to construction or treatment of the roadbed, the in-situ roadbed material shall not contain any of the following materials listed hereunder. These unwanted materials shall be removed to a designated spoil site.

- Organic materials, grass and shrubs;
- Wood chippings, tree bark and roots;
- Plastic (bags, polystyrene and so forth);
- Refuse or other non-compliant material;
- Free asbestos; or

- Any of the hazardous material

A5.1.5.2 Topsoil

Topsoil shall be obtained from wherever suitable topsoil material occurs within the road prism ahead of the roadbed construction and within the road reserve.

A5.1.5.3 Collapsing soil material

The following types of material exhibit a collapsible structure and may form part of the roadbed in some areas:

- Certain types of Kalahari sands, other aeolian sands and transported sands.
- Some alluvial and sedimentary soils.

Features most commonly associated with collapsible soils include:

- An open soil structure;
- A high void ratio ('void ratio' is the ratio of 'volume of voids to the volume of solids');
- A low dry density;
- A high porosity;
- Geologically young or recently altered deposit;
- Low inter-particle bond strength.

Table A5.1.5-1 provides an indication of the collapse potential of a soil in terms of key soil properties.

Table A5.1.5-1: Soil property collapse potential (CP) indicators

Soil Property	CP indicators
Maximum dry density / MDD (kg/m3)	< 1600
% passing 2,0 mm and retained on 0,075 mm sieve opening	> 60 %
% passing 0,075 mm sieve opening	< 20 %
In place relative density as % of MDD	< 85 %

Where required an inspection pit shall be dug and the material sampled. An undisturbed sample for carrying out a single oedometer test shall be taken. The single oedometer test, also known as the collapse potential (CP) test, shall be performed to assess collapse potential. Table A5.1.5-2 summarises the potential for collapse in terms of the single oedometer test result. The undisturbed sample for the oedometer test shall be taken at a depth of between 0,8 m and 1,0 m below the material depth.

Table A5.1.5-2: Potential for collapse

Test result range for the single oedometer test	Collapse Potential
0 – 1 %	No potential
1 % – 5 %	Moderate potential
5 % - 10 %	Definite potential
10 % - 20 %	Severe potential
> 20 %	Very severe potential

Some collapsing soils exhibit two separate optimum moisture content (OMC) values with two separate maximum dry densities. The collapsibility of these soils is very sensitive to small increases or decreases in compaction moisture content.

A5.1.5.4 Spoil material

The roadbed may contain material that is unsuitable for use because the quality of the material is unacceptable. This material shall be excavated, loaded and hauled to designated spoil sites as instructed by the Engineer. When designated spoil sites are not available temporary spoil stockpiles may be permitted with the prior consent of the Engineer.

The material so removed shall be replaced with fill material or pioneer layer material as instructed by the Engineer.

A5.1.7.3 Normal roadbed treatment
a) Construction overview

The method of processing and compacting the roadbed and fill material as part of normal roadbed treatment, or the class of compaction, shall be specified in the Contract Documentation or be instructed by the Engineer in advance.

The classification of material as hard material or in the case of LEC, intermediate material, to compensate the Contractor for the cost of excavation thereof, shall not be taken into consideration for any additional compensation when used in the compacted fill.

When the roadbed to be treated is located on a slope that is steeper than 1 (one) vertical to 10 (ten) horizontal, the roadbed treatment shall be benched as specified in Clause A5.2.7.3 and in the Contract Documentation. The minimum depth of the specified roadbed treatment shall be complied with for the full extent of the treatment.

b) Removal of unsuitable roadbed material

Any roadbed material which is of unsuitable quality shall be removed to spoil to such widths and depths as instructed by the Engineer. The unsuitable material shall be disposed of as detailed in the Contract Documentation or as instructed by the Engineer. The excavated roadbed material shall then be replaced with approved, imported fill material, compacted to the specified density.

The Engineer may instruct that material that is unsuitable due to being unstable be removed and replaced with approved material. The Contractor shall implement adequate temporary drainage measures as per instruction from the Engineer, ahead of the removal to spoil of the unstable material. The instruction by the Engineer must clearly state the depth of the material to be removed, contain an assessment in respect of the stability of the material and ensure that suitable construction equipment is available.

