



CONTRACT NO: TEC03/2022 - CONSTRUCTION OF SHELENI GRAVEL ACCESS ROAD
CIDB GRADING: 4CE/ OR 3CE PE/ OR HIGHER

TENDER DOCUMENT

PREPARED BY:



Sikone Engineers
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Kloof
3610

Tel: 031 220 2089
Fax: 086 446 1986
E-mail: tenders@sikone.co.za

Name of Tenderer:

Address & Telephone No.:

CIBD Registration No.:

Total price including VAT:

Amount in words:

CHECK LIST FOR TENDER SUBMISSION

The Tenderer is to indicate in the check boxes if he has completed the required section of the tender document. Completion of this checklist will assist the Tenderer in ensuring that he has attended to all the required items for submission with this Tender.

Page	Description		Completed		For office use		
			Yes	No	Yes	No	Comments
Cover	Name of Tenderer						
	Contact Details						
	Tender Sum						
	Schedule : 1A	Compulsory Enterprise Questionnaire					
	Schedule : 1B	Authority of Signatory					
	Schedule : 1C	Certificate of Authority for Joint Ventures (if applicable)					
	Schedule : 1D	Record of Addenda to Tender Documents					
	Schedule : 1E	Personnel Schedule (if applicable)					
	Schedule : 1F	Schedule of Plant and Equipment available for the Contract					
	Schedule : 1G	Schedule of Work satisfactorily carried out by the Tenderer					
	Schedule : 1H	Schedule of Proposed Subcontractors					
	Schedule : 1I	Proposed Amendments and Qualifications					
	Schedule : 1J	CSD Summary Report					
	Schedule : 1K	BBB-E or Sworn Affidavit					
	Schedule : 1L	Company Registration Documents					
	Schedule : 1M	Joint Venture Agreement, if applicable					
	Schedule : 1N	Certificate Of Attendance At Clarification Meeting					
	Schedule : 2A	Certificate of Contractor Registration issued by the CIDB					
	Schedule : 2B	Proof of registration for regional levies if preference is claimed for being registered in the OKHAHLAMBA LOCAL MUNICIPALITY					
	Schedule : 2B	COIDA					
	Schedule : 2D	Audited Financials for the past three years					
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PART T1: TENDERING PROCEDURES

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INVITATION TO BID – PART A

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE OKHAHLAMBA LOCAL MUNICIPALITY					
BID NUMBER:	TEC03/2022	CLOSING DATE:	27 OCTOBER 2022	CLOSING TIME:	12H00
DESCRIPTION	THE CONSTRUCTION OF SHELENI GRAVEL ACCESS ROAD				
THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (MBD7).					
BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)					
259 KINGSWAY STREET (OPPOSITE CALTEX GARAGE)					
PO BOX 71					
BERGVILLE					
3350					
SUPPLIER INFORMATION					
NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE		NUMBER		
CELLPHONE NUMBER					
FACSIMILE NUMBER	CODE		NUMBER		
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
TAX COMPLIANCE STATUS	TCS PIN:		OR	CSD No:	
B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE [TICK APPLICABLE BOX]	Yes No		B-BBEE STATUS LEVEL SWORN AFFIDAVIT		Yes No
[A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE/ SWORN AFFIDAVIT (FOR EMES & QSEs) MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR B-BBEE]					
ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	Yes No [IF YES ENCLOSE PROOF]		ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?		Yes No [IF YES, ANSWER PART B:3]
TOTAL NUMBER OF ITEMS OFFERED			TOTAL BID PRICE		R
SIGNATURE OF BIDDER	.....		DATE		
CAPACITY UNDER WHICH THIS BID IS SIGNED					
BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO:			TECHNICAL INFORMATION MAY BE DIRECTED TO:		
DEPARTMENT	FINANCE – SUPPLY CHAIN MANAGEMENT DEPT		CONTACT PERSON	Neli Moloi	
CONTACT PERSON	THULILE MAPHALALA		TELEPHONE NUMBER	063 598 0022	
TELEPHONE NUMBER	036 – 448 8056		FACSIMILE NUMBER		
FACSIMILE NUMBER	036 – 448 1986		E-MAIL ADDRESS	Neli.moloi@okhahlamba.gov.za	
E-MAIL ADDRESS	Thulile.Maphalala@okhahlamba.gov.za				

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 ONLINE		
1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.		
2. TAX COMPLIANCE REQUIREMENTS		
2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.		
2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VIEW THE TAXPAYER'S PROFILE AND TAX STATUS.		
2.3 APPLICATION FOR THE TAX COMPLIANCE STATUS (TCS) CERTIFICATE OR PIN MAY ALSO BE MADE VIA E-FILING. IN ORDER TO USE THIS PROVISION, TAXPAYERS WILL NEED TO REGISTER WITH SARS AS E-FILERS THROUGH THE WEBSITE WWW.SARS.GOV.ZA.		
2.4 FOREIGN SUPPLIERS MUST COMPLETE THE PRE-AWARD QUESTIONNAIRE IN PART B:3.		
2.5 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.		
2.6 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.		
2.7 WHERE NO TCS IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.		
3. QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS		
3.1.	IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?	YES NO
3.2.	DOES THE ENTITY HAVE A BRANCH IN THE RSA?	YES NO
3.3.	DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?	YES NO
3.4.	DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?	YES NO
3.5.	IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?	YES NO
IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 ABOVE.		

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

SIGNATURE OF BIDDER:

CAPACITY UNDER WHICH THIS BID IS SIGNED:

DATE:

Bids are hereby invited in terms of Section 83 of the Municipal Systems Act, Act 32 of 2000 (as amended) and Sections 110 and 112 of the Municipal Finance Management Act, Act 56 of 2003.

Bid documents are obtainable from the SCM Bids office after paying non-refundable deposit of R400.00 per bid document at cashiers or by EFT made out in favor of Okhahlamba Local Municipality prior to bid collection of the bid document: First National Bank, Branch Code. 220625, **Acc no. 51660362710** or can be downloaded free of charge on the web-based portal www.etenders.gov.za with effect from **06 OCTOBER 2022 @15:30pm**. Only service providers registered on National Treasury Central Supplier Database (CSD) and Okhahlamba Local Municipality's database will be considered for bidding.

1. **COMPULSORY BRIEFING SESSION AND SITE INSPECTION:** 17 October 2022 starting at 10h00 at Council Chamber
2. **CLOSING AND OPENING DATE, TIME AND VENUE:** (08:00 to 16:00, Monday to Friday) from 17 October 2022. The cut-off time for purchasing tender documents is 14 October 2022 @ 09:00AM. The Closing date is **27 OCTOBER 2022** at 12h00.

PLEASE NOTE:

- i) BIDDERS ARE REQUIRED TO PROVIDE PROOF FOR EACH OF THE ABOVE NAMELY COMPANY REGISTRATION, QUALIFICATIONS DOCUMENTS, APPOINTMENT LETTERS, COMPLETION CERTIFICATES AND REFERENCE LETTERS FOR PREVIOUSLY COMPLETED PROJECTS. FAILURE TO DO SO WILL RENDER THE BID INVALID.
- ii) PROVIDE PROOF FOR ALL OF THE ABOVE, INCLUDING CONTACT DETAILS, NAMES OF COMPANIES AND CONTACT DETAILS WHERE REFERENCE CHECKS CAN BE UNDERTAKEN.

BID SUBMISSION

Sealed bids **with the contract number and description of the bids endorsed on the envelope with the bidders details clearly indicated** may be couriered using courier services at least two days before closing date due to National Lockdown or be hand delivered and must be deposited at the Okhahlamba Local Municipality's bid box situated in the reception at or before **the specified date and time above**, at which bids will be opened in public in the municipal's Boardroom. Bids received after the said closing date and time as prescribed will not be considered. Facsimile and e-mailed bids will not be accepted.

The Okhahlamba Local Municipality subscribes to the Preferential Procurement Policy Framework Act no 5 of 2000 and Preferential Procurement Regulations 2017. For all above contracts **80/20** preference points will be applicable and bids may only be submitted on the bid documentation that is issued. An original/copy valid Tax Clearance Certificate plus SARS status verification pin, certified copy of B-BBEE Status Level Verification Certificates or affidavit, other required certificates must accompany the bid document.

NB: Only locally produced or manufactured goods, meeting the stipulated minimum threshold for local production and content will be considered in line with regulation 8(2) of the Preferential Procurement Regulations and National Treasury Circular 69.

The exchange rate to be used for the calculation of local production and content must be the exchange rate published by the South-African Reserve Bank (SARB) at 12:00 on the date of advertisement of the bid; and Only the South-African Bureau of Standards (SABS) approved technical specification number SATS 12863:2011 must be used to calculate local content.

The Okhahlamba Local Municipality is not bound to accept the lowest or any bid and reserves the right to accept the whole or part of a bid.

**MR SN MALINGA
MUNICIPAL MANAGER**

<p>Proof of experience of the company in projects of similar scope and value (maximum of 30 points)</p>

The Bidder must attach to this a copy of their Proof of Experience.

<p>Qualified staff in the Civil / Built Environment with more than 5 years' experience (25 POINTS)</p>
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The Bidder must attach to this page the Proof of Qualified professional staff.

<p>Qualified staff in the Civil / Built Environment with more than 5 years' experience (20 POINTS)</p>
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The Bidder must attach to this page the Proof of Qualified site agent.

<p>Qualified staff in the Civil / Built Environment with more than 5 years' experience (15 POINTS)</p>
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The Bidder must attach to this page the Proof of Qualified professional Foreman.

AUDITED FINACIAL STATEMENTS (3 YEARS) (10 POINTS)
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T1.2.1: TENDER DATA: STANDARD CONDITIONS OF TENDER

The Conditions of Tender are the Standard Conditions of Tender of the CIDB Standard for Uniformity in Construction Procurement (refer: www.cidb.co.za).

F.1 GENERAL

F.1.1 Actions

F1.1.1 The Employer and each tenderer submitting a tender offer shall comply with these Conditions of Tender. In their dealings with each other, they shall discharge their duties and obligations, as set out in F.2 and F.3, timeously and with integrity, and behave equitably, honestly and transparently comply with all legal obligations and not engage in anticompetitive practices.

F1.1.2 The employer and the tenderer and all their agents and employees involved in the tender process shall avoid conflicts of interest and where a conflict of interest is perceived or known, declare any such conflict of interest, indicating the nature of such conflict. Tenderers shall declare any potential conflict of interest in their tender submissions. Employees, agents and advisors of the employer shall declare any conflict of interest to whoever is responsible for overseeing the procurement process at the start of any deliberations relating to the procurement process or as soon as they become aware of such conflict, and abstain from any decisions where such conflict exists or recuse themselves from the procurement process, as appropriate.

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

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

F1.1.3 The employer shall not seek and a tenderer shall not submit a tender without having a firm intention and the capacity to proceed with the contract

F.1.2 Tender documents

The documents issued by the Employer for the purpose of a tender offer are listed in the Tender Data.

F.1.3 Interpretation

F1.3.1 The Tender Data and additional requirements contained in the tender schedules that are included in the returnable documents are deemed part of the Conditions of Tender.

F1.3.2 The Conditions of Tender, the Tender Data and tender schedules that are only required for tender evaluation purposes, will not form part of any contract arising from the invitation to tender.

F1.3.3 For the purposes of these conditions of tender, the following definitions apply:

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

F.1.4 Communication and Employer's agent

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

F.1.5 The Employer's right to accept or reject any tender offer

- F.1.5.1 The employer may accept or reject any variation, deviation, tender offer, or alternative tender offer, and may cancel the tender process and reject all tender offers at any time before the formation of a contract. The employer shall not accept or incur any liability to a tenderer for such cancellation and rejection but will give written reasons for such action upon written request to do so.
- F.1.5.2 The employer may not subsequent to the cancellation or abandonment of a tender process or the rejection of all responsive tender offers re-issue a tender covering substantially the same scope of work within a period of six months unless only one tender was received and such tender was returned unopened to the tenderer.

F.1.6 Procurement procedures

F.1.6.1 General

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

F.1.6.2 Competitive negotiation procedure

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

- F.1.6.2.2** All responsive tenderers, or not less than three responsive tenderers that are highest ranked in terms of the evaluation method and evaluation criteria stated in the tender data, shall be invited in each round to enter into competitive negotiations, based on the principle of equal treatment and keeping confidential the proposed solutions and associated information. Notwithstanding the provisions of F.2.17, the employer may request that tenders be clarified, specified and fine-tuned in order to improve a tenderer's competitive position provided that such clarification, specification, fine tuning or additional information does not alter any fundamental aspects of the offers or impose substantial new requirements which restrict or distort competition or have a discriminatory effect.
- F.1.6.2.3 At the conclusion of each round of negotiations, tenderers shall be invited by the employer to make a fresh tender offer, based on the same evaluation criteria, with or without adjusted weightings. Tenderers shall be advised when they are to submit their best and final offer.
- F.1.6.2.4 The contract shall be awarded in accordance with the provisions of F.3.11 and F.3.13 after tenderers have been requested to submit their best and final offer.
- F.1.6.3 Proposal procedure using the two stage-system.**
- F.1.6.3.1 Option 1**
- Tenderers shall in the first stage submit technical proposals and, if required, cost parameters around which a contract may be negotiated. The employer shall evaluate each responsive submission in terms of the method of evaluation stated in the tender data, and in the second stage negotiate a contract with the tenderer scoring the highest number of evaluation points and award the contract in terms of these conditions of tender.
- F.1.6.3.2 Option 2**
- F.1.6.3.2.1 Tenderers shall submit in the first stage only technical proposals. The employer shall invite all responsive tenderers to submit tender offers in the second stage, following the issuing of procurement documents.
- F.1.6.3.2.2 The employer shall evaluate tenders received during the second stage in terms of the method of evaluation stated in the tender data, and award the contract in terms of these conditions of tender.
- F.2 TENDERER'S OBLIGATIONS**
- F.2.1 Eligibility**
- F.2.1.1 Submit a tender offer only if the tenderer satisfies the criteria stated in the tender data and the tenderer, or any of his principals, is not under any restriction to do business with employer.
- F.2.1.2 Notify the employer of any proposed material change in the capabilities or formation of the tendering entity (or both) or any other criteria which formed part of the qualifying requirements used by the employer as the basis in a prior process to invite the tenderer to submit a tender offer and obtain the employer's written approval to do so prior to the closing time for tenders.
- F.2.1.3 Only those tenderers who have in their employ management and supervisory staff satisfying the requirements of the scope of work for labor-intensive competencies for supervisory and management staff are eligible to submit tenders.
- F.2.2 Cost of tendering**
- Accept that, unless otherwise stated in the tender data, the employer will not compensate the tenderer for any costs incurred in the preparation and submission of a tender offer, including the costs of any testing necessary to demonstrate that aspects of the offer complies with requirements.
- F.2.3 Check documents**
- Check the tender documents on receipt for completeness and notify the Employer of any discrepancy or omission.

F.2.4 Confidentiality and copyright of documents

Treat as confidential all matters arising in connection with the tender. He shall 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

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.2.6 Acknowledge addenda

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

F.2.7 Clarification meeting

Attend, where required, a 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 for submission of tenders stated in the Tender Data.

F.2.9 Insurance

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

F.2.10 Pricing the Tender Offer

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

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

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

F.2.10.4

F.2.10.5 State the rates and prices in Rand unless instructed otherwise in the Tender Data. The Conditions of Contract identified in the Contract Data may provide for part payment in other currencies.

F.2.11 Alterations to documents

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

F.2.12 Alternative Tender Offers

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

compares the requirements of the tender documents with the alternative requirements that are proposed.

F.2.12.2 Accept that an alternative tender offer may be based only on the criteria stated in the Tender Data or criteria otherwise acceptable to the Employer.

F.2.13 Submitting a Tender Offer

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

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

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

F.2.13.4 Sign the original and all copies of the Tender Offer where required in terms of the Tender Data. The Employer will hold all authorized signatories liable on behalf of the Tenderer. Signatories for tenderers proposing to contract as joint ventures shall state, which, of the signatories is the lead partner whom the Employer shall hold liable for the purpose of the Tender Offer.

F.2.13.5 Seal the original and each copy of the Tender Offer as separate packages marking the packages as "ORIGINAL" and "COPY". Each package shall state on the outside the Employer's address and identification details stated in the Tender Data, as well as the Tenderer's name and contact address.

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

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

F.2.13.8 Accept that the Employer will not assume any responsibility for the misplacement of premature opening of the Tender Offer if the outer package is not sealed and marked as stated.

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

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

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

F.2.15 Closing time

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

F.2.15.2 Accept that, if the Employer extends the closing time stated in the Tender Data for any reason, the requirements of the Conditions Tender apply equally to the extended deadline.

F.2.16 Tender Offer validity

F.2.16.1 Hold the Tender Offer(s) valid for acceptance by the Employer at any time during the validity period stated in the Tender Data after the closing time stated in the Tender Data.

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

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

substituted.

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

F.2.17 Clarification of Tender Offer after submission

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

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

F.2.18 Provide other material

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

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

- F.2.18.3 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 together with satisfactory evidence that such staff members satisfy the eligibility criteria.

F.2.19 Inspections, tests and analyses

Provide access during working hours to premises for inspections, tests and analyses as provided for the 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 EMPLOYER'S UNDERTAKINGS

- F.3.1 Respond to requests from the tenderer

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

documents.

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

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

F.3.2 Issue addenda

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

F.3.3 Return late Tender Offers

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

F.3.4 Opening of tender submissions

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

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

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

F.3.5 Two-envelope system

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

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

F.3.6 Non-disclosure

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

F.3.7 Grounds for rejection and disqualification

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

F.3.8 Test for responsiveness

- F.3.8.1 Determine, after opening and before detailed evaluation, whether each Tender offer properly received:
- (a) complies with the requirements of the 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 items, conditions, and specifications of the tender documents without material deviation or qualification. A material deviation or qualification is one which, in the Employer's opinion, would
- (a) detrimentally affect the scope, quality, or performance of the works, services or supply identified in the scope of work;
 - (b) significantly change the Employer's or the Tenderer's risks and responsibilities under the contract, or
 - (c) Affect the competitive position of other tenderers presenting responsive tenders, if it were to be rectified.
- Reject a non-responsive Tender Offer, and do not allow it to be subsequently made responsive by correction or withdrawal of the non-conforming deviation or reservation.
- F.3.9 Arithmetical errors, omissions and discrepancies**
- F.3.9.1 Check responsive tenders for discrepancies between amounts in words and amounts in figures. Where there is a discrepancy between the amounts in figures and the amount in words, the amount in words shall govern.
- F.3.9.2 Check the highest ranked tender or tenderer with the highest number of tender evaluation points after the evaluation of tender offers in accordance with F.3.11 for:
- a) the gross misplacement of the decimal point in any unit rate;
 - b) omissions made in completing the pricing schedule or bills of quantities; or
 - c) arithmetic errors in:
 - i) line item totals resulting from the product of a unit rate and a quantity in bills of quantities or schedules of prices; or
 - ii) the summation of the prices.
- F.3.9.3 Notify the tenderer of all errors or omissions that are identified in the tender offer and either confirm the tender offer as tendered or accept the corrected total of prices.
- F.3.9.4 Where the tenderer elects to confirm the tender offer as tendered, correct the errors as follows:
- a) If bills of quantities or pricing schedules apply and there is an error in the line item total resulting from the product of the unit rate and the quantity, the line item total shall govern and the rate shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line item total as quoted shall govern, and the unit rate shall be corrected.
 - b) Where there is an error in the total of the prices either as a result of other corrections required by this checking process or in the tenderer's addition of prices, the total of the prices shall govern and the tenderer will be asked to revise selected item prices (and their rates if bills of quantities apply) to achieve the tendered total of the prices.
- F.3.10 Clarification of a Tender Offer**
- Obtain clarification from a Tenderer on any matter that could give rise to ambiguity in a contract arising from the Tender Offer.
- F.3.11 Evaluation of Tender Offers**
- F.3.11.1 General**
- Appoint an evaluation panel of not less than three persons. Reduce each responsive tender offer to a comparative offer and evaluate them using the tender evaluation methods and associated evaluation criteria and weightings

that are specified in the tender data.

F.3.11.2 Method 1: In the case of a Financial Offer:

- (a) Rank Tender Offers from the most favourable to the least favourable comparative offer.
- (b) Recommend the highest ranked tenderer for the award of the contract, unless there are compelling and justifiable reasons not to do so.
- (c) Re-rank all tenderers should there be compelling and justifiable reasons not to recommend the highest ranked tenderer and recommend the highest ranked tenderer, unless there are compelling and justifiable reasons not to do so and the process set out in this sub clause is repeated.

F.3.11.3 Method 2: In the case of a Financial Offer and Preferences: In the case of a

financial offer and preferences:

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

$$TEV = NFO + NP$$

where: *NFO* is the number of tender evaluation points awarded for the financial offer made in accordance with F.3.11.7;
NP is the number of tender evaluation points awarded for preferences claimed in accordance with F.3.11.8.

- c) Rank tender offers from the highest number of tender evaluation points to the lowest.
- d) Recommend the tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.
- e) Rescore and re-rank all tenderers should there be compelling and justifiable reasons not to recommend the tenderer with the highest number of tender evaluation points, and recommend the tenderer with the highest number of tender evaluation points, unless there are compelling and justifiable reasons not to do so and the process set out in this sub clause is repeated

F.3.11.4 Method 3: In the case of a Financial Offer and Quality: In the case of a

financial offer and quality:

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

$$TEV = NFO + NQ$$

where: *NFO* is the number of tender evaluation points awarded for the financial offer made in accordance with F.3.11.8;
NQ is the number of tender evaluation points awarded for quality offered in accordance with F.3.11.9.

- c) Rank tender offers from the highest number of tender evaluation points to the lowest.
- d) Recommend tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.
- e) Rescore and re-rank all tenderers should there be compelling and justifiable reasons not to recommend the tenderer with the highest number of tender evaluation points and recommend the tenderer with the highest number of tender evaluation points, unless there are compelling and justifiable reasons not to do so and the process set out in this sub clause is repeated.

F.3.11.5 Method 4: In the case of a Financial Offer, Quality and Preferences:

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

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

$$TEV = NFO + NP + NQ$$

where: *NFO* is the number of tender evaluation points awarded for the financial offer made in accordance with F.3.11.7;
NP is the number of tender evaluation points awarded for preferences claimed in accordance with F.3.11.B.
NQ is the number of tender evaluation points awarded for quality offered in accordance with F.3.11.9.

- c) Rank tender offers from the highest number of tender evaluation points to the lowest.
- d) Recommend the tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.
- e) Rescore and re-rank all tenderers should there be compelling and justifiable reasons not to recommend the tenderer with the highest number of tender evaluation points and recommend the tenderer with the highest number of tender evaluation points, unless there are compelling and justifiable reasons not to do so and the process set out in this sub clause is repeated.

F.3.11.6 Score financial offers, preferences and quality, as relevant, to two decimal places.

F.3.11.7 Scoring Financial Offers

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

$$NFO = W1 \times A$$

Where *NFO* is the number of tender evaluation points awarded for the financial offer;
W1 is the maximum possible number of tender evaluation points awarded for the financial offer as stated in the Tender Data;
A is the number calculated using the formula and option described in table F 1 as stated in the tender data.

TABLE F.1 – FORMULAE FOR THE VALUE OF A

FORMULA	BASIS FOR COMPARISON	VALUE OF "A"	
		Option 1	Option 2
1	Highest price or discount	$A = [1 + (P - P_m) / P_m]$	P / P_m
2	Lowest price or percentage commission / fee	$A = [1 - (P - P_m) / P_m]$	P_m / P

Where:

P_m = is the comparative offer which is the most favorable

P = is the comparative offer of the tender under consideration

F.3.11.8 Scoring of points for B-BBEE Status Level Contributor

Points must be awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the

table below.

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

A bid must not be disqualified from the bidding process if the bidder does not submit a certificate substantiating the B-BBEE status level of contribution or is a non-compliant contributor. Such a bidder will score zero (0) out of a maximum of 10 points for B-BBEE.

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

F.3.11.9 Scoring Quality (functionality)

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

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

$$NQ = W_2 \times S_0 / M_S$$

where: S_0 is the score for quality allocated to the submission under consideration;
 M_S is the maximum possible score for quality in respect of a submission; and
 W_2 is the maximum possible number of tender evaluation points awarded for the quality as stated in the tender data

F.3.12 Insurance provided by the Employer

If requested by the proposed successful Tenderer, submit for the Tenderers information the policies or certificates of insurance (or both) which the Conditions of Contract identified in the Contract Data require the Employer to provide.

F.3.13 Acceptance of Tender Offer

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

- is not under restrictions, or has principals who are under restrictions, preventing participating in the employer's procurement,
- can, as necessary and in relation to the proposed contract, demonstrate that he or she possesses the professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience and reputation, expertise and the personnel, to perform the contract,
- has the legal capacity to enter into the contract,
- is not insolvent, in receivership, bankrupt or being wound up, has his affairs administered by a court or a

- judicial officer, has suspended his business activities, or is subject to legal proceedings in respect of any of the foregoing,
- e) complies with the legal requirements, if any, stated in the tender data, and
 - f) is able, in the opinion of the employer, to perform the contract free of conflicts of interest.

F.3.14 Prepare contract documents

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

- (a) addendum issued during the tender period;
- (b) inclusion of some of the returnable documents;
- (c) other revisions agreed between the Employer and the successful Tenderer,

F.3.14.2 Complete the schedule of deviations attached to the form of offer and acceptance, if any.

F.3.15 Complete adjudicator's contract

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

F.3.16 Notice to unsuccessful tenderers

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

F.3.17 Provide copies of the contracts

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

F.3.18 Provide written reasons for actions taken

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

T1.2.2 : TENDER DATA: APPLICABLE TO THIS TENDER

The Conditions Of Tender applicable to this contract are the Standard Conditions of Tender as contained in Annex F of the May 2010 edition of the CIDB Standard for Uniformity in Construction Procurement (see www.cidb.org.za)

The Standard Conditions of Tender refer 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	Wording (Data)
F.1.1	The employer is the Okhahlamba Local Municipality.
F.1.2	<p>The tender documents issued by the employer comprise:</p> <p>PART T1 : TENDERING PROCEDURES</p> <p>T1.1: Tender Notice and Invitation to Tender</p> <p>T1.2: Tender Data</p> <p>PART T2 : RETURNABLE DOCUMENTS</p> <p>T2.1: List of Returnable Documents</p> <p>T2.2: Returnable Schedules</p> <p>PART C1: AGREEMENTS AND CONTRACT DATA</p> <p>C1.1: Form of Offer and Acceptance</p> <p>C1.2: Contract Data</p> <p>C1.3: Form of Guarantee</p> <p>C1.4: Adjudicator's Agreement (if applicable)</p> <p>PART C2 : PRICING DATA</p> <p>C2.1: Pricing Instructions</p> <p>C2.2: Bills of Quantities</p> <p>PART C3 : SCOPE OF WORKS</p> <p>C3 Scope of Work</p> <p>C3.1 Description of the Works</p> <p>C3.2 Procurement</p> <p>C3.3 Annexes</p> <p>C3.3.1 Variations and Additions to Standard Specification</p> <p>C3.3.2 Occupational Health and Safety Specification</p> <p>C3.3.3 Construction Environmental Management Plan</p> <p>C3.3.4 Drawings</p> <p>PART C4 : SITE INFORMATION</p>

Clause	Wording (Data)
F.1.4	The Employer's agent is:
	<p>Name: Sikone Engineers</p> <p>Address: Suite 1, Brozite Block, Kloof, 3610</p> <p>Tel No: 031 220 2089</p> <p>E-Mail: tenders@sikone.co.za</p>
F.2.1	<p>Only those tenderers who satisfy the following eligibility criteria are eligible to submit tenders:</p> <ol style="list-style-type: none"> Availability of resources. Availability of skills to manage and perform the contract – including staff that satisfies EPWP requirements (if applicable). Previous experience on contracts of a similar value and nature. Financial standing and capability.
F.2.1	<p>Only those tenderers who are registered with the CIDB, or are capable of being so prior to the evaluation of submissions, in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a 4CE/3CE PE or higher class of construction work, are eligible to submit tenders.</p> <p>Joint ventures are eligible to submit tenders provided that:</p> <ol style="list-style-type: none"> every member of the joint venture is registered with the CIDB; the lead partner has a contractor grading designation in the 4CE/3CE PE or higher class of construction work; and the combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a 4CE/3CE PE or higher class of construction works.
F.2.1	<p>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:</p> <ol style="list-style-type: none"> contractors who have a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a 4CE or higher Class of construction work, and contractors registered as potentially emerging contractors with the CIDB who are registered in one contractor grading designation lower than that required in terms of (1) above and who satisfy the following criteria: <p>Joint ventures are eligible to submit tenders provided that:</p> <ol style="list-style-type: none"> every member of the joint venture is registered with the CIDB; the lead partner has a contractor grading designation in the 4CE/3CE PE or higher class of construction work; and The combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a 4CE/3CE PE or higher class of construction work, are eligible to submit tenders.