After completion of the removal of any unstable material to the specified line and depth in accordance with the Engineer's instructions, it may still be necessary to remove some stable material. This material will also be classified as 'unstable' material, for measurement and payment purposes only, if the thickness of the stable material to be removed is less than 200mm. If the thickness to be removed exceeds 200mm then the stable material will remain classified as stable material taken to spoil.

c) Percentage of maximum dry density (MDD)

Any section of the roadbed material that is classified as being suitable for use in-situ, but the material fails to meet density requirements, shall be scarified, watered and compacted to the depth and to the percentage of MDD specified in the Contract Documentation. In the absence of a specified depth, the depth of roadbed treatment shall be 150mm. If necessary, roadbed material may have to be scarified and temporarily bladed to windrow to allow for compaction in layers in order to achieve the specified compaction density throughout the specified depth of treatment.

Where any additional material has to be imported to make up the required level and layer thickness, and where the thickness of the layer of imported material would be less than the specified layer thickness after compaction, then the roadbed material shall first be scarified. The additional imported material shall then be placed, blended with the scarified roadbed material and compacted to the full specified depth of that roadbed layer.

d) Roller-pass compaction

Where the percentage compaction cannot be satisfactorily determined by way of testing the in-situ density due to the nature of the material, the Engineer shall instruct that the material be compacted by a specified number of passes. The number of passes shall be carried out by a single type of roller or by a combination of various types of rollers. The Engineer shall issue instructions regarding the required number of passes for each type of roller being used.

A trial section shall be constructed to determine the best type of rollers or combination of rollers and the required number of roller-passes for each roller being used.

The Contractor shall use one, or a combination of any, of the following rollers:

- Grid roller;
- Impact roller;
- Pad-foot vibratory roller;
- Smooth drum vibratory roller;
- Any other suitable roller.

This roller-pass compaction shall normally be carried out at the in-situ moisture content. No rigid control of the moisture content will be exercised during compaction. The Contractor shall nevertheless prove to the Engineer that every possible endeavour is being made to take advantage of favourable soil-moisture conditions and to carry out such roller-pass compaction in so far as is possible during periods when the roadbed is neither excessively dry nor excessively wet.

The Contractor shall consult the Engineer as to when conditions are favourable for compaction and where such compaction shall be done at any particular time. The Engineer shall instruct and then compensate the Contractor to water the roadbed when the roller-pass compaction cannot be programmed to be carried out at a time when acceptable moisture conditions exist.

e) Compaction of collapsible soil

(i) General
The type of treatment of any portion of the roadbed that has a collapsible soil structure shall be specified in the Contract Documentation.

(ii) Soil collapse construction
The measurable criteria to confirm that soil collapse has taken place, such as percentage of MDD, the in-situ measured CBR (by DCP), the amount of collapse settlement and so forth, shall be specified in the Contract Documentation.

(iii) Non wetting-up roadbed collapse
The non wetting-up collapsible roadbed material;

- The material can be compacted in-situ using conventional rollers. The soil shall be collapsed at the insitu moisture content.
- The material to be collapsed can alternatively be temporarily excavated to stockpile and then imported from the stockpile in controlled compacted layers.
- The existing in-situ DCP-determined CBR strength (pre-construction);
- Confirm the compaction equipment or combination of compaction equipment required;
- A correlation between settlement, density and DCP-determined CBR strength for compaction control;
- The minimum required number of compaction passes to ensure collapse settlement;
- The moisture content and the percentage of MDD; and
- The DCP-determined CBR (post-construction) at the depth specified.

(iv) Wetting-up roadbed collapse

The wetting-up and compaction of a roadbed trial section for the collapse thereof shall be divided into construction phases:

- Determine the pre-construction moisture contents and then after each controlled addition of water.
- All moisture contents are to be determined along the length and the full collapse depth of the trial section. This is to establish and verify uniform moisture sections for collapse treatment;
- The trial section shall monitor and establish all or some of the following criteria as specified in the Contract Documentation:
- The existing in-situ DCP-determined CBR strength at different depths (pre-construction);
- Determine the moisture contents and DCP-determined CBR strengths after completion of each wetting and compaction cycle during the construction of the trial section;
- Establish the amount of vertical settlement or collapse by taking sufficient levels before, after completion of each wettingup/compaction phase and after the completed construction of the trial section for each uniform moisture section.
- The minimum required number of compaction passes, compaction equipment and moisture content required to ensure compliance with the specified collapse settlement and/or the required DCP-determined CBR, post-construction.