Clause	Wording (Data)
F.2.7	The arrangements for a compulsory clarification meeting are:
	A compulsory site meeting will be held as stated in the bid invitation.
F.2.12	<p>If, a tenderer wishes to submit an alternative offer, the only criteria permitted for such alternative tender offer is that it demonstrably satisfies the Employer's standards and requirements, the details of which may be obtained from the Employer's Agent.</p> <p>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.</p> <p>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.</p> <p>The modified Pricing Data must include an amount equal to 5% of the amount tendered for the alternative offer to cover the Employer's costs of confirming the acceptability of the detailed design before it is constructed.</p>
F.2.13.3	Parts of each tender offer communicated on paper shall be submitted as an original, plus 0 (nil) copies.
F.2.13.5 F.2.15.1	<p>The Employer's address for delivery of tender offers and identification details to be shown on each tender offer package are:</p> <p>Location of tender box: OKHAHLAMBA LOCAL MUNICIPALITY</p> <p>Identification details: "MUNICIPAL MANAGER, OKHAHLAMBA LOCAL MUNICIPALITY: THE CONSTRUCTION OF SHELENI GRAVEL ACCESS ROAD</p> <p>CLOSING DATE: 27 OCTOBER 2022</p> <p>Postal address: OKHAHLAMBA LOCAL MUNICIPALITY 259, KINGSWAY STREET, BERGVILLE, 3350, KZN, ZA</p>
F.2.13	A two-envelope procedure will not be followed.
F.2.15	The closing time for submission of tender offers is 12h00 hours on 27 October 2022.
+	Telephonic, telegraphic, telex, facsimile or e-mailed tender offers will not be accepted.
F.2.16	The tender offer validity period is ninety (90) days.
F.2.18	The tender 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 together with satisfactory evidence that such staff members satisfy the eligibility requirements
F.2.23	<p>The tenderer is required to submit the following certificates with his tender:</p> <ol style="list-style-type: none"> 1) either a Certificate of Contractor Registration issued by the Construction Industry Development Board OR a copy of the Application Form for registration in terms of the Construction Industry Development Board Act (Form F006) <u>and</u> an original valid Tax Clearance Certificate issued by the South African Revenue Services. 2) a certificate certifying that the enterprise has no undisputed commitments to a municipality or other service provider in respect of which payment is overdue by more than 30 days (if greater than R10 million incl. VAT);

Clause	Wording (Data)				
	3) particulars of any contracts awarded by an organ of state during the last five years including particulars of any material non-compliance or dispute concerning their execution over this period (if >R10 000 incl. VAT); and				
	4) a statement indicating whether any portion of the goods or services are expected to be sourced from outside the Republic, and, if so, what portion and whether any portion or payment from the municipality or municipal entity is expected to be transferred out of the Republic (if greater than R10 million incl. VAT).				
F3.4	The time and location for opening of the tender offers are in accordance with F.2.15 & F.2.13.5				
F.3.11	<p>The procedure for the evaluation of responsive tenders is Method 2.</p> <p>a) Scoring financial offer:</p> <p>The financial offer will be scored using Formula 2 (Option 1) where the value of W1 is:</p> <ol style="list-style-type: none"> 1) 90 where the financial value inclusive of VAT of all responsive tenders received have a value in excess of R50 000 000 (R50 million); or 2) 80 where the financial value inclusive of VAT of one or more responsive tender offers equals or is above R30 000 and up to R50 000 000. <p>b) Scoring Preferences</p> <p>Up to 100 minus W1 tender evaluation points will be awarded to tenderers in respect of:</p> <ol style="list-style-type: none"> 1) the BBBEE balanced scorecard 2) Locality <p>Preference points will be allocated as follows:</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 60%;"><u>Price</u></td><td style="text-align: right;">W1 = 80</td></tr> <tr> <td><u>BBBEE Score:</u></td><td style="text-align: right;">20 (max)</td></tr> </table>	<u>Price</u>	W1 = 80	<u>BBBEE Score:</u>	20 (max)
<u>Price</u>	W1 = 80				
<u>BBBEE Score:</u>	20 (max)				
	Tenderers are advised to study: <i>OKHAHLAMBA LOCAL MUNICIPALITY – SUPPLY CHAIN MANAGEMENT PROCUREMENT POLICY</i> when completing Schedule 1K and claiming points.				
F.3.13.1	<p>Tender offers will only be accepted on condition that :</p> <ol style="list-style-type: none"> a) the tenderer has in <u>his or her possession</u> an original Tax Clearance Certificate issued by the South African Revenue Services; b) the tenderer is registered with the Construction Industry Development Board in an appropriate contractor grading designation; 				
	c) the tenderer or any of its directors is not listed in 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				
	<p>d) the tenderer has not:</p> <ol style="list-style-type: none"> i) abused the Employer's Supply Chain Management System; or ii) failed to perform on any previous contract and has been given a written notice to this effect; and <p>e) 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.</p>				
F.3.18	The number of paper copies of the signed contract to be provided by the Employer is ONE (1).				

T1.2 3: TENDER DATA: SPECIAL CONDITIONS OF TENDER

1. FUNCTIONALITY CRITERIA

The Functionality Scorecard is as per the Table below.

DESCRIPTION	VERIFICATION METHOD	MAXIMUM POTENTIAL SCORE	POINTS CLAIMED	BID EVALUATION COMMITTEE SCORES
Proof of experience of the company in Roads projects of similar scope and value (5 points per project to a maximum of 30 points) (Completion Certificates and Name of traceable references with contact details to be included for verification)	Appointment letters and Completion Certificates	30		
Qualifications of Contracts Manager with more than 5 years' experience (B-Tech = 25 points, National Diploma = 15 points, No submission = 0 points (Less than 5 years' experience = 0 points)	Certified Copy of Qualification and Curriculum Vitae to be attached	25		
Qualifications of Site Agent with more than 5 years' experience (National Diploma = 20 points, No submission = 0 points (Less than 5 years' experience = 0 points)	Certified Copy of Qualification and Curriculum Vitae to be attached	20		
Forman with Experience on road projects of similar scope and value with more than 3 years of minimum experience.	Curriculum Vitae	15		
Financial Viability, 3-year Audited financial statements. 3-year AFS=10 points, 2-year AFS=5 points, 1-year AFS=3 points, No submission=0 points	Audited Financial Statements	10		
TOTAL		100		

NOTE:

- i) BIDDERS ARE REQUIRED TO PROVIDE PROOF FOR EACH OF THE ABOVE NAMELY COMPANY REGISTRATION, QUALIFICATIONS DOCUMENTS, APPOINTMENT LETTERS, COMPLETION CERTIFICATES AND REFERENCE LETTERS FOR PREVIOUSLY COMPLETED PROJECTS. FAILURE TO DO SO WILL RENDER THE BID INVALID.
- ii) PROVIDE PROOF FOR ALL OF THE ABOVE, INCLUDING CONTACT DETAILS, NAMES OF COMPANIES AND CONTACT DETAILS WHERE REFERENCE CHECKS CAN BE UNDERTAKEN.
- iii) FAILURE TO COMPLETE THE FUNCTIONALITY SCORE CARD WILL DISQUALIFY YOUR PROPOSAL AND BIDDERS NEED TO SCORE A MINIMUM OF 70 POINTS OUT OF 100 POINTS TO BE ELIGIBLE

SPECIAL CONDITIONS

2. DURATION OF CONTRACT

The project must be completed within Eight (8) months from contract start date.

3. PAYMENTS

All payments will be made to the Service Provider within thirty (30) days of verification of an invoice. All invoices should be submitted by the 10th of each month. No payments will be made to the contractor if he/she does not adhere to the EPWP requirements.

4. SERVICE LEVEL AGREEMENT

- 4.1 A service level agreement will be entered into with the successful bidder.
- 4.2 Negotiations in respect of the service level agreement must be finalized within fourteen (14) calendar days of receipt of the letter of acceptance by the successful bidder."
- 4.3 Service level agreement entered into with the successful bidder will capture the time frames for performance applying to this contract.
- 4.4 Should no consensus be reached within fourteen (14) calendar days of finalizing the Service Level Agreement (SLA), the Municipality will be entitled to:
 - i) Cancel its acceptance of the bid, or
 - ii) Extend the negotiation period without prejudice to any of its other rights in terms of this contract or common law.

5. PENALTIES

Penalties will be levied at R 5000.00 per day in the event of non-compliance.

6. PRICE

This Tender shall be a **Fixed Price Contract**. Contract price adjustment is not be applicable to this Tender.

7. BID VALIDITY

This bid shall not be withdrawn during a period of Ninety (90) days from the date on which it is to be lodged and it may be accepted at any time during that period.

8. BID COMPLIANCE

The Bid must comply with the following:

The VAT component of the price must be indicated separately. This bid or part thereof may not be ceded. The bid documents submitted must be in the form and order as issued by the Municipality in order to assist the Municipality with the evaluation of same

9. MEETINGS

Progress meetings will be held once a month as agreed with the Engineer and Technical Meetings will be on an ongoing basis as and when is deemed necessary by the Engineer.

10. PROGRAMME/PERFORMANCE

The Service provider will be required to submit a program of confirmed activities to be undertaken in the project that will form an Annexure to the Service Level Agreement within 14 days from the commencement date.

The Service Provider will also be required to submit monthly progress reports.

11. RETURNABLE DOCUMENTS

The issued documents must be returned in the form and order in which they were issued to assist the Municipality to expedite adjudication of the bids. The Okhahlamba Local Municipality reserves the right to disqualify a bid in the event that the bidder does not fully comply with this provision.

12. MANDATORY OBJECTION PERIOD

All administrative actions and decisions taken by the Okhahlamba Local Municipality through its officials may become subject to an objections and appeals process. As such, in terms of Section 62 of the Municipal Systems Act 32 of 2000, a period of Fourteen (14) days will be set aside to allow for the submission of appeals against the award/process of making the award to a particular bidder by any interested party. Except in scenarios where the decision of a duly appointed panel sets aside the appointment of the successful bidder as service provider of this contract, the appointment will then be confirmed by the Okhahlamba Local Municipality in writing.

13. PERFORMANCE SECURITY

A fixed amount of 10% in respect of Performance Security is applicable in respect of each bid and must apply for the duration of the contract.

The Performance Security shall be secured within fourteen (14) calendar days of award of the bid and shall apply from the date of award of the bid.

The Performance Security submitted has to be approved by the Okhahlamba Local Municipality.

14. OTHER MATTERS

Bidders must also submit three year audited financial statements of the company.

Bidders must certify that he/she have no outstanding debts due to the Municipality where the bidder originates and any other Municipality or any service provider.

PART T2: RETURNABLE DOCUMENTS

TABLE OF CONTENTS		Page Colour
T2.1	List of Returnable Documents	(Yellow)
T2.2	Returnable Schedules	(Yellow)

T2.1: LIST OF RETURNABLE DOCUMENTS

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

1. RETURNABLE DOCUMENTS TO BE INCORPORATED IN THE DOCUMENT FOR TENDER SUBMISSION (Included hereafter for completion)

Schedule : 1A	Valid Tax Clearance or Sars Pin
Schedule : 1B	Authority of Signatory
Schedule : 1C	Certificate of Authority for Joint Ventures (if applicable)
Schedule : 1D	Record of Addenda to Tender Documents
Schedule : 1E	Personnel Schedule (if applicable)
Schedule : 1F	Schedule of Plant and Equipment available for the Contract
Schedule : 1G	Schedule of Work satisfactorily carried out by the Tenderer
Schedule : 1H	Schedule of Proposed Subcontractors
Schedule : 1I	Proposed Amendments and Qualifications
Schedule : 1J	CSD Summary Report
Schedule : 1K	BBB-E OR Sworn Affidavit
Schedule : 1L	Company Registration Documents
Schedule : 1M	Joint Venture Agreement, if applicable
Schedule : 1N	Certificate Of Attendance At Clarification Meeting

2. COMPULSORY DOCUMENTS REQUIRED FOR TENDER EVALUATION PURPOSES

Schedule : 2A	Certificate of Contractor Registration issued by the CIDB
Schedule : 2B	Rate Bill / Lease agreement COIDA
Schedule : 2D	Audited Financials for the past 3 years.
Schedule : 2E	Bank Rating Letter.

**3. OTHER SCHEDULES AND AFFIDAVITS THAT WILL BE INCORPORATED INTO THE CONTRACT
(included hereafter for completion)**

- C1.1 : The Form of Offer and Acceptance
C1.2 : Contract Data (Part 2)
C1.3 Occupational Health and Safety Agreement
C2.2 : Bills of Quantities

SCHEDULE 1A VALID TAX CLEARANCE OR SARS PIN
--

Valid Tax Clearance or Sars Pin here .

SCHEDULE 1B: AUTHORITY OF SIGNATORY

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

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

A. Certificate for Company

I,, chairperson 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
for contract and any contract resulting from it on behalf of the
company.

As witnesses :

1. Chairman :
2. Date :

Tenderers must attach a copy of the Resolution of the Board - refer Schedule 2B.

B. Certificate for Partnership

We, the undersigned, being the key partners in the business trading as
..... hereby authorize Mr/Ms
acting in the capacity ofto sign all documents in connection
with the tender for Contractand 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

C. Certificate for Joint Venture

We, the undersigned, are submitting this tender offer in Joint Venture and hereby authorise Mr/Ms
....., authorised signatory of the company
....., acting in the capacity of lead partner, to sign all documents in connection with the
tender offer for Contract 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	AUTHORISING SIGNATURE, NAME & CAPACITY
Lead partner		

D. Certificate for Sole Proprietor

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

.....

As witnesses:

1. Signature : Sole owner :
2. Date :

E. Certificate for Close Corporation

We, the undersigned, being the key members in the business trading as

..... hereby authorize Mr/Ms

acting in the capacity of....., to sign all documents in connection with the tender for

Contract.....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 who rests the direction of the affairs of the Partnership as a whole.

SCHEDULE 1C: CERTIFICATE OF AUTHORITY FOR JOINT VENTURES (if applicable)

This returnable schedule is to be completed by joint ventures.

We, the undersigned, are submitting this tender offer in joint venture and hereby authorize Mr/Ms, authorised signatory of the company, close corporation or partnership, acting in the capacity of lead partner, to sign all documents in connection with the tender offer and any contract resulting from it on our behalf.

NAME OF FIRM	ADDRESS	DULY AUTHORISED SIGNATORY
Lead partner		Signature Name Designation
		Signature Name Designation
		Signature Name Designation

NOTE: A copy of the Joint Venture Agreement showing clearly the **percentage contribution of each partner** to the Joint Venture shall be appended to this schedule.

SCHEDULE 1D: RECORD OF ADDENDA TO TENDER DOCUMENTS

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

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

Attach additional pages if more space is required.

Signed

Date

Name

Position

Tenderer

SCHEDULE 1E: PERSONNEL SCHEDULE

Job Description	Non-Local	Local
Contract Manager		
Site Agent		
Quantity Surveyor		
Surveyors		
General Foreman		
Foremen		
Community Officers		
Clerks		
Operators		
Bricklayers		
Learner Bricklayers		
Steel fixers		
Watchmen		
Pipe Layers		
Labourers		
* Other		
* Other		
* Other		

* To be filled in by Tenderer

Signed Date

Name Position

Tenderer

SCHEDULE 1F: SCHEDULE OF PLANT AND EQUIPMENT AVAILABLE FOR THE CONTRACT

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

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

Quantity	Description, Size, Capacity, etc

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 acceptable.

Quantity	Description, Size, Capacity, etc

Attach additional pages if more space is required.

Signed

Date

Name

Position

Tenderer

SCHEDULE 1G: SCHEDULE OF WORK SATISFACTORILY CARRIED OUT BY THE TENDERER

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

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

Signed

Date

Name

Position

Tenderer

SCHEDULE 1H: SCHEDULE OF PROPOSED SUBCONTRACTORS

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

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

NOTE: Cession agreements and ceding in part of whole of this contract is forbidden as per MFMA Circular 120 dated 15-08-2022 titled, "Application Of Cession And Assignment Of Contracts Resulting From Procurement."

No.	Name and Address of Proposed Subcontractor	Nature and Extent of Work	Previous Experience with Subcontractor
1.			
2.			
3.			
4.			
5.			
6.			
7.			

Signed

Date

Name

Position

Tenderer

SCHEDULE 1I: PROPOSED AMENDMENTS AND QUALIFICATIONS
--

The Tenderer must attach to this page a copy of their proposed amendments and qualifications

SCHEDULE 1J: CSD SUMMARY REPORT
--

The Tenderer must attach to this page a copy of their CSD SUMMARY REPORT

SCHEDULE 1K: BBB-E OR SWORN AFFIDAVIT
--

The Tenderer must attach to this page a copy of their BBB-E OR SWORN AFFIDAVIT

SCHEDULE 1L: COMPANY REGISTRATION DOCUMENTS

The Tenderer must attach to this page a copy of their Company Registration Documents

SCHEDULE 1M: JOINT VENTURE AGREEMENT, IF APPLICABLE
--

The Tenderer must attach to this page a copy of their Joint Venture Agreement.

SCHEDULE 1N: CERTIFICATE OF ATTENDANCE AT CLARIFICATION MEETING

(Please print)

It is hereby CERTIFIED that I, (name)

in my capacity asand a duly authorized

representative of..... (the TENDERER)

of (address).....

in the company of.....(the ENGINEER)

attended the official Site Inspection on(date)

for and on behalf of the above named Tenderer.

I hereby further DECLARE that I am satisfied with the description of the Works and the explanations given by the above named Engineer.

SIGNATURE
(On behalf of TENDERER)

DATE

AS WITNESS :-
(On behalf of ENGINEER)

NAME

SIGNATURE

DATE

Compulsory Documents Required for Tender Evaluation Process

SCHEDULE 2A: CERTIFICATE OF CONTRACTOR REGISTRATION ISSUED BY THE CIDB

The Tenderer must attach to this page a copy of their CIDB Certificate.

SCHEDULE 2B ;RATE BILL/LEASE AGREEMENT

The tenderer must attach to this page Rate Bill/Lease Agreement

SCHEDULE 2B: COIDA

The Tenderer must attach to this page a copy of COIDA.

SCHEDULE 2D: AUDITED FINANCIAL STATEMENTS FOR LAST THREE YEARS

The Tenderer must attach to this page their Audited Financial Statements.

SCHEDULE 2E: BANK RATING LETTER

The Tenderer must attach to this page their Bank Rating Letter.

MBD 3.1

**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.....
Closing Time	Closing Date

OFFER TO BE VALID FOR.....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)	.....
			*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

MBD 4

DECLARATION OF INTEREST

1. No bid will be accepted from persons in the service of the state¹.
2. Any person, having a kinship with persons in the service of the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid. In view of possible allegations of favoritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to persons in service of the state, it is required that the bidder or their authorized representative declare their position in relation to the evaluating/adjudicating authority.

3. In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

- 3.1 Full Name of bidder or his or her representative:
- 3.2 Identity Number:
- 3.3 Position occupied in the Company (director, trustee, shareholder²):.....
- 3.4 Company Registration Number:
- 3.5 Tax Reference Number:.....
- 3.6 VAT Registration Number:
- 3.7 The names of all directors / trustees / shareholders members, their individual Identity numbers and state employee numbers must be indicated in paragraph 4 below.

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

3.8.1 If yes, furnish particulars.

.....
.....

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

(a) a member of –

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

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

(c) an official of any municipality or municipal entity;

(d) an employee of any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No.1 of 1999);

(e) a member of the accounting authority of any national or provincial public entity; or

(f) an employee of Parliament or a provincial legislature.

² Shareholder" means a person who owns shares in the company and is actively involved in the management of the company or business and exercises control over the company.

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

3.9.1 If yes, furnish particulars.

.....
.....

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

3.10.1 If yes, furnish particulars.

.....
.....

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

3.11.1 If yes, furnish particulars

.....
.....

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

3.12.1 If yes, furnish particulars.

.....
.....

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

3.13.1 If yes, furnish particulars.

.....
.....

3.14 Do you or any of the directors, trustees, managers, principle shareholders, or stakeholders of this company have any interest in any other related companies or business whether or not they are bidding for this contract..... **YES / NO**

3.14.1 If yes, furnish particulars:

.....
.....

4. Full details of directors / trustees / members / shareholders.

Full Name <i>(Compulsory-must be completed)</i>	Identity Number <i>(Compulsory-must be completed)</i>	State Employee Number <i>(Ignore this column if not working for the State)</i>

.....
Signature

.....
Date

.....
CAPACITY

.....
NAME OF BIDDER

MBD 6.1

PREFERENCE POINTS CLAIM FORM

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2017

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

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

GENERAL CONDITIONS

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

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

1.2 The value of this bid is estimated not to exceed R50 000 000 (all applicable taxes included) and therefore the **80/20** system shall be applicable.

1.3 Preference points for this bid shall be awarded for, Price and B-BBEE Status level of Contribution

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

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

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

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

2. DEFINITIONS

1.4 “**all applicable taxes**” includes value-added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies;

1.5 “**B-BBEE**” means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;

2.3 “**B-BBEE status level of contributor**” means the B-BBEE status received by a measured entity based on its overall performance using the relevant scorecard contained in the Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;

- 2.4 **“bid”** means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of services, works or goods, through price quotations, advertised competitive bidding processes or proposals;
- 2.5 **“Broad-Based Black Economic Empowerment Act”** means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- 2.6 **“comparative price”** means the price after the factors of a non-firm price and all unconditional discounts that can be utilized have been taken into consideration;
- 2.7 **“consortium or joint venture”** means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract;
- 2.8 **“contract”** means the agreement that results from the acceptance of a bid by an organ of state;
- 2.9 **“EME”** means any enterprise with an annual total revenue of R5 million or less.
- 2.10 **“Firm price”** means the price that is only subject to adjustments in accordance with the actual increase or decrease resulting from the change, imposition, or abolition of customs or excise duty and any other duty, levy, or tax, which, in terms of the law or regulation, is binding on the contractor and demonstrably has an influence on the price of any supplies, or the rendering costs of any service, for the execution of the contract;
- 2.11 **“functionality”** means the measurement according to predetermined norms, as set out in the bid documents, of a service or commodity that is designed to be practical and useful, working or operating, taking into account, among other factors, the quality, reliability, viability and durability of a service and the technical capacity and ability of a bidder;
- 2.12 **“non-firm prices”** means all prices other than “firm” prices;
- 2.13 **“person”** includes a juristic person;
- 2.14 **“rand value”** means the total estimated value of a contract in South African currency, calculated at the time of bid invitations, and includes all applicable taxes and excise duties;
- 2.15 **“sub-contract”** means the primary contractor's assigning, leasing, making out work to, or employing, another person to support such primary contractor in the execution of part of a project in terms of the contract;
- 2.16 **“total revenue”** bears the same meaning assigned to this expression in the Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act and promulgated in the *Government Gazette* on 9 February 2007;
- 2.17 **“trust”** means the arrangement through which the property of one person is made over or bequeathed to a trustee to administer such property for the benefit of another person; and
- 2.18 **“trustee”** means any person, including the founder of a trust, to whom property is bequeathed in order for such property to be administered for the benefit of another person.

3. ADJUDICATION USING A POINT SYSTEM

- 3.1 The bidder obtaining the highest number of total points will be awarded the contract.
- 3.2 Preference points shall be calculated after prices have been brought to a comparative basis taking into account all factors of non-firm prices and all unconditional discounts;.
- 3.3 Points scored must be rounded off to the nearest 2 decimal places.
- 3.4 In the event that two or more bids have scored equal total points, the successful bid must be the one scoring the highest number of preference points for B-BBEE.
- 3.5 However, when functionality is part of the evaluation process and two or more bids have scored equal points including equal preference points for B-BBEE, the successful bid must be the one scoring the highest score for functionality.
- 3.6 Should two or more bids be equal in all respects, the award shall be decided by the drawing of lots.

4. POINTS AWARDED FOR PRICE

4.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

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

80/20

or

90/10

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

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

Where

P_s = Points scored for comparative price of bid under consideration

P_t = Comparative price of bid under consideration

P_{\min} = Comparative price of lowest acceptable bid

5. Points awarded for B-BBEE Status Level of Contribution

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

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

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

- 5.2 Bidders who qualify as EMEs in terms of the B-BBEE Act must submit a certificate issued by an Accounting Officer as contemplated in the CCA or a Verification Agency accredited by SANAS or a Registered Auditor. Registered auditors do not need to meet the prerequisite for IRBA's approval for the purpose of conducting verification and issuing EMEs with B-BBEE Status Level Certificates.
- 5.3 Bidders other than EMEs must submit their original and valid B-BBEE status level verification certificate or a certified copy thereof, substantiating their B-BBEE rating issued by a Registered Auditor approved by IRBA or a Verification Agency accredited by SANAS.
- 5.4 A trust, consortium or joint venture, will qualify for points for their B-BBEE status level as a legal entity, provided that the entity submits their B-BBEE status level certificate.
- 5.5 A trust, consortium or joint venture will qualify for points for their B-BBEE status level as an un-incorporated entity, provided that the entity submits their consolidated B-BBEE scorecard as if they were a group structure and that such a consolidated B-BBEE scorecard is prepared for every separate bid.
- 5.6 Tertiary institutions and public entities will be required to submit their B-BBEE status level certificates in terms of the specialized scorecard contained in the B-BBEE Codes of Good Practice.
- 5.7 A person will not be awarded points for B-BBEE status level if it is indicated in the bid documents that such a bidder intends sub-contracting more than 25% of the value of the contract to any other enterprise that does not qualify for at least the points that such a bidder qualifies for, unless the intended sub- contractor is an EME that has the capability and ability to execute the sub-contract.
- 5.8 A person awarded a contract may not sub-contract more than 25% of the value of the contract to any other enterprise that does not have an equal or higher B-BBEE status level than the person concerned, unless the contract is sub-contracted to an EME that has the capability and ability to execute the sub-contract.

6. BID DECLARATION

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

7. B-BBEE STATUS LEVEL OF CONTRIBUTION CLAIMED IN TERMS OF PARAGRAPHS 1.3.1.2 AND 5.1

- 7.1 B-BBEE Status Level of Contribution: = (Maximum of 10 or 20 points)

(Points claimed in respect of paragraph 7.1 must be in accordance with the table reflected in paragraph 5.1 and must be substantiated by means of a B-BBEE certificate issued by a Verification Agency accredited by SANAS or a Registered Auditor approved by IRBA or an Accounting Officer as contemplated in the CCA).

8 SUB-CONTRACTING

8.1 Will any portion of the contract be sub-contracted? YES / NO (delete which is not applicable)

8.1.1 If yes, indicate:

- (i) what percentage of the contract will be subcontracted? %
- (ii) the name of the sub-contractor?
- (iii) the B-BBEE status level of the sub-contractor?
- (iv) whether the sub-contractor is an EME? YES / NO (delete which is not applicable)

9 DECLARATION WITH REGARD TO COMPANY/FIRM

9.1 Name of company/firm :

9.2 VAT registration number

9.3 Company registration number

:

9.4 TYPE OF COMPANY/ FIRM

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

[TICK APPLICABLE BOX]

9.5 DESCRIBE PRINCIPAL BUSINESS ACTIVITIES

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

9.6 COMPANY CLASSIFICATION

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

[TICK APPLICABLE BOX]

9.7 Total number of years the company/firm has been in business?

9.8 I/we, the undersigned, who is / are duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBEE status level of contribution indicated in paragraph 7 of the foregoing certificate, qualifies the company/firm for the preference(s) shown and I / we acknowledge that:

- (i) The information furnished is true and correct;
- (ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form.
- (iii) In the event of a contract being awarded as a result of points claimed as shown in paragraph 7, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;

- (iv) If the B-BBEE status level of contribution has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –
- (a) Disqualify the person from the bidding process;
 - (b) Recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) Cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
 - (d) restrict the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, from obtaining business from any organ of state for a period not exceeding 10 years, after the *audit lateral partum* (hear the other side) rule has been applied; and forward the matter for criminal prosecution

WITNESSES:

.....

.....

SIGNATURE(S) OF BIDDER(S)

DATE:

ADDRESS:

.....

.....

MBD 6.2

DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS

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

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

1. General Conditions

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

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

Where

- x is the imported content in Rand
y is the bid price in Rand excluding value added tax (VAT)

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

The SABS approved technical specification number SATS 1286:2011 is accessible on [http://www.thedti.gov.za/industrial development/ip.jsp](http://www.thedti.gov.za/industrial%20development/ip.jsp) at no cost.

- 1.6. A bid may be disqualified if –
 - (a) this Declaration Certificate and the Annex C (Local Content Declaration: Summary Schedule) are not submitted as part of the bid documentation; and
 - (b) the bidder fails to declare that the Local Content Declaration Templates (Annex C, D and E) have been audited and certified as correct.

2. Definitions

- 2.1. **“bid”** includes written price quotations, advertised competitive bids or proposals;
- 2.2. **“bid price”** price offered by the bidder, excluding value added tax (VAT);

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

<u>Description of services, works or goods</u>	<u>Stipulated minimum threshold</u>
Concrete	100%
Structural Steel	80%
Fencing	100%

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

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

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

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

Indicate the rate(s) of exchange against the appropriate currency in the table below (refer to Annex A of SATS 1286:2011):

Currency	Rates of exchange
US Dollar	
Pound Sterling	
Euro	
Yen	
Other	

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

Note: VAT to be excluded from all calculations

Returnable Schedules

												SATS 1286.2011		
Annex D														
Imported Content Declaration - Supporting Schedule to Annex C														
(D1)	Tender No.												Note: VAT to be excluded from all calculations	
(D2)	Tender description:													
(D3)	Designated Products:													
(D4)	Tender Authority:													
(D5)	Tendering Entity name:													
(D6)	Tender Exchange Rate:		Pula		EU		R 9,00		GBP		R 12,00			
A. Exempted imported content					Calculation of imported content						Summary			
	Tender item no's	Description of imported content	Local supplier	Overseas Supplier	Foreign currency value as per Commercial Invoice	Tender Exchange Rate	Local value of imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT	Tender Qty	Exempted imported value		
	(D7)	(D8)	(D9)	(D10)	(D11)	(D12)	(D13)	(D14)	(D15)	(D16)	(D17)	(D18)		
(D19) Total exempt imported value											R 0			
												This total must correspond with Annex C - C 21		
B. Imported directly by the Tenderer					Calculation of imported content						Summary			
	Tender item no's	Description of imported content	Unit of measure	Overseas Supplier	Foreign currency value as per Commercial Invoice	Tender Rate of Exchange	Local value of imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT	Tender Qty	Total imported value		
	(D20)	(D21)	(D22)	(D23)	(D24)	(D25)	(D26)	(D27)	(D28)	(D29)	(D30)	(D31)		
(D32) Total imported value by tenderer											R 0			
C. Imported by a 3rd party and supplied to the Tenderer					Calculation of imported content						Summary			
	Description of imported content	Unit of measure	Local supplier	Overseas Supplier	Foreign currency value as per Commercial Invoice	Tender Rate of Exchange	Local value of imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT	Quantity imported	Total imported value		
	(D33)	(D34)	(D35)	(D36)	(D37)	(D38)	(D39)	(D40)	(D41)	(D42)	(D43)	(D44)		
(D45) Total imported value by 3rd party											R 0			
D. Other foreign currency payments				Calculation of foreign currency payments						Summary of payments				
	Type of payment	Local supplier making the payment	Overseas beneficiary	Foreign currency value paid	Tender Rate of Exchange							Local value of payments		
	(D46)	(D47)	(D48)	(D49)	(D50)							(D51)		
(D52) Total of foreign currency payments declared by tenderer and/or 3rd party														
Signature of tenderer from Annex B												(D53) Total of imported content & foreign currency payments - (D32), (D45) & (D52) above		
												R 0		
Date:												This total must correspond with Annex C - C 23		

SATS 1286.2011

Annex E

Local Content Declaration - Supporting Schedule to Annex C

(E1)	Tender No.		Note: VAT to be excluded from all calculations
(E2)	Tender description:		
(E3)	Designated products:		
(E4)	Tender Authority:		
(E5)	Tendering Entity name:		

Local Products (Goods, Services and Works)	Description of items purchased	Local suppliers	Value
	(E6)	(E7)	(E8)
	(E9) Total local products (Goods, Services and Works)		R 0
(E10)	Manpower costs (Tenderer's manpower cost)		R 0
(E11)	Factory overheads (Rental, depreciation & amortisation, utility costs, consumables etc.)		R 0
(E12)	Administration overheads and mark-up (Marketing, insurance, financing, interest etc.)		R 0
		(E13) Total local content	R 0
		This total must correspond with Annex C - C24	

Signature of tenderer from Annex B

Date:

5. Were the Local Content Declaration Templates (Annex C, D and E) audited and certified as correct?
(***Tick applicable box***)

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

- 5.1. If yes, provide the following particulars:

- (a) Full name of auditor:
(b) Practice number:
(c) Telephone and cell number:
(d) Email address:

(Documentary proof regarding the declaration will, when required, be submitted to the satisfaction of the Accounting Officer / Accounting Authority)

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

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

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

IN RESPECT OF BID NO.

ISSUED BY: (Procurement Authority / Name of Municipality / Municipal Entity):
..... NB

1 The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the bidder.

2 Guidance on the Calculation of Local Content together with Local Content Declaration Templates (Annex C, D and E) is accessible on http://www.thedti.gov.za/industrial_development/ip.jsp. Bidders should first complete Declaration D. After completing Declaration D, bidders should complete Declaration E and then consolidate the information on Declaration C. **Declaration C should be submitted with the bid documentation at the closing date and time of the bid in order to substantiate the declaration made in paragraph (c) below.** Declarations D and E should be kept by the bidders for verification purposes for a period of at least 5 years. The successful bidder is required to continuously update Declarations C, D and E with the actual values for the duration of the contract.

I, the undersigned,(full names),
do hereby declare, in my capacity as
of (name of bidder entity), the
following:

(a) The facts contained herein are within my own personal knowledge.

(b) I have satisfied myself that

- (i) the goods/services/works to be delivered in terms of the above-specified bid comply with the minimum local content requirements as specified in the bid, and as measured in terms of SATS 1286:2011; and
- (ii) the declaration templates have been audited and certified to be correct.

(c) The local content percentages (%) indicated below has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E which has been consolidated in Declaration C;

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

Local content %, as calculated in terms of SATS 1286:2011

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

(d) I accept that the Procurement Authority / Municipality /Municipal Entity has the right to request that the local content be verified in terms of the requirements of SATS 1286:2011.

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

SIGNATURE: _____

DATE: _____

WITNESS No. 1 _____

DATE: _____

WITNESS No. 2 _____

DATE: _____

MBD 7.2

CONTRACT FORM - RENDERING OF SERVICES

THIS FORM MUST BE FILLED IN DUPLICATE BY BOTH THE SERVICE PROVIDER (PART 1) AND THE PURCHASER (PART 2). BOTH FORMS MUST BE SIGNED IN THE ORIGINAL SO THAT THE SERVICE PROVIDER AND THE PURCHASER WOULD BE IN POSSESSION OF ORIGINALLY SIGNED CONTRACTS FOR THEIR RESPECTIVE RECORDS.

PART 1 (TO BE FILLED IN BY THE SERVICE PROVIDER)

1. I hereby undertake to render services described in the attached bidding documents to (name of the institution)..... in accordance with the requirements and task directives / proposals specifications stipulated in Bid Number..... at the price/s quoted. My offer/s remain binding upon me and open for acceptance by the Purchaser during the validity period indicated and calculated from the closing date of the bid.
2. The following documents shall be deemed to form and be read and construed as part of this agreement:
 - (i) Bidding documents, viz
 - Invitation to bid;
 - Tax clearance certificate;
 - Pricing schedule(s);
 - Filled in task directive/proposal;
 - Preference claims for Broad Based Black Economic Empowerment Status Level of Contribution in terms of the Preferential Procurement Regulations 2011;
 - Declaration of interest;
 - Declaration of Bidder's past SCM practices;
 - Certificate of Independent Bid Determination;
 - Special Conditions of Contract;
 - (ii) General Conditions of Contract; and
 - (iii) Other (specify)
3. I confirm that I have satisfied myself as to the correctness and validity of my bid; that the price(s) and rate(s) quoted cover all the services specified in the bidding documents; that the price(s) and rate(s) cover all my obligations and I accept that any mistakes regarding price(s) and rate(s) and calculations will be at my own risk.
4. I accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me under this agreement as the principal liable for the due fulfillment of this contract.
5. I declare that I have no participation in any collusive practices with any bidder or any other person regarding this or any other bid.
6. I confirm that I am duly authorised to sign this contract.

NAME (PRINT)

CAPACITY

SIGNATURE

NAME OF FIRM

DATE

WITNESSES

1

2

DATE:

CONTRACT FORM - RENDERING OF SERVICES PART 2 (TO BE FILLED IN BY THE PURCHASER)

1. I..... in my capacity as.....
accept your bid under reference numberdated.....for the rendering of services indicated hereunder and/or further specified in the annexure(s).
2. An official order indicating service delivery instructions is forthcoming.
3. I undertake to make payment for the services rendered in accordance with the terms and conditions of the contract, within 30 (thirty) days after receipt of an invoice.

DESCRIPTION OF SERVICE	PRICE (ALL APPLICABLE TAXES INCLUDED)	COMPLETION DATE	B-BBEE STATUS LEVEL OF CONTRIBUTION	MINIMUM THRESHOLD FOR LOCAL PRODUCTION AND CONTENT (if applicable)

4. I confirm that I am duly authorised to sign this contract.

SIGNED AT ON

NAME (PRINT)

SIGNATURE

OFFICIAL STAMP

WITNESSES

1

2

DATE:

MBD 8

DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

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

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

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

CERTIFICATION

I, THE UNDERSIGNED (FULL NAME)
CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM TRUE AND CORRECT.

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

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

MBD 9

CERTIFICATE OF INDEPENDENT BID DETERMINATION

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

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

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

MBD 9

CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:

(Bid Number and Description)

in response to the invitation for the bid made by:

(Name of Municipality / Municipal Entity)

do hereby make the following statements that I certify to be true and complete in every respect: I certify, on behalf of: ___ that:

(Name of Bidder)

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

MBD 9

6. The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium³ will not be construed as collusive bidding.
7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
- (a) prices;
 - (b) geographical area where product or service will be rendered (market allocation)
 - (c) methods, factors or formulas used to calculate prices;
 - (d) the intention or decision to submit or not to submit, a bid;
 - (e) the submission of a bid which does not meet the specifications and conditions of the bid; or
 - (f) bidding with the intention not to win the bid.
8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.
9. The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
10. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

J

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

PART C1: AGREEMENT AND CONTRACT DATA

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C1.4	Occupational Health and Safety Agreement	104

_____ Contractor	_____ Witness 1	_____ Witness 2	_____ Employer	_____ Witness 1	_____ Witness 2
---------------------	--------------------	--------------------	-------------------	--------------------	--------------------

C1.1: FORM OF OFFER AND ACCEPTANCE

1. OFFER

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

Contract No. TEC03/2022 Construction of Sheleni Gravel Access Road WITHIN OKHAHLAMBA LOCAL MUNICIPALITY

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

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

The offered total of the prices inclusive of Value-Added Tax is

.....

..... Rand (in words); R(in figures)

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

Signature(s)

Name(s)

Capacity

for the **Tenderer**
(Name and address of organization)

Name and signature of witness

..... Date

2. ACCEPTANCE

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

The terms of the contract are contained in

Part C1 : Agreements and contract data (which includes this agreement) Part C2 :

Pricing data

Part C3 : Scope of work

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

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

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

Notwithstanding anything contained herein, this agreement comes into effect on the date when the tenderer receives one fully completed original copy of this document, including the schedule of deviations (if any). Unless the tenderer (now contractor), within five (5) working days of the date of such receipt, notifies the employer in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the parties.¹

Signature(s)

Name(s)

Capacity

for the **Employer**

(Name and address of organization)

Name and signature of witness

.....

Date

¹ As an alternative the following wording may be used :

Notwithstanding anything contained herein, this agreement comes into effect two (2) working days after the submission by the Employer of one fully completed original copy of this document, including the schedule of deviations (if any), to a courier-to-counter delivery / counter-to-counter delivery / door-to-counter delivery / door- to-door delivery / courier service (delete that which is not applicable), provided that the Employer notifies the Tenderer of the tracking number within 24 hours of such submission. Unless the tenderer (now contractor) within seven (7) working days of the date of such submission 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.

3. SCHEDULE OF DEVIATIONS

Notes:

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

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

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

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

C1.2: CONTRACT DATA (PART 1)

The Conditions of Contract are the General Conditions of Contract for Construction Works (2015) published by the South African Institution of Civil Engineering (SAICE). Copies of these conditions of contract may be obtained from the SAICE Tel no.: (0)11 805 5947.

The General Conditions of Contract for Construction Works make several references to the Contract Data. The Contract Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the General Conditions of Contract.

Each item of data given below is cross-referenced to the clause in the General Conditions of Contract for Construction Works to which it mainly applies.

PART 1: DATA PROVIDED BY THE EMPLOYER

Clause	Description
1.1.14 1.2.2	<p>The Employer is the OKHAHLAMBA LOCAL MUNICIPALITY</p> <p>The Employer's address for receipt of communications and notices is :</p> <p>Telephone: (036) 448 8000 Facsimile: (036) 448 1986</p> <p>Address (Postal) : PO Box 71 (Physical): 259 Kingsway Street</p> <p style="text-align: center;">Bergville Bergville</p> <p style="text-align: center;">3350 3350</p>
1.1.15 1.2.2	<p>The Engineer is Sikone Engineers</p> <p>The Engineer's address for receipt of communications and notices is :</p> <p>Suite 1, Brozite Block, Kloof, 3610</p> <p>Tel: 031 220 2089 Fax: 086 206 1765</p> <p>E-mail : tenders@sikone.co.za</p>
1.1.13	The time for completing the works is 8 months.
1.6 and 38	The special non-working days are public holidays, Sundays and the year-end break . These days will be excluded from time calculations.
1.6	The year-end break commences on 09 December 2022 and ends on 03 January 2023
2.3	<p>The Engineer is required to obtain the specific approval of the Employer before executing any of the following functions or duties:</p> <p>a) The issuing of a variation order in terms of Clause 36.2.</p> <p>b) Approval of extension of time in terms of Clause 42.2.</p> <p>c) Approval of penalties in terms of Clause 43.1.</p> <p>d) Approval to utilize the contingencies</p>
4.5.2	Replace the term "Safety" with "Occupational Health and Safety".

Clause	Description
7	The time to deliver the Deed of Guarantee is 14 days of the Commencement Date
	The Form of Guarantee is to contain the wording of the document included in C1.3. The liability of the Guarantee shall be for 10 % of the Tender Price.
10	The Contractor shall commence executing the Works within 14 days of the Commencement Date.
12.2	The Contractor shall deliver his programme of work within 14 days of the Commencement Date.
35.1.1.2.2	The value of the materials supplied by the Employer to be included in the insurance sum is R0-00 (Nil) .
35.1.1.2.3	The amount to cover professional fees for repairing damage and loss to be included in the insurance sum is 14% .
35.1.3	The limit of indemnity for the liability insurance required is R10 million .
37.2.2.3	The percentage allowance to cover overhead charges for work executed on a day-work basis is 25%
43.1	The penalty for failing to complete the Works is R 5000 per day
46.2	The Contract is a Fixed Price Contract: Contract Price Adjustment will not apply to this contract
46.3	Price adjustments for variations in the costs of special materials will not apply to this contract. Refer Contract Data (Part 2).
49.1.5	The percentage advance on materials not yet built into the Permanent Works is 80 % .
49.3	The percentage retention on the amounts due to the Contractor is 10 % .
49.3	The limit of retention money is 10 % of the Contract Price. No interest will be paid on retention money
49.6	A Retention Money Guarantee is permitted. Replace the term "Bank" with "Bank or Insurance Company" in Clauses 49.6.1 to 49.6.3.
51.5.3	Delete Clause 51.5.3 as retention monies shall not be halved at completion.
53.1	The Defects Liability Period is 06 months measured from the date of the Certificate of Completion.
55.1.8	Replace subclause with: The Contractor or anyone on his behalf or in his employ would pay, offer or offer as payment to any person in the employ of the Employer, or in the employ of the Engineer, a gratuity or reward or commission.
Additional Conditions of Contract	EXTENSION OF TIME FOR ABNORMAL RAINFALL Extensions of time in respect of clause 42 in respect of abnormal rainfall shall be calculated using the following formula for each calendar month or part thereof: $V = \frac{Nw \cdot Nn \cdot \sum R_w \cdot R_n}{X}$ Where:

Clause	Description
	<p>V = Extension of time in calendar days in respect of the calendar month under consideration.</p>
	<p>Nw = Actual number of days during the calendar month on which a rainfall of 10 mm or more has been recorded.</p> <p>Nn = Average number of days in the relevant calendar month, as derived from existing rainfall records, as stated in the Scope of Work, on which a rainfall of 10mm or more has been recorded for the calendar month.</p> <p>Rw = Actual average rainfall in mm recorded for the calendar month under consideration.</p> <p>Rn = Average rainfall in mm for the calendar month as derived from existing rainfall records as stated in the Scope of Work.</p> <p>For purposes of the Contract Nn, Rn, X and Y shall have those values assigned to them in the Scope of Work.</p> <p>If V is negative and its absolute value exceeds Nn, then V shall be taken as equal to minus Nn.</p> <p>The total extension of time shall be the algebraic sum of all monthly totals for the period under consideration, but if the total is negative the time for completion shall not be reduced due to subnormal rainfall.</p> <p>Extensions of time for part of a month shall be calculated using pro rata values of Nn and Rn.</p> <p>This formula does not take account flood damage which could cause further or concurrent delays and will be treated separately as far as extension of time is concerned.</p> <p>The factor (Nw – Nn) shall be considered to represent a fair allowance for variations from the average in the number of days during which rainfall exceeds 10 mm. The factor (Rw- Rn) shall be considered to represent a fair allowance for variations from the average in the number of days during which the rainfall did not exceed 10 mm but wet conditions prevented or disrupted work.</p> <p>For the purpose of applying the formula, accurate rain gauging shall be taken at a suitable point on the Site and the Contractor shall at his own expense, take all necessary precautions to ensure that rain gauges cannot be interfered with by unauthorized persons.</p>
Additional Clause	<p>MENTORING OF LEARNERS</p> <p>Definition</p> <p>Mentor means an experienced and trusted advisor appointed by the National Department of Public Works and tasked with the provision of assistance to the Learners and Learner Contracting Companies in the planning, execution, and management of the on-site training projects.</p> <p>Objectives of mentorship services</p> <p>The National Department of Public Works' objective in appointing a Mentor is to:</p> <ol style="list-style-type: none"> minimize the Public Body's risk of the projects not being constructed to stated requirements, within budget and on time; provide access to project and commercial expertise that Learner Contracting Companies may lack during the execution of the three projects which form an integral part of the EPWP Contractor Learnership Programme outlined in the Scope of Work. capacitate Learner Contracting Companies to successfully complete their contracts with the Public Body and to work independently and profitably; and identify learners who do not satisfy the requirements of the EPWP Learnership Programme and as such be removed from the programme. <p>Authority of mentors</p>

Clause	Description
	The Mentor has no authority to relieve the Contractor or the Employer of any of his obligations under the Contract.
	<p>Payment for the labour-intensive component of the works</p> <p>Payment for works identified in the Scope of Work as being labour-intensive shall only be made in accordance with the provisions of the Contract if the works are constructed strictly in accordance with the provisions of the scope of work. Any non-payment for such works shall not relieve the Contractor in any way from his obligations either in contract or in delict.</p> <p>Applicable labour laws</p> <p>The Ministerial Determination, Special Public Works Programmes, issued in terms of the Basic Conditions of Employment Act of 1997 by the Minister of Labour in Government Notice N° R63 of 25 January 2002, as reproduced below, shall apply to works described in the scope of work as being labour intensive and which are undertaken by unskilled or semi-skilled workers.</p>
	<p>1. Introduction</p> <p>1.1 This document contains the standard terms and conditions for workers employed in elementary occupations on a Special Public Works Programme (SPWP). These terms and conditions do NOT apply to persons employed in the supervision and management of a SPWP.</p> <p>1.2 In this document –</p> <p>(a) “department” means any department of the State, implementing agent or contractor;</p> <p>(b) “employer” means any department, implementing agency or contractor that hires workers to work in elementary occupations on a SPWP;</p> <p>(c) “worker” means any person working in an elementary occupation on a SPWP;</p> <p>(d) “elementary occupation” means any occupation involving unskilled or semi- skilled work;</p> <p>(e) “management” means any person employed by a department or implementing agency to administer or execute an SPWP;</p> <p>(f) “task” means a fixed quantity of work;</p> <p>(g) “task-based work” means work in which a worker is paid a fixed rate for performing a task;</p> <p>(h) “task-rated worker” means a worker paid on the basis of the number of tasks completed;</p> <p>(i) “time-rated worker” means a worker paid on the basis of the length of time worked.</p>
	<p>2. Terms of Work</p> <p>2.1 Workers on a SPWP are employed on a temporary basis.</p> <p>2.2 A worker may NOT be employed for longer than 24 months in any five-year cycle on a SPWP</p> <p>2.3 Employment on a SPWP does not qualify as employment as a contributor for the purposes of the Unemployment Insurance Act 30 of 1966.</p>

Clause	Description
	<p>3. Normal Hours of Work</p> <p>3.1 An employer may not set tasks or hours of work that require a worker to work–</p> <p>(a) more than forty hours in any week</p> <p>(b) on more than five days in any week; and</p> <p>(c) for more than eight hours on any day.</p> <p>3.2 An employer and worker may agree that a worker will work four days per week. The worker may then work up to ten hours per day.</p>
	<p>4. Meal Breaks</p> <p>4.1 A worker may not work for more than five hours without taking a meal break of at least thirty minutes duration.</p> <p>4.2 An employer and worker may agree on longer meal breaks.</p> <p>4.3 A worker may not work during a meal break. However, an employer may require a worker to perform duties during a meal break if those duties cannot be left unattended and cannot be performed by another worker. An employer must take reasonable steps to ensure that a worker is relieved of his or her duties during the meal break.</p> <p>4.4 A worker is not entitled to payment for the period of a meal break. However, a worker who is paid on the basis of time worked must be paid if the worker is required to work or to be available for work during the meal break.</p>
	<p>5. Special Conditions for Security Guards</p> <p>5.1 A security guard may work up to 55 hours per week and up to eleven hours per day.</p> <p>5.2 A security guard who works more than ten hours per day must have a meal break of at least one hour or two breaks of at least 30 minutes each.</p>
	<p>6. Daily Rest Period</p> <p>Every worker is entitled to a daily rest period of at least eight consecutive hours. The daily rest period is measured from the time the worker ends work on one day until the time the worker starts work on the next day.</p>
	<p>7. Weekly Rest Period</p> <p>Every worker must have two days off every week. A worker may only work on their day off to perform work which must be done without delay and cannot be performed by workers during their ordinary hours of work ("emergency work").</p>
	<p>8. Work on Sundays and Public Holidays</p> <p>8.1 A worker may only work on a Sunday or public holiday to perform emergency or security work.</p> <p>8.2 Work on Sundays is paid at the ordinary rate of pay.</p> <p>8.3 A task-rated worker who works on a public holiday must be paid –</p> <p>(a) the worker's daily task rate, if the worker works for less than four hours;</p>

Clause	Description
	<p>(b) double the worker's daily task rate, if the worker works for more than four hours.</p> <p>8.4 A time-rated worker who works on a public holiday must be paid –</p> <p>(a) the worker's daily rate of pay, if the worker works for less than four hours on the public holiday;</p> <p>(b) double the worker's daily rate of pay, if the worker works for more than four hours on the public holiday.</p>
	<p>9. Sick Leave</p> <p>9.1 Only workers who work four or more days per week have the right to claim sick- pay in terms of this clause.</p> <p>9.2 A worker who is unable to work on account of illness or injury is entitled to claim one day's paid sick leave for every full month that the worker has worked in terms of a contract.</p> <p>9.3 A worker may accumulate a maximum of twelve days' sick leave in a year.</p> <p>9.4 Accumulated sick-leave may not be transferred from one contract to another contract.</p> <p>9.5 An employer must pay a task-rated worker the worker's daily task rate for a day's sick leave.</p> <p>9.6 An employer must pay a time-rated worker the worker's daily rate of pay for a day's sick leave.</p> <p>9.7 An employer must pay a worker sick pay on the worker's usual payday.</p> <p>9.8 Before paying sick-pay, an employer may require a worker to produce a certificate stating that the worker was unable to work on account of sickness or injury if the worker is –</p> <p>(a) absent from work for more than two consecutive days; or</p> <p>(b) absent from work on more than two occasions in any eight-week period.</p> <p>9.9 A medical certificate must be issued and signed by a medical practitioner, a qualified nurse or a clinic staff member authorized to issue medical certificates indicating the duration and reason for incapacity.</p> <p>9.10 A worker is not entitled to paid sick-leave for a work-related injury or occupational disease for which the worker can claim compensation under the Compensation for Occupational Injuries and Diseases Act.</p> <p>10. Maternity Leave</p> <p>10.1 A worker may take up to four consecutive months' unpaid maternity leave.</p> <p>10.2 A worker is not entitled to any payment or employment-related benefits during maternity leave.</p> <p>10.3 A worker must give her employer reasonable notice of when she will start maternity leave and when she will return to work.</p>
	<p>10.4 A worker is not required to take the full period of maternity leave. However, a worker may not work for four weeks before the expected date of birth of herchild</p>