g) Inactive clay and normal clay

Inactive clays and normal clays in the roadbed that heave or settle during a three roller-pass trial compaction shall be treated using one of the following three methods.
A trial section shall be constructed of the specified roadbed treatment, to clearly establish the construction technique to be applied as well as to confirm the correct construction equipment and the required number of roller-passes required.
The trial section shall also clearly establish the visual and/or laboratory testing to be done. Upon completion of the trial section the Engineer shall instruct the Contractor regarding the type and amount of testing.

Removal of material

The clay material shall be removed and replaced with approved material to a maximum depth of 450 mm. The approved material shall be compacted to the specified MDD.

h) Active clay

Roadbed construction by removal of active clay

The heaving clay in the roadbed shall be removed down to the bottom of the clay layer, or to a minimum depth of 750 mm below natural ground level. The material shall be loaded, hauled and then offloaded at a designated spoil site.

The removed material shall be replaced with compliant material and be compacted to the specified percentage of MDD.

Moisture content fluctuations for both alternatives within the road prism must be restricted. This shall be achieved by constructing a flattened side batter such as 1 (vertical):3 (horizontal), or by placing and compacting additional clay material adjacent to the standard road side batter as detailed in the Contract Documentation.

A5.1.7.4 Special drainage measures, dewatering

Any waterlogged roadbed, such as saturated material overlying less pervious strata, shall first be drained by the installation of all permanent surface and/or subsoil drainage detailed in the Contract Documentation or as directed by the Engineer, before any other construction may commence on these sections.

CHAPTER 11: ANCILLARY ROAD WORKS

SECTION 11.9 FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS

A11.9.7.1 Finishing the road and road reserve

For new construction, after completing the seal, surfacing or gravel surfacing on gravel roads; or other final activities where surfacing is not included, the road and road reserve shall be cleared of all excess earth, stones, boulders, debris, litter, garbage, unwanted vegetation and other waste or excess material resulting from the construction of the works or the use of the road. All finishing and cleaning not previously done or required as specified in the sections of the specifications set out in Clause A11.9.1 above, shall be undertaken and completed. This specification, however, does not intend the finishing, cleaning and maintenance, which must be undertaken as provided for in other Sections of these specifications, to be postponed until the final finishing operations provided for in this section.

For 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 and processes have compacted the original surfaces.

Culvert inlets and outlets, culvert barrels, and open drains shall be cleared of debris, soil, silt undesirable vegetation and other material generated from the construction activities.

The surfacing shall be cleared of all dirt, mud and foreign objects. Brooming or other non-damaging actions shall be used on finished surfacing and dragging, pushing or scraping material across 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 noxious weeds have been removed from the road reserve and borrow pit areas.

All materials resulting from the finishing operations shall be disposed of at approved locations, such as approved waste disposal sites or approved disused borrow pits. Excess stone in particular from resurfacing operations shall be collected and removed from the site to ensure that future grass cutting maintenance work will not be hindered by remaining surfacing stone. The Contractor shall make his own arrangements with the owners of properties on which such materials are to be deposited. Disposal shall be carried out in a neat and uniform manner. Disused materials such as pipe culverts, not further required and left with approval on adjoining properties, shall be disposed of out of sight from the road to ensure the road appearance reflects a fully complete and finished project.

All materials resulting from the finishing operations shall be disposed of at approved spoil sites.

A11.9.7.2 Treating old roads

All old roads, temporary deviations, haul roads and construction roads shall, in so far as is practicable, are levelled with the original ground. Surfaces shall be scarified and broken up to a depth of 150 mm for promoting plant growth.

Where specified by the Engineer, in order to prevent soil erosion, banks, dykes or ditches shall be constructed over the old road to dimensions specified by the Engineer.

All roads and temporary deviations treated as above shall be left in a neat and tidy state.

PART C4 SITE INFORMATION

C4.1 LOCALITY PLAN