Clause	Description
	or for six weeks after the birth of her child, unless a medical practitioner, midwife or qualified nurse certifies that she is fit to do so.
	<p>10.5 A worker may begin maternity leave :-</p> <p>(a) four weeks before the expected date of birth; or</p> <p>(b) on an earlier date :-</p> <p>(i) if a medical practitioner, midwife or certified nurse certifies that it is necessary for the health of the worker or that of her unborn child; or</p> <p>(c) on a later date, if a medical practitioner, midwife or certified nurse has certified that the worker is able to continue to work without endangering her health.</p> <p>10.6 A worker who has a miscarriage during the third trimester of pregnancy or bears a stillborn child may take maternity leave for up to six weeks after the miscarriage or stillbirth.</p> <p>10.7 A worker who returns to work after maternity leave, has the right to start a new cycle of twenty-four months employment, unless the SPWP on which she was employed has ended.</p> <p>11. Family responsibility leave</p> <p>11.1 Workers, who work for at least four days per week, are entitled to three days paid family responsibility leave each year in the following circumstances :-</p> <p>(a) when the employee's child is born;</p> <p>(b) when the employee's child is sick;</p> <p>(c) in the event of a death of –</p> <p>(i) the employee's spouse or life partner;</p> <p>(ii) the employee's parent, adoptive parent, grandparent, child, adopted child, grandchild or sibling.</p> <p>12. Statement of Conditions</p> <p>12.1 An employer must give a worker a statement containing the following details at the start of employment :-</p> <p>(a) the employer's name and address and the name of the SPWP;</p> <p>(b) the tasks or job that the worker is to perform; and</p> <p>(c) the period for which the worker is hired or, if this is not certain, the expected duration of the contract;</p> <p>(d) the worker's rate of pay and how this is to be calculated;</p> <p>(e) the training that the worker will receive during the SPWP</p> <p>12.2 An employer must ensure that these terms are explained in a suitable language to any employee who is unable to read the statement.</p> <p>12.3. An employer must supply each worker with a copy of these conditions of employment.</p> <p>13. Keeping Records</p> <p>13.1 Every employer must keep a written record of at least the following :-</p>

Clause	Description
	<p>(a) the worker's name and position;</p> <p>(b) in the case of a task-rated worker, the number of tasks completed by the worker;</p> <p>(c) in the case of a time-rated worker, the time worked by the worker;</p> <p>(d) payments made to each worker.</p> <p>13.2 The employer must keep this record for a period of at least three years after the completion of the SPWP.</p>
	<p>14. Payment</p> <p>14.1 An employer must pay all wages at least monthly in cash or by cheque or into a bank account.</p> <p>14.2 A task-rated worker will only be paid for tasks that have been completed.</p> <p>14.3 An employer must pay a task-rated worker within five weeks of the work being completed and the work having been approved by the manager or the contractor having submitted an invoice to the employer.</p> <p>14.4 A time-rated worker will be paid at the end of each month.</p> <p>14.5 Payment must be made in cash, by cheque or by direct deposit into a bank account designated by the worker.</p> <p>14.6 Payment in cash or by cheque must take place :-</p> <p>(a) at the workplace or at a place agreed to by the worker;</p> <p>(b) during the worker's working hours or within fifteen minutes of the start or finish of work;</p> <p>(c) in a sealed envelope which becomes the property of the worker.</p> <p>14.7 An employer must give a worker the following information in writing :-</p> <p>(a) the period for which payment is made;</p> <p>(b) the numbers of tasks completed or hours worked;</p> <p>(c) the worker's earnings;</p> <p>(d) any money deducted from the payment;</p> <p>(e) the actual amount paid to the worker.</p> <p>14.8 If the worker is paid in cash or by cheque, this information must be recorded on the envelope and the worker must acknowledge receipt of payment by signing for it</p> <p>14.9 If a worker's employment is terminated, the employer must pay all monies owing to that worker within one month of the termination of employment.</p>
	<p>15. Deductions</p> <p>15.1 An employer may not deduct money from a worker's payment unless the deduction is required in terms of a law.</p> <p>15.2 An employer must deduct and pay to the SA Revenue Services any income tax that the worker is required to pay.</p> <p>15.3 An employer who deducts money from a worker's pay for payment to another person must pay the money to that person within the time period and other</p>

Clause	Description
	requirements specified in the agreement law, court order or arbitration award concerned.
	<p>15.4 An employer may not require or allow a worker to :-</p> <p>(a) repay any payment except an overpayment previously made by the employer by mistake;</p> <p>(b) state that the worker received a greater amount of money than the employer actually paid to the worker; or</p> <p>(c) pay the employer or any other person for having been employed.</p>
	<p>16. Health and Safety</p> <p>16.1 Employers must take all reasonable steps to ensure that the working environment is healthy and safe.</p> <p>16.2 A worker must :-</p> <p>(a) work in a way that does not endanger his/her health and safety or that of any other person;</p> <p>(b) obey any health and safety instruction;</p> <p>(c) obey all health and safety rules of the SPWP;</p> <p>(d) use any personal protective equipment or clothing issued by the employer;</p> <p>(e) report any accident, near-miss incident or dangerous behavior by another person to their employer or manager.</p>
	<p>17. Compensation for Injuries and Diseases</p> <p>17.1 It is the responsibility of the employers (other than a contractor) to arrange for all persons employed on a SPWP to be covered in terms of the Compensation for Occupational Injuries and Diseases Act, 130 of 1993.</p> <p>17.2 A worker must report any work-related injury or occupational disease to their employer or manager.</p> <p>17.3 The employer must report the accident or disease to the Compensation Commissioner.</p> <p>17.4 An employer must pay a worker who is unable to work because of an injury caused by an accident at work 75% of their earnings for up to three months. The employer will be refunded this amount by the Compensation Commissioner. This does NOT apply to injuries caused by accidents outside the workplace such as road accidents or accidents at home.</p>
	<p>18. Termination</p> <p>18.1 The employer may terminate the employment of a worker for good cause after following a fair procedure.</p> <p>18.2 A worker will not receive severance pay on termination.</p> <p>18.3 A worker is not required to give notice to terminate employment. However, a worker who wishes to resign should advise the employer in advance to allow the employer to find a replacement.</p> <p>18.4 A worker who is absent for more than three consecutive days without informing the employer of an intention to return to work will have terminated the contract. However, the worker may be re-engaged if a position becomes available for the balance of the 24-month period.</p>

Clause	Description
	18.5 A worker who does not attend required training events, without good reason, will have terminated the contract. However, the worker may be re-engaged if a position becomes available for the balance of the 24-month period.
	<p>19. Certificate of Service</p> <p>19.1 On termination of employment, a worker is entitled to a certificate stating –</p> <ul style="list-style-type: none"> (a) the worker's full name; (b) the name and address of the employer; (c) the SPWP on which the worker worked; (d) the work performed by the worker; (e) any training received by the worker as part of the SPWP; (f) the period for which the worker worked on the SPWP; (g) any other information agreed on by the employer and worker.

C1.2: CONTRACT DATA (PART 2)

PART 2: DATA PROVIDED BY THE CONTRACTOR.

Clause	Description												
1.1.8	The Contractor is the <i>[Enter the Legal name of the Contractor]</i> .												
1.2.2	<p>The Contractor's address for receipt of communications and notices is :</p> <p>Telephone: Facsimile:</p> <p>E-mail :</p> <p>Address (Postal) : Address (Physical) :</p> <p>.....</p> <p>.....</p>												
37.2.2.3	The percentage allowance to cover all overhead charges is												
42.1	<p>The Works shall be completed in days/weeks/months *(delete one).</p> <p><i>[State the total number of days, weeks, months or years which must include the special non-working days and the year end break]</i>.</p> <p>The Works shall be completed for the portions as set out in the Scope of Works for :</p> <p>Portion 1 within.....(To be completed by the Compiler)</p> <p>Portion 2 within</p> <p>The whole of the Works shall be complete within</p>												
46.3	<p>The variation in cost of special materials is :</p> <table border="1"> <thead> <tr> <th>Type of Material</th> <th>Unit</th> <th>Rate or Price</th> </tr> </thead> <tbody> <tr> <td>.....</td> <td>.....</td> <td>.....</td> </tr> <tr> <td>.....</td> <td>.....</td> <td>.....</td> </tr> <tr> <td>.....</td> <td>.....</td> <td>.....</td> </tr> </tbody> </table>	Type of Material	Unit	Rate or Price
Type of Material	Unit	Rate or Price											
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C1.3: FORM OF GUARANTEE

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

GUARANTOR DETAILS AND DEFINITIONS

"Guarantor" means:

Physical Address:

"Employer" means: OKHAHLAMBA LOCAL MUNICIPALITY

"Contractor" means:

"Engineer" means: SIKONE ENGINEERS

"Works" means:

"Site" means:

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

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

Amount in words:

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

Amount in words:

"Expiry Date" means:

CONTRACT DETAILS

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

PERFORMANCE GUARANTEE

1. The Guarantor's liability shall be limited to the amount of the Guaranteed Sum.
2. The Guarantor's period of liability shall be from and including the date of issue by this Performance Guarantee and up to and including the Expiry Date or the date of issue by the Engineer of the Certificate of Completion of the Works or the date of payment in full of the Guaranteed Sum, whichever occurs first. The Engineer and/or the Employer shall advise the Guarantor in writing of the date on which the Certificate of Completion of the Works has been issued.
3. The Guarantor hereby acknowledge that:
 - 3.1 any reference in this Performance Guarantee to the Contract is made for the purpose of convenience and shall not be construed as any intention whatsoever to create an accessory obligation or any intention whatsoever to create a suretyship;
 - 3.2 its obligation under this Performance Guarantee is restricted to the payment of money.
 - 3.3 Subject to the guarantor's maximum liability referred to in 1, the Guarantor hereby undertakes to pay the Employer the sum certified upon receipt of the documents identified in 4.1 to 4.3.

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

district having jurisdiction in terms of Section 28 of the said Act, notwithstanding that the amount of the claim may exceed the jurisdiction of the Magistrate's Court.

Signed at:

Date:

Guarantor's Signatory (1):

Capacity:

Guarantor's Signatory (2):

Capacity:

Witness signatory (1):

Witness signatory (2):

C1.4: OCCUPATIONAL HEALTH AND SAFETY AGREEMENT

MEMORANDUM OF AGREEMENT CONCLUDED BY AND BETWEEN:

OKHAHLAMBA LOCAL MUNICIPALITY

(HEREINAFTER REFERRED TO AS THE MUNICIPALITY)

herein represented by _____
in his capacity as _____ of the Municipality, he being duly authorised thereto
and

(hereinafter referred to as the Mandatory)

herein represented by _____
in his capacity as _____
of the Mandatory, he being duly authorised thereto

WHEREAS:

1. The Municipality and the mandatory entered into a written, alternatively oral agreement on the... Day of20in terms of which the Mandatory undertook to carry out the following work for the Municipality , viz. (give a short description of the type of contract work to be done as well as the address where work will be done)

*(The said contract work is hereinafter referred to as the **Work**)*

2. The Occupational Health and Safety Act, Act 85 of 1993 as amended (hereinafter referred to as **the Act**) contains amongst others certain provisions with regard to the health and safety of people at work and in connection with the usage of plant and machinery, as well as the protection of other persons than persons at work against hazards to health and safety that originates from or in connection with the activities of persons at work.
3. Section 37(2) of the Act makes provision for the exclusion by the parties, by way of a written agreement, of supposition and accompanying liability of the Municipality as stipulated in section 37(1) of the Act.
4. The parties have reached consensus with regard to the terms and conditions to which they agree in terms of the provisions of section 37(2) of the Act.

NOW THEREFORE THE PARTIES AGREE AS FOLLOWS

1. WRITTEN AGREEMENT

The parties herewith agree in terms of section 37(2) of the Act on the arrangements and procedures that must be followed to ensure compliance with the provisions of the Act by the Mandatory.

2. ACKNOWLEDGEMENT BY THE MANDATARY

The mandatory acknowledge herewith that he is fully acquainted with the contents of the Act, as well as with all regulations and SABS codes of practice that have been made in terms of section 43 of the Act.

3. UNDERTAKING BY MANDATARY

- (a) The Mandatory hereby undertakes and binds himself to the Municipality to ensure prompt and strict compliance with the provisions of the Act and the said regulations as well as with the provisions included in this Safety Agreement at all times during the execution of the Works
- (b) It is hereby recorded that the provisions of this Safety Agreement as set out hereinafter are in no way intended to restrict the duties of the Mandatory, nor to exempt the Mandatory from his obligation in accordance with the Act and the said regulations

4. PERSONAL PROTECTIVE EQUIPMENT

- (a) It is compulsory to wear equipment for eye protection when working in an eye protection zone or where the Work requires eye protection.
- (b) It is compulsory to wear safety helmets when working in a safety helmet zone or where the Work requires safety helmets.
- (c) It is compulsory to wear hearing protection when working in a noise zone or where the Work requires hearing protection.
- (d) The wearing of other protective clothing and equipment as prescribed by the Occupational Health and Safety Officer of Nelspruit Municipality is compulsory.
- (e) The Mandatory shall ensure that the statutory requirements are complied with at all times.

5. FENCING AND GENERAL MACHINERY PROTECTION

No shield or fencing may be removed from or be moved at any machinery or installation without written permission.

6. SCAFFOLDING, LADDERS, TOOLS, ET CETERA

The Mandatory without the written permission of the Municipality may use no equipment or tools that belong to the Municipality.

Except where agreed beforehand the Mandatory shall provide enough tools and equipment to enable him to complete the Works and the Mandatory shall provide all storerooms, offices and eating halls that he may need. The Mandatory will be responsible for all his material on site.

In special case where the Municipality may lend equipment, tools or materials to the Mandatory, the Mandatory will use such equipment, tools and/or materials at his own risk and the Mandatory herewith indemnifies the Municipality against any liability of whichever nature or from any cause whatsoever, whether direct or indirect, that may arise from such usage.

7. SERVICES AND WORKING METHODS

The written permission of the Chief Executive/Town Clerk of the Municipality shall be obtained where any work which must be undertaken by the Mandatory is connected with a working process or machinery or any other service in connection therewith, or may possibly affect it, before he commences with such work.

Approval shall be obtained from the City Electrical Engineer of the Municipality before any equipment is connected to the electrical supply of the Municipality. All equipment shall be isolated before any equipment is connected to the electrical supply of the Municipality. It shall be isolated and be provided with earth leakage protection. Electrical machinery, portable electrical tools and portable lights must comply with the requirements of the applicable regulations.

Work permits must be issued in terms of the Occupational Health and Safety Act and Regulations when the nature of the work requires it. Permits must be issued by the relevant departmental head where necessary.

8. EXCAVATIONS

Written permission for excavations shall be obtained from the City Engineer of the Municipality and the Mandatory shall make sure of the existence and position of electrical cables, discharge pipes, gas lines, water conduits, et cetera before he commences with any excavation work.

All excavations and obstructions and/or any openings in platforms or floors shall be enclosed in a safe way and warning notices shall be erected to ensure absolute safety. An adequate number of red or orange caution lights shall be provided when it is dark or should bad light prevail.

The area surrounding excavations shall be kept in a safe, orderly and tidy condition. No loose material of whatever nature may be left in walkways or workplaces or be allowed to block walkways or workplaces.

Nobody may enter into any restricted area in which hazardous fumes or a shortage of oxygen exists without a permit giving permission to do so, issued by the head of the relevant department of the Municipality and until it has been certified safe for entrance by the Occupational Health and Safety Officer and the Health Inspector of the Municipality.

9. RESTRICTION TO WORKPLACE

Employees of the Mandatory shall be restricted to their workplaces except when they have to leave their area for work purposes or when they visit toilets.

10. SUBCONTRACTORS

The Mandatory shall ensure that all subcontractors receive a copy of this safety agreement and must ensure they comply with it.

11. OCCUPATIONAL HEALTH AND SAFETY OFFICER AND THE REPORTING OF ALL ACCIDENTS

The Occupational Health and Safety Officer of the Municipality is available for consultation and he will make periodical visits to the workplace of the Mandatory. Any hazardous occurrence or incident to the employees of the Mandatory that results in absence from work for a period longer than three days shall be reported in writing to the Occupational Health and Safety Officer of the Municipality within forty eight hours as well as to the Department of Labour as specified by the Act. Every user, employer, occupier, builder or excavator must, under this Act, keep record of all accidents that occur.

In the case of an accident that results in loss of life, nobody may disturb the scene of the accident or any articles involved in the accident prior to the arrival of the Occupational Health and Safety Officer and the Inspector, unless it is to prevent another accident from happening or the prevention of loss of life or to remove corpses.

The Occupational Health and Safety Officer will issue contravention notices to the Mandatory or a sub contractor when there is a non compliance and will specify the time in which it must be rectified.

The Occupational Health and Safety Officer will issue work stop notices to the Mandatory or sub contractor whenever he is

of the opinion that the health and safety of any person at work is threatened or that the contravention notices are not adhered to.

12. FIRST AID

Where five or more persons are employed at a workplace, the Mandatory shall provide and maintain an adequately equipped first-aid box that meets the following requirements.

- (a) Every first-aid box shall contain the minimum contents as prescribed by the Occupational Health and Safety Act.
 - (b) Nothing except articles and equipment required for first-aid purposes may be kept in the first-aid box.
 - (c) Each first-aid box shall be kept in a place readily accessible in case of an accident.
- All first-aid boxes shall be placed under control of a responsible person except where five or less persons are at work. The responsible person must be in the possession of a valid first-aid certificate issued by one of the following organisations:

- A South-African Red Cross Society
- B St. John's Ambulance Foundation
- C South-African First-Aid League

A notice indicating where the first-aid box is kept as well as the name of the person in charge, shall be affixed in a conspicuous place. The first-aid facilities of the Municipality may be used during emergencies.

13. FIRE PREVENTION MEASURES AND STORAGE OF FLAMMABLE MATERIAL

The Fire department of the Municipality shall be notified before any welding, oxyacetylene welding, cutting, burning of paint or tar from floors or roofs is undertaken so that the necessary fire prevention measures can be arranged. All "NO SMOKING AND OPEN SURFACE FIRES/LIGHTS PROHIBITED" notices shall be adhered to. The Mandatory and his senior employee shall acquaint themselves and their fellow workers with the fire prevention measures of the Municipality, which will also include fire alarm notices and exits in case of fire, and they shall ensure that these rules are strictly complied with.

14. COMPLETION OF WORK

Before the mandatory or his sub-contractors leaves the site they shall inform the Head of the relevant Department of the Municipality and obtain his/her written approval that the work has been completed satisfactory and that the site of the work is left in a good condition.

15. SALVAGED MATERIAL AND EQUIPMENT

Any building demolished or equipment or materials that are salvaged whilst carrying out the work shall remain the property of the Municipality, unless the contract specifically provides otherwise.

16. BREAKING OF THESE RULES AND POOR CONDUCT

The Mandatory is warned that no behavior that causes danger to their own employees, to the employees of the Municipality or general public will be tolerated. The Occupational Health and Safety Officer of the Municipality reserves the right of the withdrawal of any employees of the Mandatory or Municipality from the premises in the case of any default or breach of the agreement and to order that the completion of the work be stayed, pending compliance with this agreement; alternatively to cancel the agreement referred to in par.2 in which event the Municipality will be entitled to appoint an alternative contractor to complete the work and recover the costs thereof from the mandatory, without prejudice to any alternative or additional right or action or remedy to the Municipality, to recover from the mandatory damages for the default or breach and the cancellation.

The senior employees of the Mandatory shall sign a note of acknowledgement of this safety agreement to certify that they have received the regulations as included herein and that they understand the regulations

17. INTOXICATION

Nobody that is in a state of intoxication or that is in any other condition that causes or may cause his/her incapability to control him/herself or persons under his control may and shall not be permitted on the premises of the Municipality. The

Occupational Health and Safety Officer of the Municipality reserves the right to the withdrawal of any employees of the Mandatory or Municipality from the premises in the case of any transgression of this nature.

18. CONFIDENTIALLY

The Mandatory shall at all times treat data and information that have been made known to him or that he requires in connection with his work from the Municipality as confidential and he may not make unauthorized use thereof. He must also ensure that such data and information are not communicated to anybody else that is not an employee of the Mandatory without obtaining prior written approval from the Municipality and he must further ensure that such persons do in fact know that the said information is confidential and that they are obliged to treat it as such.

The Mandatory shall provide for adequate physical protection for any confidential documents, sketches, et cetera that he receives from the Municipality in connection with the work as well as for any copies thereof that he makes. He shall hand back all documents sketches and copies thereof to the Municipality upon completion of the work, or earlier, if so requested by the Municipality. The Mandatory shall inform the Municipality immediately should any such documents or sketches become lost.

19. INDEMNIFICATION BY THE MANDATORY

The following conditions will be applicable to the Mandatory:

- (a) The Mandatory is liable and herewith indemnifies the Municipality irrevocably and in full against any claim for loss or damage to property or arising from death or injury of any person and any associated loss or damage suffered, and against all lawsuits, claims, demands, costs, expenses, and charges that may arise when the said occurrences are caused on purpose or through the negligence, violation of legal obligations or failure by the Mandatory or its employees.
- (b) Whenever any of the employees of the Municipality is busy with work to, or with the supply of material that will be used during the execution of the work by the Mandatory, or otherwise busy with work under the instruction and supervision of the Mandatory, in as far as they may be negligent or fail to do their duty, they will be regarded as employees of the mandatory
- (c) All installations, equipment, hoisting-apparatus and other implements, scaffolding, ladders, material, et cetera that are borrowed from the Municipality by the Mandatory for usage during the execution of the work, will be used entirely at the risk of the Mandatory or employees of the Mandatory and the Mandatory herewith indemnifies the Municipality irrevocably and in full against any liability that may arise from such usage.

20. AMENDMENTS MUST BE IN WRITING

The parties agree herewith that this safety agreement is the only safety agreement between them and that no amendment thereof will be valid unless it is in writing and signed by both parties.

21. JURISDICTION AND LEGAL COSTS

In the event of any legal action being instituted pertaining to this agreement the party in default or breach will be liable for the other party's legal costs on the scale as between attorney and own Employer and the parties consent to the jurisdiction of the magistrate's court for purpose of any legal action being instituted.

PARTICULARS OF THE MANDATORY

Name (Mandatory) _____

C.E.O. (Section 16(1)) _____

ID NO _____

Designation _____

Name of Business _____

Address of Business _____

Tel number _____ (h) _____ (w) e-mail _____

Number of employees employed _____

Registration number as allocated to the Mandatory by the Workman's Compensation Commissioner Date allocated

Thus done and signed on this _____ day of _____ 20

As witnesses:

_____ (Signature)	_____ (Name in print)
_____ (Signature)	_____ (Name in print)
_____ (Signature)	_____ (Name in print)

THE MANDATORY

Thus done and signed on this _____ day of _____ 20

As witnesses:

_____ (Signature)	_____ (Name in print)
_____ (Signature)	_____ (Name in print)
_____ (Signature)	_____ (Name in print)

THE MUNICIPALITY

Acknowledgement of receipt of the agreement:

THE MANDATORY

PART C2: PRICING DATA

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C2.1: PRICING INSTRUCTIONS

- C2.1.1** Measurement and payment shall be in accordance with Clause 8 of the SANS 1200 Standardised Specifications for Civil Engineering Construction referred to in the Scope of Works, subject to the variations and amendments contained in the section "Applicable SANS 1200 standardised specifications".
- C2.1.2** Descriptions in the Bills of Quantities are abbreviated and comply generally with those in the Standardised Specifications. Clause 8 of each Standardised Specification, read together with the relevant clauses of the Scope of Work, set out what ancillary or associated activities are included in the rates for the operations specified. Should any requirements of the measurement and payment clause of the applicable Standardised Specification, or the Scope of Work, conflict with the terms of the Bill, the requirements of the Standardised or Scope of Work, as applicable, shall prevail.
- C2.1.3** The clauses in a specification in which further information regarding the Bill item can be obtained appear under "Reference clause" in the Bills of Quantities. The reference clauses indicated are not necessarily the only sources of information in respect of schedule items. Further information and set specifications may be found elsewhere in the contract documents. Standardised Specifications are identified by the letter or letters which follow SANS in the SANS 1200 series of specifications, e.g. G for SANS 1200 G.
- C2.1.4** Unless otherwise stated, items are measured nett in accordance with the drawings, and no allowance is made for waste.
- C2.1.5** The quantities set out in these Bills of Quantities are approximate and do not necessarily represent the actual amount of work to be done. The quantities of work accepted and certified for payment will be used for determining payments due and not the quantities given in the Bills of Quantities.
- C2.1.6** The prices and rates to be inserted in the Bills 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 shall cover the cost of all general risks, liabilities, and obligations set forth or implied in the documents on which the tender is based, as well as overhead charges and profit. The prices will be used as a basis for assessment of payment for additional work that may have to be carried out.
- C2.1.7** It will be assumed that prices included in these Bills of Quantities are based on Acts, Ordinances, Regulations, By-laws, International Standards and National Standards that were published 28 days before the closing date for tenders. (Refer to www.stanza.org or www.iso.org for information on standards).
- C2.1.8** Where the Scope of Work requires detailed drawings and designs or other information to be provided, all costs associated therewith are deemed to have been provided for and included in the unit rates and sum amount tendered such items
- C2.1.9** A price or rate is to be entered against each item in the Schedule/Bills of Quantities, whether the quantities are stated or not. An item against which no price is entered will be considered to be covered by the other prices or rates in the Bills of Quantities. A single lump sum will apply should a number of items be grouped together for pricing purposes.
- C2.1.10** Except where rates only are required, the Tenderer shall insert all amounts to be included in his total tendered price in the "Amount" column and show the corresponding total tendered price.
- C2.1.11** The units of measurement described in the Bills of Quantities are metric units. Abbreviations used in the Bills of Quantities are as follows:

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

C2.1.12 Those parts of the contract to be constructed using labour-intensive methods have been marked in the Bills 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.

C2.1.13 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 unauthorised 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: SCHEDULE OF QUANTITIES

CONTRACT NO: TEC03/2022
 PROJECT: CONSTRUCTION OF SHELENI ACCESS ROAD
 SECTION 1: PRELIMINARY AND GENERAL

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	SABS 1200 A	SECTION 1: PRELIMINARY AND GENERAL				
	8.3	SCHEDULED FIXED CHARGED ITEMS				
1.1	8.3.1	Contractual Requirements	Sum	1		
	8.3.2.1	Facilities for Engineer				
1.2	a) Nameboards (1 No)		Sum	2		
	8.3.2.2	Facilities for Contractor				
1.3	a) Offices and storage sheds		Sum	1		
1.4	b) Workshops		Sum	1		
1.5	e) Ablution and latrine facilities		Sum	1		
1.6	f) Tools and equipment		Sum	1		
1.7	8.3.3	Other Fixed-charge Obligations	Sum	1		
1.8	8.3.4	Removal of Site Establishment	Sum	1		
	8.4	SCHEDULED TIME-RELATED ITEMS				
1.9	8.4.1	Contractual Requirements	Sum	1		
	8.4.2.2	Facilities for Contractor	Sum	1		
1.10	a) offices and storage sheds		Sum	1		
1.11	b) Workshops		Sum	1		
1.12	c) Ablution and latrine facilities		Sum	1		
1.13	d) Tools and equipment					
1.14	8.4.3	Supervision for Duration of Construction	Sum	1		
1.15	8.4.4	Company and Head Office Overhead cost for the duration of the	Sum	1		
1.16	8.4.5	Other Time-Related Obligations	Sum	1		
	8.7	DAYWORKS				
		Labour				
1.17	a) Foreman		hr	5		
1.18	b) Skilled		hr	5		
1.19	c) Unskilled		hr	5		
1.20	d) Surveyor		hr	5		
1.21	e) Liason officer		Prov Sum	1	49,500.00	49,500.00
1.22	Contractors mark-up to above		%	49,500.00	%	
1.23	f) Material acceptance testing		Prov Sum	1	10,000.00	10,000.00
1.24	Contractors mark-up to above		%	10,000.00	%	
1.25	g) Project Administration for Engineer		Prov Sum	1	40,000.00	40,000.00
1.26	Contractors mark-up to above		%	40,000.00	%	
1.27	h) Materials		Prov Sum	1	25,000.00	25,000.00
1.28	Contractors mark-up to above		%	25,000.00	%	
1.29	i) Allowance for borrow pit Royalty fees		Prov Sum	1	50,000.00	50,000.00
1.30	Contractors mark-up to above		%	50,000.00	%	
TOTAL CARRIED FORWARD						

CONTRACT NO: TEC03/2022
 PROJECT: CONSTRUCTION OF SHELENI ACCESS ROAD
 SECTION 1: PRELIMINARY AND GENERAL

ITEM NO	Ref	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
1.31		j) Allowance for payment of an Environmental Control Officer (ECO)	Prov Sum	1	50,000.00	50,000.00
1.32		Contractors mark-up to above	%	50,000.00	%	
1.33		m) Allowance for payment of a Survey consultant	Prov Sum	1	40,000.00	40,000.00
1.34		Contractors mark-up to above	%	40,000.00	%	
		Plant				
		a) backactors				
1.35		(i) TLB	hr	2		
1.36		(ii) 1kW, 22 ton	hr	2		
		b) Compactors				
1.37		(i) Pedestrian vibrating rollwe (Bomag 111 or similar)	hr	4		
1.38		(ii) Self propelled vibro roller (Bomag 210 or similar)	hr	4		
		c) Trucks				
1.39		(i) 6m3 tip truck	hr	4		
1.40		(ii) 9000L watercart	hr	4		
	8.8	TEMPORARY WORKS				
	8.8.4	Existing services				
1.41		(c) Excavate by hand in soft material to expose services	m ³	5		
1.42	PSA1	As built plans	Sum	1		
1.43	AH 14.1	Prepare of risk assesment, safe work procedures, the project H&S plan, the provision of PPE	Sum	1		
1.44	AH 14.2	Full compliance with H&S matters during the construction period	Sum	1		
1.45	AH 14.3	Submission of a copy of the Health and Safety file to the Client at the end of the contract	Sum	1		
		PROVISION FOR EPWP				
1.46		Extra over sub-item for branding of EPWP PPE	Sum	1		
		PROVISION FOR TRAINING				
1.47		General Skills Training	Person days of Training	25		
1.48		Entrepeneural Skills Training	Prov. Sum	1	25,000.00	25,000.00
1.49		Handling cost and profit in respect of sub-item 1,48	%	25,000.00	%	
1.50		Training Venue (only if required)	Prov. Sum	1	10,000.00	10,000.00
1.51		Transport and accomodation of workers for training where it is not possible to undertake the training in close proximity to the site. (provisional sum)	Prov. Sum	1	11,250.00	11,250.00
1.52		Handling cost and profit in respect of sub-item 1,54 and 1,55	%	2,250.00	%	
TOTAL CARRIED FORWARD TO SUMMARY						

CONTRACT NO: TEC03/2022
 PROJECT: CONSTRUCTION OF SHELENI ACCESS ROAD
 SECTION 2: SITE CLEARANCE

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R - c
	SABS 1200 C	SECTION 2: SITE CLEARANCE				
2.1	8.2.1	Clear and grub (for road construction) including trees below 1m girth	m ²	13964		
2.2		Removal and re-erection of fencing	m	1400		
2.3	8,2,2	Remove and grub large trees and tree stumps of girth a) over 1 m and up to and including 2 m	No.	10		
TOTAL CARRIED FORWARD TO SUMMARY:						

CONTRACT NO: TEC03/2022
 PROJECT: CONSTRUCTION OF SHELENI ACCESS ROAD
 SECTION 3: PIPE TRENCHES

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R - c
	SABS 1200 DB	SECTION 3: PIPE TRENCHES				
3.1	8.3.1	Site Clearance for pipelines	m	240		
	8.3.2 (a)	Excavate in all materials for trenches, backfill, compact and dispose of surplus / unsuitable material, for pipes:				
		450 mm pipes:				
3.2		Exceeding 0,0m but not exceeding 1,5m	m	135		
		600 mm pipes:				
3.3		Exceeding 0,0m but not exceeding 1,5m	m	70		
		750 mm pipes:				
3.4		Exceeding 0,0m but not exceeding 1,5m	m	0		
		900 mm pipes:				
3.5		Exceeding 0,0m but not exceeding 1,5m	m	50		
	8.3.2 (b)	Extra over item (a)				
3.6		i) Intermediate Excavation	m ³	65		
3.7		ii) Hard rock Excavation	m ³	22		
	8.3.2 (c)	Excavate and dispose unsuitable material	m ³	250		
	8.3.3	EXCAVATION, ANCILLARIES				
		Make up deficiency in backfill material (Provisional)				
3.8	8.3.3.1 (b)	By Importation from borrow pits	m ³	35		
	(c)	By importation from site source	m ³	35		
TOTAL CARRIED FORWARD TO SUMMARY:						

CONTRACT NO: TEC03/2022
 PROJECT: CONSTRUCTION OF SHELENI ACCESS ROAD
 SECTION 4: GABIONS AND PITCHING

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R - c
	SABS 1200 DK	SECTION 4: GABIONS AND PITCHING				
4.1	8.2.1	Surface preparation for bedding of cavities filled with approved excavated material or rock	m ²	445		
4.2	8.2.2	Gabions a) Gabions (1.0 x 1.0 x 1.0 m) complete with rockfill (between 80 - 125mm diameter)	m ³	110		
4.3		b) Foundation mattresses of depth 0,3 m with diaphragms providing 2 m x 1 m cells complete with rockfill (between 80 - 125mm diameter)	m ³	106.8		
4.4	8.2.4	Geotextile (U 24 or similar) a) Below foundation mattresses and behind gabion walls	m ²	445		
4.5	8.2.5	Stone Pitching complete	m ²	20		
TOTAL CARRIED FORWARD TO SUMMARY:						

CONTRACT NO: TEC03/2022
 PROJECT: CONSTRUCTION OF SHELENI ACCESS ROAD
 SECTION 5: BEDDING

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R - c
	SABS 1200 LB	SECTION 5: BEDDING				
		BEDDING FROM TRENCH EXCAVATION				
5.1	8.2.2	Bedding from trench excavations (see relevant drawing)				
		a) Selected granular material	m ³	20		
5.2		b) Selected fill material	m ³	95		
		BEDDING FROM BORROW PITS				
		Provision of bedding from designated borrow pits (unlimited freehaul) and place in stockpile at 100m intervals along trench (Provisional items).				
5.3	8.2.2.3	a) Selected granular material	m ³	120		
5.4		b) Selected fill material	m ³	25		
	SABS 1200 LB	BEDDING FROM COMMERCIAL SOURCES				
	8.2.2	Supply only of bedding by importation				
	8.2.2.3	From Commercial sources				
5.5		(a) Selected granular material	m ³	80		
5.6		(b) Selected fill material	m ³	25		
TOTAL CARRIED FORWARD TO SUMMARY:						

CONTRACT NO: TEC03/2022
 PROJECT: CONSTRUCTION OF SHELENI ACCESS ROAD
 SECTION 6: EARTHWORKS (ROADS, SUBGRADE)

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R - c
	SABS 1200 DM	SECTION 6: EARTHWORKS (ROADS, SUBGRADE)				
6.1	8.3.2 & PSDM1	Preperation of Site a) Preparation and stripping of topsoil to 100mm thick, stockpile and maintain	m ²	15800		
6.2	8.3.3	Treatment of Roadbed a) Road-bed preparation and compaction of material 2) Minimum of 93 % mod. AASHTO maximum density	m ³	1580		
6.3		b) In-place treatment of road-bed in intermediate or hard rock material by 1) Ripping	m ³	960		
6.4		2) Blasting	m ³	69		
6.5	8.3.4	Cut to fill a) Compact to 93 % mod. AASHTO maximum density	m ³	520		
6.6	8.3.4	Borrow to fill a) Compact to 93 % mod. AASHTO maximum density	m ³	1800		
6.7	8.3.6	Extra-over items 54 & 55 for excavating and breaking down material in: d) Boulder excavation Class B	m ³	1300		
6.8	8.3.7	Cut to spoil or stockpile from a) Soft excavation	m ³	2367		
6.9	8.3.12	Overhaul	m ³ km	25669		
6.10	8.3.13	Surface Finishes a)Topsoiling	m ²	2346		
6.11		b) Grassing (Hydro-seeding)	m ²	2346		
6.12	8.3.16	Gravel surface layer (G7 or better - Imported from Commercial Source,150mm thick, compacted to 95% Mod AASHTO Density) No overhaul for 10km radius	m ³	1372		
6.13		Gravel surface layer (G5 or better - Imported from Commercial Source,150mm thick, compacted to 98% Mod AASHTO Density) No overhaul for 10km radius	m ³	1372		
TOTAL CARRIED FORWARD TO SUMMARY:						

CONTRACT NO: TEC03/2022
 PROJECT: CONSTRUCTION OF SHELENI ACCESS ROAD
 SECTION 7: STORMWATER DRAINAGE

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R - c
	SABS 1200 LE	SECTION 7: STORMWATER DRAINAGE				
	8.2.1	Supply, handle, lay, bed Class 50D concrete pipe Type ogee with rubber collars				
7.1		a) 450 mm diameter	m	147		
7.2		b) 600 mm diameter	m	33.6		
7.3		c) 750 mm diameter	m	0		
7.3		c) 900 mm diameter	m	7		
	8.2.8	Supply and install Manholes, Catchpits, and the like (a) Stormwater inlets (Centre and single splay) Construct complete with covers and frames (heavy duty)				
7.5		i) 0m to 2m deep	No	2		
7.6	8.2.11	Anchor Blocks (20Mpa Concrete)	m³	10		
	PSLE 1	Standards headwalls				
7.7		a) 450mm diameter pipe	No	56		
7.8		b) 600mm diameter pipe	No	10		
7.9		c) 4 x 600mm diameter pipe	No	1		
7.10		d) 3 x 750mm diameter pipe	No	0		
7.11		e) 2 x 900mm diameter pipe	No	2		
		DRAINS				
	PSLE 1	Excavation for Open Channel Mitre Drains: a) Excavating soft materail situated within the following depth ranges below surface level (rate to include for grading of excavations and disposal of material as directed including a free haul of 1.0 km)				
7.12		i) 0m up to 1.5m	m³	300		
7.13		ii) Exceeding 1.5m and up to 3.0m	m³	20		
7.14		b) Extra over for excavation in hard material, irrespective of depth	m³	20		
7.15		Cast in situ concrete and formwork In floor slabs for concrete dish drains, including formwork, mesh ref. 193 and Class U2 surface finish as per detail	m³	5		
7.16	PSLE2	Supply and construct subsoil drain as per detail, including materials, labour, tying into manholes, outlets and installation. (Rodding eyes to be constructed at 30m intervals)	m	1600		
7.17	PSLE3	Construct Earth Catchwater berms as per detail	m³	65		
TOTAL CARRIED FORWARD TO SUMMARY:						

CONTRACT NO:

TEC03/2022

PROJECT:

CONSTRUCTION OF SHELENI ACCESS ROAD

SECTION:

CULVERTS - CONCRETE, FORMWORK, REINFORCEMENT, WATERPROOFING

ITEM NO	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		CONCRETE, FORMWORK AND REINFORCEMENT				
		For Preambles refer to 'Model Preambles to All Trades'				
		<u>SUPPLEMENTARY PREAMBLES</u>				
		<u>Propriety items or materials</u>				
		Proprietary items or materials where specified are to be the brand specified - or other approved - by the client or the client's agent				
		<u>Tests</u>				
		The unit rate for concrete shall not include for the cost of testing				
		As the concrete used on this contract will involve small quantities the Engineer will decide when testing is to be done. The Contractor is however required to provide a minimum of 3 moulds and to make the tests				
		<u>Formwork</u>				
		Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use				
		The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself				
		<u>UNREINFORCED CONCRETE</u>				
		<u>10MPa/19mm concrete</u>				
8.1		10MPa blinding	m ³	16		
		1.6mm QC Decking to suspended slabs, supply, trim and fix	m ²	25		
		<u>REINFORCED CONCRETE</u>				
		<u>30MPa/19mm concrete</u>				
8.2		Surface beds on waterproofing	m ³	50		
8.3		Stairs including landings, beams and inverted beams	m ³	2		
8.4		Vertical to walls and columns	m ³	35		
		<u>Thickening under surface bed</u>				
		<u>30MPa/19mm concrete</u>				
8.5		Slabs including beams and inverted beams	m ³	102.05		
		<u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>				
		<u>30MPa/19mm concrete</u>				
8.6		Strip footings	m ³	20		
8.7		Pad footings	m ³	7		
8.8		Surface beds	m ³	1		
		Construction joints	m	3		
		Supply and place 3:1 sand/cement grout	m ³	1		
		<u>TEST BLOCKS</u>				
8.9		Making and testing 150 x 150 x 150mm concrete strength test cube	No	6		
TOTAL CARRIED FORWARD						

CONTRACT NO: TEC03/2022
 PROJECT: CONSTRUCTION OF SHELENI ACCESS ROAD
 SECTION: CULVERTS - CONCRETE, FORMWORK, REINFORCEMENT, WATERPROOFING

ITEM NO	Ref	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
		<u>CONCRETE SUNDRIES</u>				
		<u>Finishing top surfaces of concrete smooth with a wood float</u>				
8.10		Surface beds, slabs, etc	m ²	124		
8.11		Tread and risers	m ²	5		
		<u>Finishing top surfaces of concrete smooth with a steel trowel</u>				
8.12		Surface beds, slabs, etc to falls	m ²	15		
		<u>Finishing top surfaces of concrete smooth with a power float</u>				
8.13		Surface beds, slabs, etc	m ²	15		
		<u>FORMWORK</u>				
		<u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u>				
		<u>Rough formwork to sides</u>				
8.14		Pad footings	m ²	10		
8.15		Edges, risers, ends and reveals not exceeding 300mm high or wide	m	60		
8.16		Sloping and stepped outer edges of stairs not exceeding 300mm high extreme	m	6		
		<u>Rough formwork to sides and soffits</u>				
8.17		Slabs propped up not exceeding 1,5m high	m ²	20		
		<u>SMOOTH FORMWORK (DEGREE OF ACCURACY II)</u>				
		<u>Smooth formwork to sides</u>				
8.18		Wing walls	m ²	22		
		<u>MOVEMENT JOINTS</u>				
		Saw-cut joints				
8.19		3,2mm x 30mm Deep saw cut joints in top of concrete	m ²	117		
		<u>Isolation joints with 10mm polystyrene including 10 x 10mm polysulphide bead between vertical brick and/or concrete surfaces</u>				
8.20		10mm Joints not exceeding 300mm high	m	40		
		<u>REINFORCEMENT</u>				
		<u>Plain round mild steel bar reinforcement and high yield deformed steel bar reinforcement, including hoisting or lowering and fixing in position complete</u>				
8.21		6mm to 40mm Diameter bar reinforcement	t	8		
		<u>Fabric reinforcement</u>				
8.22		Type 193 fabric reinforcement in concrete surface beds, slabs etc	m ²	845		
TOTAL CARRIED FORWARD						

CONTRACT NO: TEC03/2022
PROJECT: CONSTRUCTION OF SHELENI ACCESS ROAD
SECTION: CONCRETE, FORMWORK, REINFORCEMENT

ITEM NO	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
		WATERPROOFING For Preambles refer to 'Model Preambles to All Trades'				
		SUPPLEMENTARY PREAMBLES Waterproofing Waterproofing of roofs, basements, etc. shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid to even falls to outlets, etc. with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs				
		Propriety items or materials Proprietary items or materials where specified are to be the brand specified - or other approved - by the client of the client's				
		DAMPPROOFING OF WALLS AND FLOORS <u>One layer of 375 micron "Consol Plastics Brikrip DPC"</u> <u>embossed damp proof course or equal approved</u>				
8.23		In walls	m2	95		
		<u>One layer of 250 micron "Consol Plastics Gunplas USB Green" waterproof sheeting or equal approved sealed at laps with "Gunplas Pressure Sensitive Tape"</u>				
8.24		Under surface beds	m2	495		
		<u>Prepare and apply two coats 'Brixéal' bitumen emulsion waterproof compound or equal approved</u>				
8.25		On bagged brick walls	m2	567		
		JOINT SEALANTS ETC <u>Silicone rubber base one component sealing compound</u>				
8.26		In joints in steel frames and brickwork or concrete surfaces	m	205		
		<u>Polysulphide sealing compound including backing cord, bond breaker, primer, etc.</u>				
8.27		3,2 x 30mm In saw cut joint in floors	m	117		
8.28		10 x 100mm In isolation joints	m	89		
TOTAL CARRIED FORWARD TO SUMMARY						

CONTRACT NO: TEC03/2022
 PROJECT: CONSTRUCTION OF SHELENI ACCESS ROAD
 SECTION 8: ANCILLARY ROADWORKS

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R - c
	SABS 1200 MM	SECTION 8: ANCILLARY ROADWORKS				
	8.2.1	Scheduled Items for Guardrails				
9.1		a) Supply and erect galvanized steel guardrails on timber posts, backfilled with material available on Site	m	35		
9.2	PSMM1	E/O Item 79 for excavation of posts in hard material	No.	15		
		End Units				
9.3	8.2.3	a) Returnable (Bullnose) End wings	No.	4		
	8.3	Scheduled Items for Permanent Road Signs				
9.4	8.3.6/ PSMM2	Statutory signs (610mm), street names, and the like, supplied and erected complete	No.	35		
9.5		Chevron Signage (2400x400) with frame	No.	35		
		ROCK BOLSTERS				
9.6		Construct rock bolsters as per detail on the drawing, including supply of boulders.	No.	176		
TOTAL CARRIED FORWARD TO SUMMARY:						

CONTRACT NO: TEC03/2022
 PROJECT: CONSTRUCTION OF SHELENI ACCESS ROAD
 SECTION 9: PROVISIONAL SUMS

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R - c
	SABS 1200 MM	SECTION 9: PROVISIONS SUMS				
10.1		Allow a provisional sum for water pipes to be relocated and /or protected as ordered by the Engineer.	Prov Sum	1	R 25,000.00	R 25,000.00
10.2		Handling costs and profit in respect of Sub-item B12.03(a).	%	R 25,000		
10.3		Allow a provisional sum for electrical lines to be relocated and /or protected as ordered by the Engineer.	Prov Sum	1	R 300,000.00	R 300,000.00
10.4		Handling costs and profit in respect of Sub-item B12.03(a).	%	R 300,000		
10.5		Allow a provisional sum for demolishing of existing structures as ordered by the Engineer.	Prov Sum	1	R 25,000.00	R 25,000.00
10.6		Handling costs and profit in respect of Sub-item B12.03(a).	%	R 25,000		
10.7		Allow a provisional sum for relocations of structures as ordered by the Engineer.	Prov Sum	1	R 10,000.00	R 10,000.00
10.8		Handling costs and profit in respect of Sub-item B12.03(a).	%	R 10,000		
TOTAL CARRIED FORWARD TO SUMMARY:						

CONTRACT NO: TEC03/2022
PROJECT: CONSTRUCTION OF SHELENI ACCESS ROAD

SUMMARY OF BILL OF QUANTITIES

SECTION	ITEM	AMOUNT
1	PRELIMINARY AND GENERAL	
2	SITE CLEARANCE	
3	PIPE TRENCHES	
4	GABIONS AND PITCHING	
5	BEDDING	
6	EARTHWORKS (ROADS, SUBGRADE)	
7	STORMWATER DRAINAGE	
8	CULVERTS	
9	ANCILLARY ROADWORKS	
10	PROVISIONAL SUMS	
	BOQ TOTAL	
	Add Contingencies @ 10%	
	SUB-TOTAL 1	
	Value Added Tax (VAT @ 15%)	
	TOTAL	

PART C3: SCOPE OF WORKS

TABLE OF CONTENTS

C3.1	Description of the Works
C3.2	Procurement
C3.3	Annexes
C3.3.1	Variations and Additions to Standard Specification
C3.3.2	Occupational Health and Safety Specification
C3.3.3	Construction Environmental Management Plan
C3.3.4	Drawings

C3.1. DESCRIPTION OF WORKS

The following description is a broad outline of the works and does not limit the work to be executed by the Contractor in terms of the contract. The quantities of some of the major items indicated in this section are indicative, not absolute, and are provided to define in general terms the overall scope of the project.

Approximate quantities of each type of work to be carried out in accordance with the contract documents are listed in the Schedule of Quantities in Section C2.2.

The site shall not only comprise the proclaimed road reserve but shall be extended in the broader sense to take account of all areas occupied by the Contractor, be it deliberate or unintentional, in the execution of the contract. The site includes all the land within the proclaimed limits of the road reserve along the extent of the works, borrow pits and quarry sites, stockpile areas, locations set aside for construction and supervision accommodation and any other location required for the execution of the Works.

Incidental intrusion into private or tribal property outside the road reserve shall not be permitted without the owner's written authority. Any such agreement reached with a private or tribal landowner (occupier) shall include the provision that any material or equipment on that site shall remain the exclusive property of the Employer in terms of the contract.

C3.1.1 Employer's Objectives

This project forms part of the MIG funded project dedicated for the upgrade of rural areas initiated by the Okhahlamba Local Municipality. Sheleni Gravel Road will provide an important gravel road access linking immediate community with the existing road infrastructure.

The contract is located in a region of KwaZulu-Natal that has been historically impoverished by a lack of infrastructure access. It is therefore mandatory that the Contractor shall interact with the community via proactive project liaison with and project participation by its leaders and constituted organizations and forums, as well as through the employment of its people, and these activities shall constitute essential facets of the project.

The Contractor shall be required to attend community meetings from time to time.

C3.1.2 General Description of the Project

Sheleni Gravel Access Road is located at Emmaus, about 18.6km South of Bergville, within Ward 02 of the Okhahlamba Local Municipality Area. The general location of the works is shown on the locality plan in Section C4.1 of this document.

Coordinates:

Start 28°50'54.15"S; 29° 24'41.36"E

End 1 28°51'16.06"S; 29° 24'42.85"E

End 2 28°51'06.63"S; 29° 24'27.39"E

The construction of Sheleni Gravel Road entails the following scope of works:

- Construction of 2.4km gravel-wearing course with a width of 4.9m
- Construction of twenty-one (21) circular culverts crossing (900 x 900) Each Culvert
- Provision of storm water pipe crossings of 900mm, 750mm and 600mm diameter pipes
- Provision of catch pits and headwalls
- Provision of mitre drains
- Provision of guardrails
- Provision of road signs

C3.1.3 Extent of Works

The main work items to be undertaken involves the following:

The work that is to be carried out under the contract is as provided for in the Schedule of Quantities, Drawings and project particular specifications. However, if during the course of construction conditions are found to differ from those anticipated, the Engineer reserves the right to modify the scope of the work to suit the prevailing conditions and circumstances. Variation introduced in this manner will be dealt with in accordance with the Conditions of Contract 2015.

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

General:

The following general items will be included in the contract:

- The establishment on site of the Contractor's campsite;
- Provision of offices for the Engineer's site personnel.
- The supply of plant, labour, tools, equipment and materials necessary to complete the work;
- Setting out of the works;
- Accommodation of traffic and maintaining temporary deviations;
- Clearing and grubbing of the site;
- Finishing off of the site on completion of the works.

Storm water drainage:

Stormwater drainage work will include the following:

- Major stream crossing using portal culverts
- Minor stream crossing using 900mm diameter pipe
- Normal stormwater road crossings using 600mm diameter pipes
- Miter drains.

Earthworks and pavement layers:

The following earthworks will be undertaken under this contract

- Mass earthworks for road bed preparation. This includes cut-to-fill, borrow-to-fill, cut-to-spoil, removal of unsuitable material, stockpiling of material etc.;
- Ripping and re-compacting existing in-situ layer
- Importation and compaction of G7 base layer
- Importation and compaction of G5 wearing course

C3.1.4 Temporary Works

The contractor might have to provide temporary road deviations in order to control the traffic during construction. These deviations will have to be removed and made good on completion of the works.

C3.1.5 General Information

C3.1.5.1 Accommodation of Traffic

The Contractor shall be required to accommodate traffic on the existing access road near the site in order to ensure the safe movement of vehicles and pedestrians.

C3.1.5.2 Services

There is an existing water pipeline crossing near the start of the road. The contractor shall do a

reconnaissance of the route for possible services that may be affected.

C3.1.5.3 Construction Materials

Gravel materials and crushed stone required for construction work are not available on the site and shall be obtained from the borrow pit. Concrete, making-up material and surfacing materials shall be obtained from commercial sources.

Testing of materials

The Engineer will source the nearest commercial laboratory to carry out acceptance control testing of the materials. A prime cost sum has been allowed in Section 8100 of the Schedule of Quantities for any other acceptance control testing laboratory work that may have to be carried out by the Engineer using commercial laboratory facilities.

C3.1.5.4 Drawings

All drawings necessary to complete the works are bound in Volume 2: Contract Drawings. The drawings indicating the extent of the works along the road are for tendering purpose only. The final extent of the work will be as instructed by the engineer.

Any information in the possession of the contractor that is required by the resident engineer to complete his as-built drawings shall be supplied to the resident engineer before a certificate of completion will be issued.

Only figured dimensions shall be used and drawings shall not be scaled unless so instructed by the engineer. The Engineer will supply any figured dimensions that may have been omitted from the drawings.

The levels given on the structural drawings are subject to confirmation on site, and the contractor shall submit all levels to the engineer for confirmation before commencing any structural work. The contractor shall check all clearances given on the drawings and shall inform the engineer of any discrepancies.

C3.1.5.5 Power Supply and other Services

The contractor shall make his own arrangements regarding the supply of electrical power and all other services. No direct payment will be made for the provision of electrical 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.

C3.1.5.6 Water for Construction Purposes

The contractor shall make his own arrangements regarding a suitable supply of water for the project and he must make adequate provision in his tender for all negotiations and procurement of water for construction activities and all related costs will be deemed to be included in his tendered rates.

C3.1.5.7 Construction in Confined Areas

It may be necessary for the Contractor to work within confined areas. No additional payment will be made for work done in restricted areas, except in the case of structures as described in Subclause 6108(d) of the Standard Specifications. In certain places the width of the fill material and pavement layers may decrease to zero and the working space may be confined. The method of construction in these confined areas largely depends on the Contractor's constructional plant.

However, the Contractor must note that measurement and payment will be in accordance with the specified cross-sections and dimensions only. This is irrespective of the method used for achieving these cross-sections and dimensions. The tendered rates and amounts shall include full compensation for all special equipment and construction methods and for all difficulties encountered when working in confined areas and narrow widths and at or around obstructions. No extra payment will be made nor will any claim for additional payment be considered in such cases.

C3.1.5.8 Contractor's Camp Site

Possible locations for a campsite shall be pointed out at the clarification meeting.

The Contractor shall make his own arrangements for the provision of his campsite and housing for construction personnel. The chosen site shall be subject to the approval of the Engineer, the local authorities and the Community

Liaison Officer (CLO) associated with the project.

The standard of the Contractor's camp, offices, accommodation, ablution, and other facilities must comply with the requirements of all local authority, environmental and industrial regulations concerned. In establishing and maintaining his campsite, due cognisance is to be taken of the requirements of clause B1233 of these Project Specifications.

The Contractor is to fully familiarise himself with all local by-laws and Government regulations for the employment, transport and accommodation of labour on site.

The Contractor shall particularly note that there is a low risk of theft, vandalism and damage to property in this area but adequate security will be required for all plant, establishment, temporary works and partially completed works. The Contractor shall be responsible for providing security for all plant, establishment, temporary works and partially completed works. No separate payment shall be made for the provision of such security since full compensation for these costs shall be deemed to be included in the rates for time-related obligations.

C3.1.5.9 Additional requirements for construction activities

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.

C3.1.5.10 Security

The contractor shall be responsible for the security of his personnel and constructional plant on and around the site of the works and for the security of his camp. The employer shall not consider any claims in this regard. The Contractor shall also be responsible for the security of the areas around the Engineer's offices.

C3.1.5.11 Programme of the Works

In addition to any other restrictions accommodated by the Contractor in compiling the construction programme, the following constraints shall be taken into account in the preparation thereof:

- (1) Working days lost due to abnormal rainfall shall be treated as set out in clause B1215.
- (2) Allowance shall be made for special non-working days (refer to the contract data in section C1.2.2).
- (3) Construction activities must comply with all the specified environmental requirements including clause B1233 and the requirements of Part C: Environmental Management Specification contained in section C3.3 Particular Specifications.
- (4) Construction activities must comply with all the specified health and safety obligations including the requirements of Part E: OHSA 1993 Health and Safety Specification contained in section C3.3 Particular Specifications.
- (5) Throughout the contract period traffic must be accommodated through the site and must not be prevented from doing so by the contractor's activities at the box culvert and pedestrian bridge.
- (6) Strict control of access to and from local public roads shall be required when construction

vehicles, plant or equipment leave or enter the site.

- (7) Low level crossings follow a natural stream drainage course and are founded below the water table. Access must be provided for excavations within the stream bed and along the stream banks below the water table. This will require the construction and maintenance of temporary stream diversion works and the continuous shoring and drainage of all excavations.
- (8) Rainfall in the upstream catchment of the stream will cause the water level at low level crossing sites to rise, thereby posing a threat to all the temporary works and partially completed permanent works. Such works must therefore be adequately drained, shored and protected and any stream diversions must maximize the available channel opening. The Contractor's programme of work shall take due cognisance of these risks by limiting the duration of the exposure of the various construction elements to such natural phenomena.
- (9) The concrete mix designs and water quality test results must be submitted to the Engineer for approval before concrete work for the structures commences. In the case of the low level crossings, the Contractor shall therefore arrange the necessary laboratory testing immediately after commencing the contract so as not to delay the construction progress. The Contractor shall note that the necessary permission must be obtained from the Department of Water Affairs for the abstraction of water from streams and rivers.

C3.2. PROCUREMENT

C3.2.1 Preferential Procurement Procedures

C3.2.1.1 Requirements

State requirements appropriate to the methodology and procedures which are to be followed. (See Annex A of SANS 10396. Make reference to Preference Schedules, if any.

C3.2.1.2 Resource Standard Pertaining to Targeted Procurement

State the number, title, part and edition of SANS 1914 Targeted Procurement applicable to the contract and all data, variations and definitions required - e.g. definitions of targeted groups, weighting factors etc. (Refer to SANS 10396 for specific guidance)

- SANS 1914-1:2002 Targeted Construction Procurement Part 1 – Participation of Targeted Enterprises
- SANS 1914-2:2002 Targeted Construction Procurement Part 1 – Participation of Targeted Partners in Joint Ventures
- SANS 1914-3:2002 Targeted Construction Procurement Part 1 – Participation of Targeted Enterprises and Targeted Partners in Joint Ventures
- SANS 1914-4:2002 Targeted Construction Procurement Part 1 – Participation of Targeted Enterprises and Targeted Labour (local resources)
- SANS 1914-5:2002 Targeted Construction Procurement Part 1 – Participation of Targeted Labour
- SANS 1914-6:2002 Targeted Construction Procurement Part 1 – Participation of Targeted Enterprises in Concession Contracts

C3.2.2 Subcontracting

C3.2.2.1 Scope of Mandatory Subcontract Works

There is no mandatory subcontract work in this contract. Contractors are however encouraged to maximise the usage of local labour and suppliers.

C3.2.2.2 Preferred Subcontractors / Suppliers

Contractors are encouraged to use subcontractors and suppliers that are registered on Okhahlamba Municipality database.

C3.2.2.3 Subcontracting Procedures

Any work to be subcontracted must be indicated in the returnable schedules. Should such work only be identified on site, request to subcontract must be sent to the Engineer for approval.

C3.2.3 Construction

C3.2.3.1 Works Specifications

C3.2.3.2 Applicable SANS 2001 Standards

COLTO Standard Specification for Road and Bridge Works for State Authorities 1998 (Green Book) for Civil Engineering Construction.

C3.2.3.2.1 Applicable Technical Recommendations For Highways (TRH)

- TRH 14 Guidelines for Road Construction Materials
- TRH 20 The Structural Design, Construction and Maintenance of Unpaved Roads

C3.2.3.2.2 Applicable Technical Methods For Highways (TMH)

- TMH 1 Standard Methods for Road Construction Materials
- TMH 5 Sampling Methods for Road Construction Materials
- TMH 6 Special Methods for Testing Roads
- TMH 10 Manual for the Completion of As-Built Materials Data Sheets
- TMH 11 Standard Survey Methods

C3.2.3.3 Particular Specifications

Refer to Annex C3.4.

C3.2.3.4 Certification by Recognized Bodies

Certified by the CIDB

C3.2.4 Plant and Materials

C3.2.4.1 Plant and Materials Supplied by the Employer

None

C3.2.4.2 Materials, Samples and Shop Drawings

All materials are to be tested by a commercial laboratory as directed by the Engineer. Construction needs to be carried out according to the Construction Drawings.

C3.2.5 Construction Equipment

C3.2.5.1 Requirements for Equipment

The Contractor is required to use plant and equipment that is sufficient for the construction of roads and the ancillary works.

C3.2.5.2 Equipment Provided by the Employer

None

C3.2.6 Existing Services

C3.2.6.1 Known Services

All known services are shown on the Construction Drawings. The onus still lies with the main contractor to ensure that no services are damaged during the construction phase.

C3.2.6.2 Treatment of Existing Services

It is not envisaged that any of the existing services requires temporary or permanent relocation. Special care should be taken working underneath overhead lines.

C3.2.6.3 Use of Detection Equipment for the Location of Underground Services

None

C3.2.6.4 Damage To Services

It is the responsibility of the contractor to ensure that no services are damaged during the construction process. In case the known services indicated on the drawings are damaged, the main contractor shall be responsible for the repair off the services to the original state before it was damaged, as well as all cost associated with the damaged service.

C3.2.7 Site Establishment

C3.2.7.1 Services and Facilities Provided by the Employer

None

C3.2.7.2 Facilities Provided by the Contractor

The onus lies with the main contractor to find a suitable camp site, approved by the Engineer. The main contractor is also responsible for the rehabilitation of the area to its original state on completion of the works.

C3.2.7.3 Storage And Laboratory Facilities

No requirements are specified. A commercial laboratory will be utilised.

C3.2.7.4 Other Facilities and Services

No requirements are specified.

C3.2.7.5 Vehicles and Equipment

No requirements are specified.

C3.2.7.6 Advertising Rights

It is the main contractor's responsibility that no suppliers advertise on site. Any advertisement from suppliers shall be removed at the cost of the main contractor.

C3.2.7.7 Notice Boards

The main contractor is allowed to place a Notice board on site. The maximum allowed size of this board should be 2 x 2m

C3.2.8 Site Usage

The contractors are not allowed to work outside the allowed working hours, as agreed with the Engineer. The disturbance to the residence should be kept at a minimum.

C3.2.9 Permits and Way Leaves

No requirements are specified.

C3.2.10 Water for Construction Purposes

The onus lies with the main contractor to source and pay for construction water. The quality of the construction water should be as specified is COLTO.

C3.2.11 Survey Control and Setting Out of the Works

The setting out bench marks is provided by the Employer. It is the contractor's responsibility to ensure that the setting out bench marks is correct and to use these bench marks for setting out.

C3.3. ANNEXES

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C3.3.1 Variations and Additions to Requirements of Standardised COLTO

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.
3. The tenderer shall note that the standard COLTO specification is based on the COLTO General Conditions of Contract. References to specific COLTO General Conditions of Contract clauses will need to be exchanged for the equivalent clause in the FIDIC Conditions of Contract as amended by the Particular Conditions of Contract to be found in Part C1 of this document. The employer assumes no responsibility for the contractor's interpretation of which are the correct relevant clauses.

COLTO SERIES 1000: GENERAL

B1100: DEFINITIONS AND TERMS

B1155 WORK IN RESTRICTED AREAS

Add the following:

“Any omission of pay items from the pricing schedule with regard to additional or extra over payment for work in restricted areas should be regarded as deliberate and any additional cost incurred shall be included in the bulk rate.(Refer also to clause B1209(g))”

SECTION B1200: GENERAL REQUIREMENTS AND PROVISIONS

B1202 SERVICES

Add the following first paragraph:

“All reference to services in this clause shall mean utility services.”

In the final paragraph delete the second and third sentences starting with ‘Should’ and replace with the following:

“Table B1202/1 lists all known services on the site. Those requiring removal, realignment or temporary replacement are indicated with an asterisk. However, before any work can commence the contractor shall verify the actual position of each station and bring to the attention of the Engineer any service that is not recorded. As the contractor is not authorised to remove or replace these facilities he shall:

- i) Give preliminary notice, in writing to the relevant service provider, that the services on the site will require removal or protection prior to works being carried out in the vicinity of each station. The contractor shall advise the service provider of
 - a) The number of services, their locations and station ID numbers and
 - b) The proposed dates when work will commence in the vicinity of each service.
- ii) In addition to the above preliminary notice, give the service provider 14 days written notice of the intention to commence work in the vicinity of each facility.
- iii) Upon completion of the work in the vicinity of each facility, the contractor shall notify the service provider, in writing, that work is complete and the service may be reinstated.

Any delay resulting from the removal/replacement of a service shall not be the subject of a potential claim, unless the contractor can demonstrate that every effort has been made to timeously request and/or apply for the removal/replacement of the said service. In addition, the contractor shall be deemed to have employed the services of the service provider as a subcontractor for purposes of removing and/or replacing the relevant service.

TABLE B1202/1: LIST OF KNOWN SERVICES

SV	SERVICE TYPE	IDENTITY	Service Level from Survey (m)	Final Road Level (m)	Height Above Road Level (m)	ACTION REQUIRED
	No known services					

Any cost of repairs, replacement and/or installation of the stations and equipment resulting from the

contractor's negligence or unauthorised action shall be to the contractor's account."

B1204 PROGRAMME OF WORK

a) General requirements

Add the following as a continuation of the first paragraph:

"In drawing up the programme the contractor shall make allowance for the following:

- i) All special non-working days defined in C1.2.1 and C1.2.2 in the Contract Data.
- ii) The expected delays defined in B1215: Extension of time resulting from inclement weather.
- iii) The following embargo hours and days: The Contractor shall be required to programme the works such that the entire length of this section of the road shall be open to two way traffic without a step in level during the annual December / January shutdown period. The aforementioned embargo will also apply the Thursday immediately preceding Good Friday.

This initial indicative programme shall realistically account for the forecast cash flow within the defined contract period, and as provided on Form 7: Schedule of Estimated Monthly Expenditure. If an alternative contract period is offered, the contractor shall submit a separate programme with the alternative tender.

b) Programme of work for construction work

Insert the following after the first sentence of the second paragraph:

"The programme shall include the following details:

- i) A work breakdown structure that identifies all major activities.
- ii) Scheduled start and end dates for each activity.
- iii) Linkages between activities that clearly identify sequence, floats and critical path.
- iv) Intended working hours and resource allocations (plant and labour).
- v) Monthly cash flow projections.
- vi) Key dates in respect of information required or due delivery."

Add the following sub-clause:

"c) Programme revisions

The programme will be reviewed at the monthly site meetings at which the contractor shall provide sufficient detail that will allow the comparison of completed work per activity against the original approved programme. The contractor shall indicate what resources and programme changes he intends to implement in order to remedy any activity that has fallen behind. The Engineer may demand from the contractor a major revision of the programme. Such a revision shall be submitted for approval within fourteen days of the demand."

B1205 WORKMANSHIP AND QUALITY CONTROL

Add the following after the title:

"The contractor shall implement a quality assurance system in accordance with ISO 9002 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".

Delete the second, third, fourth and fifth paragraphs and replace with 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 have 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."

As the Contractor's process control will be used for acceptance purposes, the minimum intensity and type of the control testing shall be as stipulated in Section 8200 (scheme 1), Table 8206/3 as amended herein. In **addition** to the sampling and testing specified in Section 8200, the following minimum sampling and testing shall be carried out:

Table B1205 – MINIMUM SAMPLING AND TESTING FREQUENCIES

COMPONENT	PROPERTY	MINIMUM SAMPLES AND TESTS PER LOT
Road bed preparation and Fill layers	Grading & Indicator Mod AASHTO maximum density determination ¹ CBR	4 4 4
Selected Layers	Grading & Indicator Relative Compaction (Nuclear density)* ² Mod AASHTO maximum density determination* ¹ CBR	4 6 4 4
Sub-base Layer	Grading & Indicator Relative Compaction (Nuclear density)* ² Mod AASHTO maximum density determination* ¹ CBR	4 6 4 4
Gravel wearing course	Grading & Indicator Relative Compaction (Nuclear density)* ² Mod AASHTO maximum density determination* ¹ CBR	4 6 4 4
Concrete for structures	Cement content Slump test Cube strength	1 1 1

*¹ The determination of Mod AASHTO maximum density can be relaxed to 1 determination per 4 density tests if, in the opinion of the Engineer, the material is found to be acceptably uniform in terms of MDD and OMC.

*² The minimum frequency is six tests in total, not six tests in addition to the four tests as Specified in Table 8206/3."

B1206 THE SETTING OUT OF WORK AND PROTECTION OF BEACONS

Replace "clause 14" in the first paragraph with "clause 4.7"

Add the following at the end of the fourth paragraph:

"Road markings are also elements of the road that require proper setting out. The contractor shall prove to the Engineer that critical reference points have been satisfactorily recorded for later reinstallation before any work commences that will obliterate the existing markings."

Delete "and of clause 14 of the general conditions of contract" in the sixth paragraph.

Add the following paragraph:

"The contractor shall take care that property beacons, trigonometrical survey beacons or setting-out beacons are not displaced or destroyed without the consent of the Engineer. Property beacons and

trigonometrical survey beacons that have been displaced or destroyed shall be replaced by a registered land surveyor, who shall certify such replacement.

The cost of replacing all beacons displaced or destroyed during the course of the contract without the consent of the Engineer shall be the contractor's responsibility and included in the tender rates."

Add the following paragraphs:

"Prior to starting construction activities, the Contractor shall satisfy himself as to the accuracy of the Benchmarks placed by the Engineer. If he finds the Benchmarks to be correct he shall submit a signed certificate to the Engineer confirming this. Any suspected fault or discrepancy shall be immediately communicated to the Engineer in writing. Five (5) working days shall then be allowed for the Engineer to investigate and correct the matter and no claim for delays or any other costs will be permitted provided that the Engineer responds with a written solution within the said period of five working days.

Before any construction work commences the Contractor shall undertake his own digital terrain model (DTM) tachometric survey of the site for comparison with the Engineer's survey. The survey must be undertaken on existing ground lines i.e. prior to undertaking any clearing and grubbing or top soil removal.

The survey data is to be submitted to the Engineer and the resulting final ground model, culminating from the comparison of both surveys, shall then be agreed in writing between the Contractor and the Engineer within seven (7) days of the submission date. This final ground model shall be used for the purposes of construction and the computation of quantities.

Should the Contractor fail to undertake the DTM survey as described above, the Engineer's shall be entitled to base all measurement on his own ground model for the computation of quantities."

B1207 NOTICES, SIGNS AND ADVERTISEMENTS

Remove this part of the sentence from the first paragraph

"... or as approved advertisements for the contractor's establishment."

Delete the third paragraph and replace with the following:

"All signboards erected in accordance with the drawings shall be removed at the same time as the disestablishment of the contractor's camp. Payment under subitem 13.01 for the final instalment of 15% of the tendered lump sum shall not be made unless all the advertisements, notices and temporary signs have been removed. A typical signboard layout is shown in the Tender Drawings"

B1209 PAYMENT

(b) Rates to be inclusive

Add the following to the first paragraph:

"VAT shall be excluded from the rates."

"(g) Work in confined areas

Except where provided for in the specification and the Pricing Schedule no extra payment shall be made nor shall any claim for additional payment be considered for construction in confined areas. The omission of standard pay items from the schedule of quantities shall be taken to be deliberate and any additional costs incurred shall be included in the bulk rate."

B1210 CERTIFICATE OF PRACTICAL COMPLETION OF THE WORKS

Add the following paragraphs after item (h):

"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 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."

The contents of this clause 1210 of the COLTO Standard Specifications, together with the above amendment, shall apply equally to the issue of a Certificate of Completion.

B1214 CONTRACTOR'S ACTIVITIES IN RESPECT OF PROPERTY OUTSIDE THE ROAD RESERVE AND OF SERVICES MOVED, DAMAGED OR ALTERED

Under sub-clause (e) replace the opening paragraph with:

"Should the contractor use land not provided by the Employer for the purpose of his own establishment, Engineer's offices or storing of equipment or materials required for construction or disposal, it shall be subject to the following:"

and add the following sub-sub-clauses:

- "(vi) That lease agreements are concluded with the owner or owners of such land for the full period that such areas are required. The leases shall provide for possible extensions to match the duration of the contract. The lease agreements shall also provide for the contract being terminated by contractor's default or liquidation and the resulting possibility for them to be taken over by a succeeding contractor.
- (vii) That copies of lease agreements shall be submitted to the Engineer prior to signature by the signing parties, and copies lodged with the Engineer after signing. Notwithstanding the Engineer's approval of the conditions of a lease the contractor shall be solely responsible for adhesion to the terms of the agreements.
- (viii) Adherence to the principles of the environmental management plan and legal obligations".

B1215 EXTENSION OF TIME RESULTING FROM INCLEMENT WEATHER

Change the existing heading of clause 1215 to read as above and wherever the expression 'abnormal rainfall' or 'rainy weather' is encountered replace it with 'inclement weather'.

In the 1st line of the 1st paragraph change 'clause 45' to read 'sub-clause 8.4'

Make the following changes to Method (ii) (Critical-path method):

In line six of the second paragraph delete 'five-day working week' and replace with '23-day working month', and:

Add the following final paragraphs:

"Extension of time resulting from rainfall or other forms of inclement weather shall be calculated according to the requirements of Method (ii) (Critical-path method). The 'n' value of working days, as specified in this

clause as being expected delays for which the contractor must make allowance in his programme, have been indicated in Clause 5.12.22 of the Contract Data.

The number of rain-related delays is the average number of days on which (10mm) of rain or more has been measured by the weather station at Richards Bay over the last four (4) years.

Other inclement weather delays for which the contractor must make allowance in his programme have been derived from previous experience of wind and temperature influence on similar construction in the area of the site. Actual extensions of time due to inclement weather shall be agreed between the Engineer's and contractor's representatives on the site. The agreed whole days or parts thereof shall be recorded at the monthly site meetings. Adjustment to the contract period shall only be made at the end of the contract when the contractor may submit its claim for the agreed extension due as well as any additional payment resulting from the delay. Extension caused by inclement weather delays will only accrue once the agreed cumulative delays exceed 58 days.

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. 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."

B1219 WATER

Add the following:

"Water for use on site other than municipal, shall be subject to the required permit from DWAF. This shall include such extraction points as rivers, dams, streams, and boreholes".

TABLE B1219: WATER CLASSIFICATION FOR CONSTRUCTION TESTING

		Water Quality Classification Code						
		H0	H1	H2	H3	H4	H5	
Property	Unit	Pure water (AR)	Clean water (Rain)	Treated water (Municipal)	Silty (muddy) water with low salt content	Highly mineralised chloride sulphate water (brackish)	Waste brack, sewage, marsh, sea, etc water	Method
PH*	-	7.0	5.7 – 7.9	4.5 – 6.5	4.5 – 8.5	9.0	-	SABS M113 SM 11 – 1990
Dissolved solids*	ppm	0	1000	1500	3000	-	-	SABS 213 SM213 – 1990
Total hardness*	-	None	None	Temporary	Temporary	Permanent	-	SABS 215 SM 215 – 1971
Suspended matter	ppm	0	2000	2000	5000	-	-	SABS 1049 SM 1049 – 1990
Electrical conductivity	mS/m	0	200	200	500	-	-	SABS 1057 SM 1057 – 1982
Sulphates (SO4)	ppm	0	200	300	500	1000	-	SABS 212 SM 212 – 1971

		Water Quality Classification Code						
		H0	H1	H2	H3	H4	H5	
Chlorides (Cl)	ppm	0	500	1000	3000	5000	-	SABS 202 SM 202 – 1983
Alkali Carbonates (CO ₃) & Bicarbonates (HCO ₃)	ppm	0	500	1000	1000	2000	-	SABS 241 – 1999
Sugar	-	Negative	Negative	Negative	Negative	Negative	-	SABS 833
Quality of water required		Untreated layer works	✓	✓	✓	✓	Investigate the effect on the quality of the material	
		Chemically treated layer works	✓	✓	✓	Investigate the effect on the quality of the material		
		Concrete mass	✓	✓	✓	Investigate the effect on the quality of the material		
		Concrete prestressed	✓	✓	References: 1. Concrete Technology – Dr S Fulton (1989) 2. Materials Manual (PAWC)			
		Slurry & emulsion	✓	✓				
		Soil/gravel tests	✓	✓				
		Chemical or control tests	✓	✓				

- A primary property. The quality of the water is that quality where all three of the primary properties are within the limits.
- The tabulated single values are maximum value except in the case of the pH value for pure water, which must be 7.0

B1229 SANS CEMENT SPECIFICATIONS

Add the following to this clause:

"Where reference is made in this specification or the standard specifications to the cement specifications, e.g. SANS 471: Portland cement and rapid hardening Portland cement, it shall be replaced with the new specification:

SANS 50197-1: 2000: Cement compositions, specifications and conformity criteria Part 1: Common cements.

B1230 MATERIALS

The contractor, when using materials that are required to comply with any standard specification, shall, if so ordered, furnish the Engineer with certificates showing that the materials do so comply.

Where so specified, materials shall bear the official mark of the appropriate authority. Samples ordered or specified shall be delivered to the Engineer's office on the site free of charge.

Where materials are specified under trade names tenders must be based on these materials. Alternative materials may be submitted as alternative tenders and the Engineer may, after receipt of tenders, approve the use of equivalent materials. The tender must be clearly marked as an alternative tender, failing which the tender may be rejected.

Unless otherwise specified, all proprietary materials shall be used and placed in strict accordance with the relevant manufacturer's current published instructions.

Unless anything to the contrary is specified, all manufactured articles or materials supplied by the contractor for the permanent works shall be unused.

Earth, stone, gravel, sand, and all other materials excavated or present on the site or within the road reserve, or in borrow areas shall not become the property of the contractor, but will be at his disposal only in so far as they are approved for use on the contract.

Existing structures on the site shall remain the property of the employer and except as and to the extent required elsewhere in the contract, shall not be interfered with by the contractor in any way.

Materials to be included in the works shall not be damaged in any way and, should they be damaged on delivery or by the contractor during handling, transportation, storage, installation or testing they shall be replaced by the contractor at his own expense.

All places where materials are being manufactured or obtained for use in the works, and all the processes in their entirety connected therewith shall be open to inspection by the Engineer (or other persons authorised by the Engineer) at all reasonable times, and the Engineer shall be at liberty to suspend any portion of work which is not being executed in conformity with these specifications.

The contractor shall satisfy himself that any quarry selected for use provides the necessary mined material in accordance with the specification.

B1231 MEASUREMENT AND PAYMENT

Add the following new payment items

Item	Unit
B12.01 Protection, removal, realignment and replacement of services	
Utility services	
(a) The removal, protection and replacement of utility services	prime cost (PC) sum
(b) Handling cost and profit in respect of subitem B12.01(a)	percentage (%)

The prime cost item shall be paid in accordance with the provisions of the General Conditions of Contract.

The tendered percentage is a percentage of the amount actually spent under the prime-cost item, which shall include full compensation for the profit in connection with providing the specified service.

Item	Unit
B12.02 Main Contractor providing supervision and Guidance to the SMME contractor	Month

The unit rate shall include full compensation for providing supervision, assistance, training and guidance to the SMME contractor to ensure that the SMME contractor execute the work to the satisfactory of this contract.

Item	Unit
B12.03 Allowance for additional costs related to the employment of SMME subcontractor, over and above the rates as tendered by the contractor	provisional sum(PS)

The expenditure under this item shall be made in accordance with the general conditions of contract.

Item	Unit
B12.04 Handling costs and profit in respect of payment of employing the SMME subcontractor under pay item B12.03	percentage (%)

The tendered percentage is a percentage of the amount actually to employ a SMME contractor. The percentage shall allow for full compensation for handling cost of the main contractor, and the profit in connection with the providing of this service.

Item	Unit
B12.05 Handling costs and profit in respect of payment of SMME subcontractor for work undertaken under section 1500, 1700, 2200, 2300 and 3300	percentage (%)

The tendered percentage is a percentage of the amount actually spent under section 1500/1700/2200/2300/3300 for the payment to the SMME contractor for work executed under the supervision and guidance of the main contractor. The percentage shall allow for full compensation for handling cost of the main contractor, and the profit in connection with the providing of this service.

Item	Unit
B12.06 Handling costs and profit in respect of payment of SMME subcontractors for work undertaken under section 3400	percentage (%)

The tendered percentage is a percentage of the amount actually spent under section 3400 for the payment to the SMME contractor for work executed under the supervision and guidance of the main contractor. The percentage shall allow for full compensation for handling cost of the main contractor, and the profit in connection with the providing of this service.

B1300: CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS

B1302 GENERAL REQUIREMENTS

(c) Legal and Contractual Requirements and responsibilities to the public

Add the following as a second paragraph:

"There has been recent legislation promulgated by Government that improve mutual obligations on the Employer and contractor in the performance of their duties to society and to the built and natural environment. To assist the contractor in understanding and assessing his obligations, and thus to make allowances for the cost of compliance with this legislation, the following additional specifications are included in the project specifications.

Section C of the Scope of Works contains the Environmental Management Plan for this project. Its provisions regulate the contractor's construction methods to ensure responsible conduct and treatment of the environment relevant to the project. No separate payment mechanism has been made available for the contractor to allow for his compliance with relevant environmental legislation. The contractor shall include such costs in the existing payment items under section B1303: Payment. However, non-compliance with the provisions of this section may lead to the imposition of penalties.

Section D of the Scope of Works contains provisions that regulate the contractor's construction methods for compliance with Government's initiatives towards black economic empowerment. It also contains information on criteria used in the procurement process. No separate payment mechanism has been made available for the contractor to allow for his compliance with relevant black economic empowerment legislation. The contractor shall include such costs in the existing payment items under section B1303: Payment. However, non-compliance with the provisions of this section may lead to the imposition of penalties.

Section E of the Scope of Works contains the specification that regulate the contractor's construction methods so far as to ensure health and safety of his employees and of the public. New pay item has been made available under this section to allow the contractor to make separate provision for the cost of health and safety measures during the construction process."

B1303 PAYMENT

Item	Unit
-------------	-------------

B13.01 The contractor's general obligations

Add the following pay subitem:

“(d) Health and safety obligations	Month
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Add the following sub-sub-clause defining ‘the contractor’s general obligations’:

“(iv) Complying with the requirements and conditions of the additional specifications relating to the Government’s Broad Based Black Economic Empowerment and the Environmental Management Plan.”

Delete the third paragraph commencing “Should the final value of the work”.

In the 11th paragraph, the following amendments apply:

- *Start the paragraph to read “The tendered rate per month for all time related pay items represent full compensation ...”; and*

Add the following at the end of sub-clause (b) of the 11th paragraph:

“... Such limitations to payments shall occur whenever the ratio of time to expenditure varies by more than 10%. For example, if payment for completed scheduled work is 30% of total scheduled work but more than

40% of time has expired, this pay item shall cease to be active until the difference between the relevant ratios is less than 10%."

Add the following new paragraphs:

"Payment of the rate per month for subitem 13.01(d) shall include full compensation for all the contractor's obligations relevant to health and safety legislation including, but not limited to, initial start-up costs, submission and maintenance of OHS file, statutory medical checks, induction, PPE etc . **Payment will only be made approval on the contractor's OHS plan.**

Should the combined total tendered for subitems (a), (b), and (c) exceed 20% of the tender sum (excluding CPA, contingencies and VAT), the tenderer shall state his reasons in writing for tendering in this manner.

Payment for time related costs arising from extensions of time granted by the employer, where the contractor is fairly entitled to such compensation which will be calculated by taking account only of pay items for which the unit of measurement is "month". All pay items for which the unit of measurement is "month" are deemed to be based on 23 working days per month."

Insert the following paragraphs:

"The tendered rate shall apply in the same manner as pay subitem B13.01(c) but shall not form part of the calculation of the restrictions imposed by Condition of Tender F3.8(c) and Form to tender B1: Contractor's Establishment on Site. A contractor who tenders zero for this pay item shall not be relieved of his statutory obligations. A nil rate offered shall be deemed not as an omission but as deliberate notice that costs have been included in the tendered rates for individual items of work or in the other preliminary and general pay items."

B1500: ACCOMMODATION OF TRAFFIC

B1501 SCOPE

Add the following:

"It is a condition of this contract that traffic is accommodated taking into account the provisions of the latest edition of the South African Road Traffic Signs Manual (SARTSM). The latest version for use in the accommodation of traffic is volume 2, chapter 13 of the June 1999 edition. Copies of this publication are available from Government Printers –Tel: (012) 334 4508/9 or (012) 3344510 Fax: (012) 323 0009.

This section also covers the provision of additional information signs for motorists and the release of any notices to the media and public."

B1502 GENERAL REQUIREMENTS

(a) Safety

Add the following:

"The contractor shall be responsible for maintaining the existing road surface both within the works area and the advance warning and termination areas in a safe and trafficable condition for the duration of the contract."

(f) Approval of temporary deviations

Add the following:

"If, after any temporary deviation has been constructed, any changes are considered necessary or desirable, the proposal shall be submitted to the Engineer for his approval."

(i) Traffic Safety Officer

Add the following to the end of the second paragraph:

"The contractor shall submit a CV of the candidate to the Engineer for approval before the candidate is appointed as the traffic safety officer. "

Insert the following as the opening phrase to sub-sub-clause (i):

"make himself available to discuss road safety and traffic accommodation matters whenever required by the Engineer and shall be responsible..."

Delete sub-sub-clauses (ii) and (iii) and replace with the following:

- "(ii) Record on neat and dimensioned sketches and submit to the Engineer the position and sign reference number, where applicable, of each sign, barricade, delineator, cone, guardrail and permanent or temporary painted road marking feature (Only the relevant measurements). The position of each shall be adequately referenced from the marker boards or other surveyed points on the site of the works.

These records shall also show the date and time at which the recorded traffic accommodation features are certified correct by the traffic safety officer, and shall be signed by the traffic safety officer before being submitted to the Engineer.

The records shall similarly account for whatever changes are made in the field. Such changes shall record the position of flagmen and stop/go control men and their associated traffic accommodation equipment wherever they are used.

- (iii) Personally inspect the position and condition of each traffic accommodation feature on the whole site of works twice each day by 9h30 and by 16h30, to record all irregularities discovered and the remedial action taken, and to sign off as correct and submit to the Engineer such record sheets by midday of the next working day. The traffic safety officer shall keep a duplicate book for this specific purpose.

The traffic safety officer shall also submit with this report the daily labour returns of flagmen, stop/go and traffic signal control men employed."

Add the following sub-sub-clauses:

- "(ix) The traffic safety officer shall be equipped with a cellular telephone and shall have a vehicle and sufficient labour at his disposal 24 hours a day, including all prescribed non-working days, and shall not be utilised for other duties. He shall be directly answerable to the contractor's site agent. The traffic safety vehicle shall be a truck with a capacity of 3 tons.

The vehicle shall also be equipped with an amber-coloured flashing light of the rotating parabolic reflector type with a minimum intensity of 100. The warning light shall be switched on at all times and the sign shall be displayed when the vehicle is used on site.

The traffic safety officer shall have a direct line of communication at all times with the police and traffic officers responsible for the area within limits of the contract. The provision of the road safety vehicle, driver, labourers and the cost of the cellular telephone shall be deemed to be included in the rates tendered for the contractor's establishment on site.

- (x) Ensure that all obstructions related to the contractor's activities be removed before nightfall where applicable as instructed by the Engineer and that the roads are safe for night traffic.
- (xi) The traffic safety officer shall, in addition to the duties listed in paragraph 1502(i), also be responsible for the removal of broken down vehicles off the roadway and implementing actions requested by the traffic authorities with regard to the work to be carried out, be responsible for the erection and maintenance of all traffic signs necessary for the accommodation of traffic.
- (xii) In the advent of an accident the traffic officer shall record in a written report the details of the accident, record the position of all temporary road signs, barricades, delineators, flagmen and any other devices used for traffic accommodation. In addition the report shall include a neat

dimensional sketch, photographs, identifiable permanent features, and any other relevant information.”

Add the following sub-clauses:

“(j) “U” turns

No vehicle or item of equipment shall be allowed to make “U” turns under any circumstances.

(k) Site personnel

The contractor shall ensure that all his personnel, excluding those who are permanently office bound, are equipped with reflective safety jackets and that these are worn at all times when working on or near to the travelled way. Any person found not wearing a reflective jacket under these circumstances shall be removed from the site until such time as he is in possession of and wearing a reflective jacket. Reflective safety jackets shall be kept in good condition and any jackets that are, in the opinion of the Engineer, ineffective shall be immediately replaced by the contractor.

(l) Failure to comply with provisions

Failure or refusal on the part of the contractor to take the necessary steps to ensure the safety and convenience of the travelling public, accommodation of traffic, plant and personnel in accordance with these specifications or as required by statutory authorities or ordered by the Engineer, shall be sufficient cause for the Engineer to apply penalties as follows:

A fixed penalty of R5 000.00 per occurrence shall be deducted for each and every occurrence of non-compliance with any of the requirements of section 1500 of the standard specifications and section B1500 of the project specifications.

In addition a time-related penalty of R500,00 per hour over and above the fixed penalty shall be deducted for non-compliance to rectify any defects in the accommodation of traffic within the allowable time after the Engineer has given an instruction to this effect. The Engineer's instruction shall state the allowable time, which shall be the time in hours for reinstatement of the defects. Should the contractor fail to adhere to this instruction, the time-related penalty shall be applied from the time the instruction was given.”

B1503 TEMPORARY TRAFFIC-CONTROL FACILITIES

Replace the first sentence of the first paragraph with the following:

“The contractor shall provide, erect and maintain the necessary traffic-control devices, road signs, canalisation devices, barricades, warning devices and road markings (hereinafter referred to as traffic-control devices) in accordance with these special provisions and as shown on the drawings and in the SARTSM and remove them when no longer required. It shall be incumbent upon the contractor to see to it that the abovementioned traffic-control devices are present where required at all times and are functioning properly.”

Replace the third paragraph with the following:

“The type of construction, spacing and placement of traffic-control devices shall be in accordance with the SARTSM. The recommended arrangements of the traffic control devices illustrated and/or drawings issued by the Engineer shall not be departed from without prior approval of the Engineer. The arrangements expected to be most commonly used in the contract are given on the tender drawings.

The details shown for spacing and placement of traffic-control facilities may however, be revised at the discretion of the Engineer where deemed necessary to accommodate local site geometry and traffic conditions.”

(b) Road signs and barricades

Add the following:

"The contractor shall be responsible for the protection and maintenance of all signs, and shall at his own cost replace any that have been damaged, lost, or stolen.

All temporary road signs required to remain in position for some time shall be pole mounted as shown on the drawings. All temporary road signs required to be moved more often shall be mounted on portable supports for the easy moving of signs to temporary positions. The only permitted method of ballasting the sign supports shall consist of durable sandbags filled with sand of adequate mass to prevent signs from being blown over by wind. The cost of the sandbags shall be included in the tendered rates for the various types of temporary road signs."

(e) Warning devices

Add the following:

"All construction vehicles and plant used on the works shall be equipped with rotating amber flashing lights and warning boards as specified. All vehicles and plant before being allowed onto the site shall obtain a clearance permit from the Engineer.

(i) Vehicle mounted flashing lights

Rotating lights shall have an amber lens of minimum height of 200mm and shall be mounted in such a way as to be highly visible from all directions. The lights on construction vehicles shall not be switched on while vehicles are being operated on unrestricted sections of a public road, but shall be switched on while construction vehicles are operating within the accommodation of traffic area, as the vehicles decelerate to enter a construction area, and as the vehicles accelerate to the general speed when entering the road from a construction area. Lights on plant shall operate continuously while the plant is working alongside sections of road open to public traffic

All LDV's and cars operating on site shall also be equipped with rotating amber flashing lights which shall be placed so as to be highly visible and operated continuously while the vehicles are manoeuvring in or out of traffic or are travelling or parked alongside roads open to public traffic.

Rotating lights and the "construction vehicle" signs on the contractor's vehicles and plant shall not be paid for separately but shall be included in the rates covering the use of the vehicles.

The contractor shall apply and maintain lights together with temporary mounting brackets, to the approval of the Engineer. Vehicles and plant that do not comply with these requirements shall be removed from the site."

Add the following sub-clauses:

"(g) Other traffic control measures ordered by the Engineer

The Engineer may instruct the contractor to provide any other road sign, reflective tape, etc. not measured in standard pay items. Such road signs shall conform to the requirements of the SARTSM, or specification provided by the Engineer. Similarly, in order to ensure that the travelling public is kept fully informed and warned on matters relating to the accommodation of traffic, construction sign posting and the effect of the construction on the free flow of traffic through the site, the Engineer may arrange for advertising in the press and/or for other forms of publicity.

(h) Flagmen

Flagmen shall be provided where shown on the drawings or required by the specification. During the daytime, at least two flagmen shall be provided at each traffic control point. At night time only one roving flagman equipped with a Stromberg Lightman xenon strobe, or similar approved, and a torch is required at each traffic control point as well as the traffic light operator. Where the shoulder of the road is closed to traffic, a flagman shall be provided at the leading end of the closure during

daytime. No flagman shall be on duty for a period of more than 10 hours per day.

Flagmen shall be adequately trained in the standard flagging techniques as described in the SARTSM (refer to figure 13.23 of detail 13.23.1) and be provided with conspicuous clothing such as safety jackets utilizing retro-reflective and/or fluorescent panels in red, yellow and/or white.

Flagmen shall have in their possession, at all times, certification that they have attended and passed an accredited course in flagging techniques before being allowed onto the construction site.

Flags shall be made from bright red or red-orange material and shall be square with a minimum side length of 600mm. The flag shall be attached to a staff at least 1,0m in length.

In terms of lateral clearance and safety, flagmen shall stand on the shoulder of the lane of traffic that is being controlled and under no circumstances shall flagmen be permitted to stand within the traffic lane. In order to obtain maximum visual impact for the travelling public, flagmen shall stand-alone."

B1600: OVERHAUL

B1602 DEFINITIONS

(b) Overhaul

Replace the sub-clause with:

"Payment shall only be made for material hauled in excess of 1 kilometre. Overhaul shall be measured as the product of the volume of material hauled and the overhauled distance.

(d) Free-haul distance

Replace the last sentence with:

"This distance shall be 1 kilometer in the case of all overhaul materials"

B1700: CLEARING AND GRUBBING

B1702 DESCRIPTION OF WORK

(c) Conservation of topsoil

Add to the end of the 1st paragraph:

"The contractor will not be required to remove topsoil to more than an average depth of 400mm, from any particular area. The depth of topsoil removed shall be reliant on the terrain, suitability of material and topsoil requirements of the work."

Replace the second paragraph of this clause with the following:

"After clearing and grubbing, all topsoil shall be removed to either windrows alongside the construction area or to stockpile. Where ordered by the Engineer, any topsoil that shall be required for the top soiling of new banks and cuts, but which cannot be accommodated within the construction site, shall be loaded and hauled to the designated stockpile area where it shall be placed in temporary stockpiles for later use in the rehabilitation of the site affected by construction activities. Where new borrow pits are to be opened up the topsoil shall first be removed (independently of the overburden) and placed in temporary stockpiles at the edge of the borrow pit. The moving of topsoil from windrow or the loading of topsoil from temporary stockpiles and the placing and spreading of thereof on cut or fill slopes or on borrow pit spoil sites, is covered in Section 5800.

Refer also to clause B5802 (g) of this project specification."

B1704 MEASUREMENT AND PAYMENT

Amend the following payment item:

Item	Unit
B17.01 Clearing and grubbing	hectare (ha)

Add the following to the measurement and payment paragraphs:

“Clearing and grubbing of the construction site camp / office shall not be measured separately and shall be deemed to be included in the rates tendered for item B13.01”

Add the following new payment item:

Item	Unit
B17.07 Removal of topsoil to temporary stockpiling thereof:	

- (a) Topsoil from within the limits of the road prism
(including 1 km free haul).....cubic metre (m³)

The unit of measurement for items (a) shall be the cubic metre of topsoil removed to temporary stockpile. The volume of topsoil removed shall be measured in cut, calculated from the difference in cross-sections of the natural ground level before the commencement of clearing to cross-sections taken after the removal of the topsoil.

The contractor shall constantly liaise and agree with the engineer as to the depth of topsoil to be removed. Where, in the opinion of the engineer, material that would not normally be classed as topsoil to be removed. Where, in the opinion of the engineer, material that would normally be classed as topsoil has also been excavated, the excavation shall be backfilled and compacted with selected material at the contractor' expense. Should material that is deemed by the engineer not to be topsoil, be removed and stockpiled together with material classed as topsoil, the contractor shall be responsible for the removal of this unsuitable soil from the stockpile and the replacement of the quantity of topsoil contaminated by the unsuitable material at his cost. The quantity of topsoil to be replaced shall be determined by the engineer.

The rates tendered shall include for the excavation of the topsoil and where required, the loading and hauling thereof to temporary stockpile as well as the maintenance of the stockpile until re-use of the material. The rates tendered shall also include for all supervision required to ensure that only topsoil is removed.”

COLTO SERIES 2000: DRAINAGE

B2100: DRAINS

B2101 SCOPE

Amend the first paragraph to read:

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

B2200: PREFABRICATED CULVERTS

B2218 MEASUREMENT AND PAYMENT

Add the following pay items:

Item	Unit
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B22.07 Cast in situ concrete and formwork

- (f) In inlet and outlet structures, skewed ends, catchpits, manholes, thrust and anchor blocks, including formwork and class U2 surface finish Crushed, washed stone obtained from commercial source for:

- cubic metre (m³)
(i) Inlet and outlet structures concrete class 30/19 as per Contract Drawing
cubic metre (m³)
(ii) Dish drain crossing as per Contract Drawing Concrete class 30/19

Payment for formwork and cast in situ concrete shall be included in the contractor's rate for these items and shall include full compensation thereof.

B3300: MASS EARTHWORKS

B3312 MEASUREMENT AND PAYMENT

General Directions

Amend the following sub-clause to read:

“(3) Work in restricted areas

No additional payment will be made for work in restricted areas”

Add the following sub-clause:

“(4) The free haul distance for all items unlimited”

Add the following new payment item

“Item	Unit
B33.11 Extra over item 33.10 for adding G7 material from a commercial source as specified in subsubclause 3207(b)(iii)	.....cubic metre (m ³)

The unit of measurement for the above items shall be the cubic metre of the compacted pavement layer, and the quantity shall be calculated from the authorised dimensions of the completed layer.

B3400: PAVEMENT LAYERS OF GRAVEL MATERIAL

B3407 MEASUREMENT AND PAYMENT

Add to the following payment item:

“Item	Unit
B34.01 Pavement layers constructed from gravel taken from commercial sources	
(h) Gravel wearing course compacted to:	
(iii) 95% of modified AASHTO density 150mm thick G7, as per material specification of TRH20	.....cubic metre.(m ³)

The unit of measurement for the above items shall be the cubic metre of the compacted pavement layer, and the quantity shall be calculated from the authorised dimensions of the completed layer.

The wearing course shall be as per the material specification of TRH20 for a wearing course and as directed by the engineer."

COLTO SERIES 5000: ANCILLARY ROADWORKS

B5100: PITCHING, STONWORK AND PROTECTION AGAINST EROSION

B5102 MATERIALS

(a) Stone

Replace the 2nd paragraph with the following:

"Unless suitable stone can be located on site, the stone for pitching shall come from commercial sources but, from whatever source, its use shall be subject to the prior approval of the Engineer."
Commercial laboratory testing

B5600: ROAD SIGNS

B5601 SCOPE

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

"SADC Road Traffic Signs Manual"

B5603 MANUFACTURING OF ROAD SIGN BOARDS AND SUPPORTS

(a) Road signboards

Add the following:

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

(ii) Steel profile road signboards

Add the following:

"Chromadek section shall be assembled in accordance with the details of Standard Plans SP-B-12-Sheets 4 and 5 and SP-B-4-Sheets 33E and 34E.

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

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

B5604 ROAD SIGN FACES AND PAINTING

Add the following sub-clause:

"(e) Application of retro-reflective material

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

Where applied to Chromadek sections, retro-reflective material shall be applied as specified for

aluminium section in Clause 5603(d) of the Standard Specification, and of Clause B5603(a)(ii) of this project Specification.”

B5605 STORAGE AND HANDLING

Add the following:

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

- Drilling of holes, except for the fastening of overlays
- Application of any form of adhesive
- Cleaning with any chemicals that are not specifically approved by the manufacturer of the retro-reflective material.
- Covering the sign face with an impermeable material that does not allow free circulation of air.”

B5606 ERECTING ROAD SIGNS

(c) Erection

Add the following:

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

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

B5609 MEASUREMENT AND PAYMENT

Item	Unit
B56.01 Road sign boards with painted or coloured semi-matt background. Symbols, lettering, and borders	
in semi-matt black or in Class I retroreflective material, where the sign board is constructed from:	

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

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

B5900: FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS

B5901 SCOPE

In the first line of the second paragraph, insert the following after ‘this section’

“...distinguishes between new construction and renewal construction. When construction is new, as in the case of new alignments for example, then this section”

B5902 FINISHING THE ROAD AND ROAD RESERVE

Retain the existing paragraphs as new sub-clause:

“(a) New construction”

Replace the sixth paragraph with:

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

Add the following:

“(b) Renewal construction

After completing construction work within the site, the contractor shall ensure that all construction generated or related material that may have been swept, windrowed, stockpiled, stored or spread beyond the road surface is removed. This shall be done before any other rehabilitation work is undertaken, including shaping, topsoiling and grassing. Should, during the removal of construction generated or related material, existing vegetation or topsoil be disturbed or destroyed, the contractor shall, at his own cost, re-instate the road reserve to its original state. This shall include ripping, should the construction material have compacted the existing surface.

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

The surfacing shall be cleared of all dirt, mud and foreign objects. Dragging, pushing or scraping material across the finished surfacing shall not be permitted.

All junctions, intersections, islands, kerbing and other elements making up the completed works shall be neatly finished off.

The contractor shall ensure that all undesirable plants have been removed from the road reserve and borrow pit areas.

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

PS1

B6100: FOUNDATIONS FOR STRUCTURES

B6103 GENERAL

(a) Subsurface Data

Add the following:

“It is expressly understood that, while all subsurface information is given in good faith, the correctness of the information furnished is not guaranteed. Where the actual foundation conditions encountered are considerably at variance with conditions visualised and described in the Contract documents and those terms for which the rate or price provided for in the Contract is rendered unreasonable or inapplicable, such other rate or price consistent with the rates set out in the Contract shall be fixed as set out in Clause 13 – Variations and Adjustments of the General Conditions of Contract subject always to a founding depth variation not exceeding 2.5m in any foundation component of the permanent structure not, by itself, being held to constitute cause for variation for the Contract rates or prices.”

PS2

B6104 ACCESS AND DRAINAGE

(a) General

Add the following:

“Tenderers shall submit with their tender concept details of their intended method of accommodating the flow of the river while constructing the abutments, piers and the bridge deck.”

PS3

B6105 EXCAVATION

(g) The safety of excavations

Add the following:

“Where in the opinion of the Engineer local conditions dictate, excavations shall be temporarily shored by means of an approved lateral support system to safeguard the stability of the excavated faces, this being particularly imperative adjacent to road, rail or pedestrian traffic. The Contractor shall submit to the Engineer for his approval, prior to the commencement of the work, the design calculations to be undertaken in compliance with recognised current applicable design codes and good practice making due

allowance for the effects of all loadings including that of traffic, as well as the detailed drawings and installation procedures for all shoring.

The design for shoring, signing of the drawings and inspection prior to construction of the permanent works of excavations to ensure it is safe shall be carried out by the Contractor's competent person who shall be a professional Engineer with the relevant experience.

The Contractor shall ensure that the installation of the shoring together with excavation and subsequent backfilling and progressive removal of the shoring is undertaken strictly in accordance with the approved drawings and procedures and in compliance with the relevant sections of the Occupational Health and Safety Act and the Construction Regulations. Notwithstanding the Engineer's acceptance, the Contractor takes sole responsibility for the safety and adequacy of the lateral support work. Approval and/or acceptance given by the Engineer for the designs, drawings and installation will be subject to the provisions of clause 1221 of the 'Standard Specifications.

The excavations shall be adequately protected by a barrier fence marked with reflective tape and of height at least 1,0m erected as close to the excavation as practical. In addition red warning lights shall be provided at night. The Contractor shall employ watchmen to ensure that the barricades and lights are effective at all times.

Any ground anchorage that may be used in the shoring system shall be proof loaded to at least 125% of the working load of the anchorage and accepted by the Engineer prior to undertaking any further excavation stages. Such authority and acceptance shall not relieve the Contractor of his responsibility for the adequacy of the shoring and excavation.

No separate payment will be made for any cost incurred in complying with the above requirements, the cost thereof being deemed included in the relevant rates for excavation."

B6106 FOUNDING

Add the following clause at the end of the last paragraph:

"Where foundation slabs or pile caps are cast directly against the face of the excavations, the volume of concrete measured for payment shall be the total volume of concrete placed or the volume based on the plan dimensions detailed on the drawings plus a 100mm allowance for overbreak on each applicable side whichever is the lesser. No formwork to the footing shall be measured when the concrete is cast against the face of the excavations".

B6109 FOUNDATION FILL

In the 5th paragraph, 7th line delete "60" substitute "45".

Add the following after the 6th paragraph:

"Concrete blinding shall extend 100mm all around beyond the horizontal dimensions of all formed footings to facilitate placing of the formwork, unless otherwise directed by the Engineer.

In the case of structures where excessive ground water is encountered, the blinding layer may extend over the full plan area of the base of the excavation and beyond the edge of the foundation where required. Payment shall be made for the quantity of concrete calculated as the product of the specified thickness of blinding layer and the actual area of blinding placed subject to a maximum distance of 500mm beyond the edge of the foundation."

B6200: FALSEWORK, FORMWORK AND CONCRETE FINISH

PS4

B6204 DESIGN

(a) General

Add the following:

"The Contractor shall submit to the Engineer at least 4 weeks before the structure is scheduled for construction a detailed analysis showing the effect of the stresses that will be induced by the Contractor's chosen method of construction. The cost of any additional prestressing, reinforcing steel, concrete, etc, required as a result of the Contractor's chosen method of construction shall be to the Contractor's account. No construction shall commence until the Engineer has given his written approval."

(b) Falsework

Add the following:

"In the view of the possibility of flooding of the river during bridge construction, the Contractor shall not be permitted to adopt a method for supporting the formwork which is vulnerable to damage during flooding. Although the Contractor is free to select suitable arrangements for the support work, the arrangements shall be subject to acceptance by the Engineer. Should the Engineer consider the proposed arrangement unsuitable, the Contractor shall be required to amend and resubmit alternative arrangements acceptable to the Engineer. The Contractor shall not be entitled to additional payment or extension of time arising from the Engineer's rejection of his proposals.

Unless instructed otherwise by the Engineer, the Contractor shall submit his design criteria and detailed drawings of the support work to the formwork for the Engineer's consideration and acceptance. The design, signing of the drawings and inspection of the support work prior to construction of the permanent works shall be undertaken by the Contractor's competent person, who shall be a professional Engineer with the relevant experience.

Notwithstanding anything to the contrary contained or implied in the Conditions of Contract, the Contractor takes sole responsibility for the safety and adequacy of the falsework and formwork in accordance with clause 6203 of the Standard Specifications. Approval and/or acceptance given by the Engineer for such designs and drawings will be subject to the provisions of clause 1221 of the Standard Specifications."

PS5

B6205

CONSTRUCTION

(b) Formwork

(ii) Formwork to exposed surfaces

Add the following:

"The formwork at construction joints shall have moulding strips 25mm x 25mm neatly butted and set at the position of the construction joint. The arrangement of formwork and boards is required to present a neat and regular appearance. The Contractor is required to submit his proposed arrangement to the Engineer for approval."

(vi) Permanent formwork

Add the following paragraph:

"Anchor ties shall be designed to resist full buoyancy forces and details of such shall be submitted to the Engineer for approval. Void formers shall be held in position in order that no movement exceeding 1% of the deck thickness or 10mm whichever is the lesser takes place during concreting."

PS6

B6207

FORMED SURFACES: CLASSES OF FINISH

Add the following:

"Steel forms for Class F3 surface finish shall only be used with the written approval of the Engineer and then only if:

- (i) the forms are in good condition, free of rust, dust and any other foreign material which would result in staining of the formed surface
- (ii) any resulting depressions and projections which occur in the formed surface do not

exceed 3mm when measured with a straight edge placed between joint lines created by the forms

(iii) the edges of forms are straight and flat to ensure that forms butt without forming gaps along the joints and that steps and hollows at the joint lines do not occur.

PS7

B6210 MEASUREMENT AND PAYMENT

B62.05 Permanent formwork:

Add the following to the second paragraph:

"The tendered rates shall include for the installation of permanent drainage holes within the void formers at the low points of each void."

B6300: STEEL REINFORCEMENT FOR STRUCTURES

PS8

B6302 MATERIALS

(a) Steel Bars

Add the following before the first paragraph:

"Unless specified or directed otherwise by the Engineer, all steel reinforcing bars shall be either high yield stress hot-rolled deformed bars (Y-bars) or mild steel hot-rolled plain round bars (R-bars) as indicated on the drawings. Cold-worked reinforcing bars will not be permitted."

Add the following paragraph:

"Substitution of mild steel reinforcement as indicated on the drawings by an equivalent area of high yield stress reinforcement or vice versa will not be permitted."

PS9

B6306 PLACING AND FIXING

Replace the second and third paragraphs with the following:

"The concrete cover for all structural concrete shall be as specified on the drawings within a tolerance of -5/+10mm. Prior to fixing the steel, samples of the proposed spacers shall be submitted to the Engineer along with a written statement for in-situ manufacture, if applicable, for approval.

Overlap of steel reinforcement bars shall be such that the cover to the lapped bars remains constant at the specified cover."

Add the following:

"Steel bars shall be spaced accurately in accordance with the drawings to comply with the following tolerances:

Specified spacing 200mm and less:	±10mm
Specified spacing greater than 200mm:	±15mm

PS10

B6307 COVER AND SUPPORT

In the second paragraph replace the second sentence, commencing with

"Where no cover is indicated...shown in Table 6306/1" with the sentence "Where no cover is indicated, the Contractor shall inform the Engineer who shall after consultation with the design engineer indicate the required cover in writing and the as-built drawings shall indicate such cover".

Add the following to the end of the fifth paragraph:

“Concrete cover and spacer blocks shall be made using the same cement and aggregate type as the main concrete with the same water/ cement ratio so that differences in shrinkage, thermal movements and strain are minimised. Cover blocks shall be water cured by submersion for a minimum of 7 days and thereafter kept submerged in water until immediately before fixing onto reinforcing steel. Where concrete cover blocks, subsequent to fixing, have visually dried out they shall be remoistened by an appropriate method so that they are damp before the placing of concrete. Only semi-spherical concrete cover blocks shall be used. Where fixing wire is inserted into cover blocks, it shall be galvanised. Cover and spacer blocks manufactured from other materials e.g. plastic or wood shall not be permitted. All cover blocks regardless of the type of material manufactured from, shall not be visible on exposed concrete surfaces.”

B6400: CONCRETE FOR STRUCTURES

PS11

B6402 MATERIALS

(a) Cement

Replace the colon at the end of the first paragraph with a comma and add the following:

“taking into account the adoption of the new SANS 50197-1:2000 code for cements: (refer to C&CI website www.cnci.org.za)”.

Add the following paragraphs:

“The type of cement to be used in any concrete element shall take into account the environmental conditions and durability requirements at the location of the site of the works, and shall be as approved by the Engineer.

With the exception of the standard SANS approved cement blends supplied by the primary cement producers, the blending of cement and extenders shall not be permitted unless specifically approved by the Engineer on the basis of an acceptable quality assurance procedure. The source of supply for each type of cementitious material shall not be changed during the contract period.

The Contractor shall submit certificates from the supplier indicating compliance with the requirements of SANS 1491 for any cement extenders used in blending the cement.

Test certificates from an approved laboratory shall be furnished by the Contractor for all cements and prior to their use in the works, indicating the alkalinity of the cement expressed as the percentage sodium oxide equivalent ($\%Na_2O + 0,658(\%K_2O)$). Cement with such an alkalinity content in excess of 0,60% shall only be used with the written authority of the Engineer regardless of whether or not the aggregates are considered to be potentially alkali reactive.”

(b) Aggregates

Replace the 2nd last paragraph of sub-clause (i) with the following:

“The aggregates used in all structural concrete for this contract shall be from approved sources known to produce aggregates with low shrinkage and low water demand characteristics. Test certificates from an approved laboratory shall be furnished by the Contractor for all aggregates and prior to their use in the works indicating compliance with the above limiting shrinkage values.”

Add the following new sub-sub-clauses:

“(vi) The maximum chloride ion content of fine aggregate shall be 0,03% by mass of aggregate as measured by SANS 1083:2002. Where concrete is situated in a chloride environment as determined by the Engineer, the value shall be reduced from 0,03% to 0,01%.

(vii) Test certificates from an approved testing authority shall be furnished by the Contractor for all aggregates and prior to their use in the works, indicating the potential alkali-silica reactivity. Where, in the opinion of the Engineer, any aggregate shows potential reactivity, then the use of such an aggregate in the works shall only be permitted if the total alkali content of the concrete as determined from all its constituents does not exceed between 2,1 kg/m³ to 2,8 kg/m³ depending on the assessed severity of the potential reactivity of the aggregate, and then only with the written authority of the Engineer.

- (viii) The grading of the fine aggregate shall in addition to the requirements in SABS 1083 also comply with the grading limits in the following table:

GRADING OF THE FINE AGGREGATE

Sieve size (mm)	Cumulative percentage passing sieve
4,75	90 - 100
2,36	75 - 100
0,18	60 - 90
0,60	40 - 60
0,30	20 - 40
0,15	10 - 20
0,075	Natural sand 5 – 10 Crusher sand 5 - 20

Blending of fine and coarse sands will be permitted where necessary to achieve the above grading limits for fine aggregate."

(d) Water

Add the following:

"Water for concrete, other than for pre-stressed concrete, shall not contain chlorides calculated as sodium chloride in excess of three thousand parts per million (3000ppm) nor sulphates calculated as sodium sulphate in excess of two thousand parts per million (2000ppm).

Water for curing concrete shall not contain impurities in sufficient amount to cause discolouration of the concrete or produce etching of the surface. No sea-water or water containing salts shall be used."

(e) Admixtures

Add the following sub-sub clauses:

"(v) Only admixtures of the type that do not increase the water demand of the mix will be considered by the Engineer.

(vi) Admixtures, which have a retarding effect on the rate of hydration of the cement, may not be used when the concrete temperature is below 20°C.

(vii) A retarding admixture shall be used if temperatures of concrete mixes using cements of strength class 42.5 or higher is between 20 to 30°C or where the ambient temperature is between 20 and 30°C."

(f) Curing agents

Add the following:

"Full technical specifications and product data sheets as well as samples of not less than 1 litre of the proposed curing agents shall be submitted to the Engineer for approval, and no curing agent shall be used until approved by the Engineer."

PS12

B6404

CONCRETE QUALITY

(a) General

Replace the first paragraph with the following:

"All concrete in the Works shall comply with the requirements for strength concrete as specified in sub-clause 6404(b). When structural concrete prefixed 'W' is shown on the drawings, it shall, in addition to the strength requirement, comply with the durability requirements specified in sub-clause 6404(h)."

(b) Strength Concrete

Add the following:

"The maximum water : cement ratio for concrete shall be limited as follows:

Class W30/19	0,48
Class W40/19 & W40/13	0,45

The cementitious material content shall fall within the following ranges:

Class W30/19	340-380 kg/m ³
Class W40/19 & W40/13	360-420 kg/m ³

Concrete mix designs complying with the specifications shall be submitted to the Engineer for approval at least two weeks prior to casting the concrete and shall for each mix include the following:

- Target strength and slump
- 7 and 28 day compressive strength results with measured slumps
- Cement source, type and composition
- Test results for mixing water, see COLTO clause 8116
- Brand and dosage of any admixtures
- Proportions of all constituents in the mix
- Cement quality certificates including Na₂O equivalent
- Certificates of compliance iro any cement extenders used (SANS1491)
- Data sheets for admixtures
- Aggregate source and test results to confirm compliance with SANS 1083, including grading, flakiness and FM
- Shrinkage characteristics and potential alkali reactivity of fine and coarse aggregate
- Results of the concrete drying shrinkage (COLTO clause 6402(b)(i)(3)).

No concrete mix designs will be considered for approval until all the above-mentioned data has been submitted and no concrete may be placed until such time that the concrete mix has been approved by the Engineer.

The Contractor's attention is drawn to the 6th paragraph relating to the requirements regards the 28-day characteristic cube compressive strength applicable to "W" concrete."

(d) Consistence and workability

Add the following:

"On-site slump cone test measurements for all structural concrete used in the works and taken at the time of actual placing shall fall within the range 75±25mm. Concrete which has a slump outside of this range shall not be placed in the structure and removed immediately from the site."

B6406

MIXING

(f) Ready-mixed concrete

Add the following:

"Delivery tickets for all ready-mixed concrete delivered to site shall be checked prior to discharge to ensure the correct mix has been delivered and the time of arrival recorded and compared to the time of batching to ensure consistency with the expected travel time and that no undue delay has occurred between dispatch and delivery.

The temperature limits at the point of delivery shall be as specified in SANS 878:2004 unless the Engineer has specified other limits due to specific design requirements.

No water shall be added on site prior to placing the concrete to improve workability. Prior to placing all concrete delivered to site shall be checked for workability using the slump cone test and slump measured outside of the limits set for the design mix shall be rejected and removed from the site.

The rate of change in concrete properties shall be closely monitored. When, in the opinion of the Engineer, the workability drops to the extent that the concrete cannot be satisfactorily placed and compacted with the available equipment and manpower it shall be deemed unsuitable for use and removed from the site of the works. Under no circumstances shall water be added to maintain or reinstate workability.

No admixtures shall be added on site before or during placing the concrete to improve or maintain workability."

B6407 PLACING AND COMPACTION

(b) Placing

Add the following:

"Casting of the in-situ parapets or placing of precast parapets shall only commence after removal of the deck support work, and in addition, in the case of pre-stressed decks, the stressing must be complete. Where specified on the drawings the top of the parapets after placing shall follow the pre-camber levels specified on the drawings to allow for future creep effects. The levels of the top rail of each panel of the balustrades/parapets shall be confirmed in writing by the Engineer".

PS13

B6408 CONSTRUCTION JOINTS

(a) General

Add the following:

"No construction joints other than those indicated on the drawings will be permitted without the written approval of the Engineer. In all cases the proposed method of forming the joint shall be discussed and agreed with the Engineer."

PS14

B6409 CURING AND PROTECTION

Add the following to the end of sub-clause 6409(f):

"Where a curing compound is used, it shall consist of an approved water based low viscosity clear wax emulsion applied in accordance with the manufacturer's instructions."

Add the following paragraphs to the end of this sub-clause:

"Where curing by retention of formwork is used as the only method of curing the concrete, it must be left in place for the minimum period specified in Table 6206/1 but in no instance shall it be less than 7 days.

The materials used for formwork shall take into account properties such as thermal insulation and moisture absorption when assessing the suitability of the material, to the approval of the Engineer.

If impermeable curing membranes are to be used as a curing method, they shall be installed at the same time as formwork is removed and no portion of a concrete surface may be left unprotected for a period in excess of 2 hours. If the surface is an unformed finish e.g. top of deck slab, then the surface must be protected immediately by appropriate methods approved by the Engineer after it is finished, without damage to that surface, since it is vulnerable to plastic shrinkage and plastic settlement cracking due to high rates of evaporation while the concrete is still in a plastic state. Plastic shrinkage and settlement shall not be permitted on any of the structural elements since it compromises the durability of the concrete. In order to prevent early settlement and shrinkage of the concrete, the concrete placed shall be re-vibrated after initial compaction while the concrete is still in a plastic state. Any remedial measures shall be as approved in writing by the Engineer.

On bridge decks, the top surface shall be cured using either the method described in clause 6409(d) i.e. 'Constantly spraying the entire area of exposed surfaces with water' or application of an approved curing compound and covering with a 75mm thick layer of sand continuously kept moist for the duration of the specified curing period."

PS15

B6410 ADVERSE WEATHER

Add the following at the end of this clause:

"Placing of concrete during dry and windy conditions irrespective of ambient temperature will not be allowed unless fully motivated in exceptional circumstances and expressly permitted under the special precautionary measures approved by the Engineer."

Add the following sub-clause:

(d) Temperature and hydration of concrete

"The temperature of concrete when placed shall be within the range 10°C to 30°C. Concrete which has a temperature outside of this range shall not be placed in the structure. Care shall also be taken not to cast concrete onto hot steel shutters as this might induce cracking.

The rate of hydration of the cement in the concrete shall be such that the concrete can be placed and properly compacted within 2 hours after the addition of water to the mix ingredients. The initial set of the concrete shall not be unduly delayed due to inappropriateness of admixtures or cement type, which could promote bleeding."

PS16

B6414 QUALITY OF MATERIALS AND WORKMANSHIP

(a) Criteria for compliance with the requirements

Add the following:

"Routine inspection and quality control will be done by the Engineer as specified in Section 8300. All reference in clause 6414 to Section 8200 and its clauses or sub clauses shall be deleted."

B6600: NO-FINES CONCRETE, JOINTS, BEARINGS, PARAPETS AND DRAINAGE FOR STRUCTURES

PS17

B6603 JOINTS IN STRUCTURES

(d) Plug type expansion joint systems

Add the following:

"Roadway expansion joints at piers and abutments shall be Silicone Highway Grade Sealant "Dow Corning 888" or other and approved equal subject to the manufacturer having obtained valid Agreement certification. The joints shall be installed in saw-cut recesses complete with joint terminations at the inside face of the parapets."

(g) Installing the expansion joints

Delete the first paragraph and replace with the following:

"All deck expansion joints shall be installed by approved specialist subcontractors only. Installed deck expansion joints shall have the following guarantees which shall be submitted to the Engineer on final acceptance:

Proprietary joints-	15 years
Asphalt plug type joints-	10 years
Concrete nosings (replacement)-	10 years
Joint sealant	5 years

Add the following after the third paragraph:

"All deck expansion joints shall, as part of the installation procedure, be checked for water-tightness over the entire length of the joint installed and particularly at the joint terminations by ponding with water to a depth of not less than 100mm for a period of at least four hours. Any water leaks shall be repaired with the same material as used in the expansion joints. Further tests and repairs shall be repeated until all water leaks have been stopped to the satisfaction of the Engineer."

PS18

B6604 BEARINGS FOR STRUCTURES

(a) Materials

Replace the entire sub-sub-clause with the following:

“Structural bearings and elastomeric bearing pads shall be seated on proprietary epoxy resin mortar beddings complying with clause B8118. Use of such materials shall be strictly in accordance with the manufacturer’s instructions. The cured compressive cube strength of the mortar shall be not less than 2,0 times the average contact stress under the bearing, or 20MPa, whichever is the greater.”

PS19

B6606

DRAINAGE FOR STRUCTURES

(c) Synthetic-fibre filter fabric

Replace the last paragraph with the following:

“Synthetic-fibre filter fabric shall be manufactured from polymeric material processed into a continuous, permeable, homogeneous, non-woven sheet which shall be mechanically, heat or chemically bonded. It shall be made from polyester, polypropylene or polyethylene and show no detectable reduction of the specified properties when subjected to chemical and biochemical conditions found in soils or in saline solution, specifically:

- soil and ground water with a pH in the range 4 to 12 (pH to be determined by MethodA20, TMH1)
- soil (as paste) and ground water containing salts with a conductance of up to 1,0Siemens per metre (S/m) (conductivity to be determined by Method A20T, TMH1);

In addition the filter fabric shall not be attractive to rodents or termites nor support the growth of algae; it shall be rot-proof and shall maintain at least 80% of the original tensile strength after direct exposure of 1500 hours to sunlight.

Synthetic-fibre fabric shall be classified according to the following:

Grade	Penetration load (kN)	Elongation at rupture (%)		Permeability (litres/sq.m/s)
		Min	Max	
A	4,5	10	50	20
B	3,0	20	50	20
C	2,5	20	-	20
D	2,0	20	-	20
E	1,5	20	-	20

The above properties shall be measured in accordance with the test methods of SABS 0221-1988.”

Add the following new sub-clause:

“(e) Synthetic-fibre filter fabric backing with Netlon pipes and strips

The drainage system shall consist of M65 Netlon drainage pipes and/or DN1 Netlon drainage strips and Grade B filter fabric placed against the rear faces of the abutments and walls and wrapped around the Netlon pipe as detailed on the drawings.

The filter fabric shall be suitably hung or fixed by approved means to the wall to prevent displacement during backfilling. The drainage pipe or strip shall be placed on a 300mm x 100mm concrete bedding strip, or other impervious material, and the bottom of the pipe shall line up with the inverts of the weep holes.”

PS20

B6609

SERVICE DUCTS

Add the following clause:

Service ducts shall be 110mm and 160mm nominal diameter normal-duty uPVC pipes as specified on the

drawings complying with SABS 791 installed in the parapets and sidewalks as shown on the drawings.

All ducts shall be joined with watertight couplings made from the same material as the pipe. The ends of the uPVC ducts shall be provided with suitable conical wooden stoppers to prevent dirt from entering the ducts. Two galvanised steel wire strands of 2,5mm diameter shall be threaded through each uPVC duct and shall extend 2m beyond each end and be firmly wedged into position with the wooden stoppers.

Provision for free movement across the deck expansion joints shall be made by terminating the service ducts either side of the joint and sleeving across the joint with a 400mm long pipe of slightly larger diameter, de-bonded on one side of the joint by wrapping water resistant adhesive tape at least three times around the circumference of the pipe.

Inspection eyes with 6mm thick hot-dip galvanised "Vastrap" recessed cover plates shall be placed at intervals not exceeding 40m. Cover plates shall be fixed with 4No. M10 50mm long stainless steel "drop-in-anchors grade 304, complete with stainless steel button cap set screws and stainless steel washers, grade 316.

PS21

B6608 MEASUREMENT AND PAYMENT

Item

B66.05 Expansion joints

Add the following:

"Roadway expansion joints will be measured per linear metre along the length of the joint between the inside faces of the sidewalks or concrete parapets in the case where there are no sidewalks. Sidewalk expansion joints will be measured per number complete with cover plates.

The tendered rate shall include for the joint terminations, forming the recesses, cover plates and fixings and also for the water test required to prove the joint. The water shall be ponded and maintained to a minimum depth of 150mm above the top of the joint for a period of one hour each. Testing should follow the installation of the various sections of joints to take advantage of the existing traffic accommodation and each test shall cover the length of each joint installed (generally half width of bridge.) The tendered rate shall also include for any necessary repair and retesting until the joint is watertight to the satisfaction of the Engineer and for clearing away the ponding materials on completion of the test."

B66.15 Concrete parapets

Add the following to this clause:

"The tendered rate shall include for sealing of joints between parapet units as shown on the drawings."

Add the following payment items:

"Item	Unit
B66.27 Drainage strips (description given)	metre (m)

The unit of measurement shall be the linear metre of drainage strips placed behind the earth faces of abutments as shown on the drawings.

The tendered rate shall include full compensation for all material, labour, and equipment to supply and install the drainage strips as shown including the 300mm wide by 100mm thick concrete bed under the drainage strip.

Item	Unit
B66.28 Perforated drainage pipes (description given)	metre (m)

The unit of measurement shall be the linear metre of perforated drainage pipes placed behind the earth faces as shown on the drawing.

The tendered rate shall include full compensation for all material, labour, and equipment to supply and install the perforated pipes as shown including the 300mm wide by 100mm thick concrete bed under the core.

Item	Unit
B66.29 Joint protection plates	metre (m)

The unit of measurement shall be the linear metre of specified width installed. The tendered rate shall include full compensation for supplying all materials, including fastening or adhesives, for galvanizing and installation, including all labour and equipment, and for any wasted material.

Item	Unit
B66.30 Additional water tests for joints ordered by the Engineer	number (No)

The unit of measurement shall be the number of additional water tests for proving the expansion joints, as ordered by the Engineer. The test shall be executed by ponding water to a minimum depth of 150mm deep above the top of the joint for a period of one hour each. Testing should follow the installation of the various sections of joints to take advantage of the existing traffic accommodation and each test shall cover the length of each joint installed (generally half width of bridge).

The tendered rate shall include full compensation for providing the pond of water and maintaining its minimum depth of 150mm for the full one hour period, and clearing away the ponding materials on completion.

Item	Unit
B66.31 Service ducts:	

(a) 110mm nominal diameter uPVC pipes metre (m)

(b) 160mm nominal diameter uPVC pipes metre (m)

The unit of measurement shall be the linear metre of service duct installed.

The tendered rate shall include full compensation for all material, labour, and equipment to supply and install the service ducts complete with couplings, joints, draw wire and end stoppers as shown on the drawings.

All service ducts to be provided in concrete parapets and end blocks as shown on the drawings shall be included in pay items 66.15 and 66.17 respectively and shall not be separately measured and paid for under item B66.31."

COLTO SERIES 8000: SUNDRIES
PS22

B8100: TESTING MATERIALS AND WORKMANSHIP

Add the following clause:

"B8118 PROPRIETARY RESINS, GROUTS AND MORTAR

All proprietary cementitious and epoxy resin, grouts and mortars shall comply with the manufacturer's specifications. The manufacturers or suppliers shall provide recent test reports from an approved laboratory to prove such compliance and shall also provide test certificates of recent tests on the materials.

Cementitious grouts and mortars shall not contain expansive cements or metallic powders such as

aluminium or iron filings. The plastic volume change shall fall in the range between zero shrinkage and 4% expansion from the time of placement until final set when tested according to ASTM C 827. Further, the grout shall show no shrinkage and a maximum of 0,2% expansion in the hardened state when tested according to ASTM C 1090.

Epoxy resin grouts and mortars shall show no shrinkage and a maximum 2,0% expansion from the time of placement when tested according to ASTM C 827 (modified). The coefficient of thermal expansion shall not exceed 0,000055/°C when tested according to ASTM C 531.

The manufacturer shall submit to the Engineer samples of the proposed materials together with complete technical details including mixing ratios and times, pot life, setting and curing times, strength, volume change, thermal expansion, creep characteristics etc.

As part of the Contractor's process control in terms of sub-clause 8103(a), testing shall be undertaken on the materials delivered to site to monitor compliance with the manufacturer's specifications. All new batches of materials shall be tested by the Contractor and approved by the Engineer prior to incorporation into the works.

Strength testing shall be undertaken, using 75mm or 100mm cubes, on samples taken from the mixed material actually being used in the work at the time of its use."

PS23

B8200: QUALITY CONTROL

B8203 DEFINITIONS

(a) Lot

Replace the above Clause with:

"A Lot is a portion of work or quantity of material which has been produced in one operation using the same continuous processing and methodology, using essentially the same materials and is assessed as a unit for the purposes of quality control."

B8204 GENERAL REQUIREMENTS

(a) Determining the Lot size

(i) Road construction layers

In the second (2nd) sentence of the first (1st) paragraph remove the word "normally" and the words "and not exceed the product of two full days' work"

(b) Random sampling

Replace the contents of this subclause with:

"In the case of the sampling of road earthworks, Layerworks and surfacing the **random sampling** methodology as prescribed in TMH 5 shall be adhered to"

SECTION 8300: QUALITY CONTROL (SCHEME2)

B8301 SCOPE

Add the following:

"Quality Control (Scheme 2), as described in Section 8300 will be applicable for the testing and control of properties of materials and workmanship."

PS24

SECTION 8400: PAINTING

B8404 APPLYING THE PAINT

Add the following:

“Protective coating to concrete surfaces:

Unless it can be proven by suitable laboratory tests that the soil is not aggressive or where indicated on the drawings or directed by the Engineer all concrete surfaces in contact with the ground shall be waterproofed by the application of a minimum of two coats of bituminous waterproofing compound complying with SABS 1153. Surface preparation, mixing and application shall be carried out strictly in accordance with the manufacturer's specification to a total dry film thickness of not less than 500 microns.”

B8412 MEASUREMENT AND PAYMENT

Add the following payment items:

“Item

Unit

B84.02 Protective coating to concrete surfaces (full description of system and part of structure indicated) square metre (m²)

The unit of measurement shall be the square metre of surface area prepared and coated as specified and accepted by the Engineer.

The tendered rate shall include full compensation for the supply and storage of materials on site and for all labour, plant and tools and for all work and incidentals required to complete the surface preparation of the coating and application as specified. The cost for testing the soil for aggressiveness shall be paid for under item 81.02.”

Item

Unit

B84.03 Waterproofing of bridge bearing seats using cementitious waterproofing slurry, “Prostruct 526” or approved equivalent, 3,0mm thick, in two coats, including surface preparation to manufacturers specifications.....square metre (m²)

The unit of measurement shall be the square metre of the bearing seating area on the top surface of the piers and abutments.

The tendered rate shall include for all labour, plant and material required for the preparation of the bearing surface and the application the waterproofing material, all as per manufactures specifications.

C3.3.2 Health and Safety Specifications

OCCUPATIONAL HEALTH AND SAFETY SPECIFICATIONS (OHS)

LIST OF ABBREVIATIONS

OLM	Okhahlamba Local Municipality
CR	Construction Regulations
GAR	General Administration Regulations
GSR	General Safety Regulations
HCSR	Hazardous Chemical Regulations
OHSA	Occupational Health and Safety Act 85 of 1993
OHSS	Occupational Health and Safety Specification
SABS	South African Bureau of Standards

1 INTRODUCTION

1.1 Purpose of the Occupational Health and Safety Specification

The purpose of the OHSS is to assist contractors to achieve compliance with the Occupational Health and Safety law, in order to reduce incidents, injuries and occupational illnesses. The OHSS will be implemented during the construction of this project or any construction activity that the Client has control over.

The OHSS is a performance specification to ensure that the Client and any bodies that enter into formal agreements with the Client viz. Agents, Consultants, Principal Contractors and Contractors achieve an acceptable level of OHS performance. No advice, approval of any document required by the OHSS such as hazard identification and risk assessment action plan or any other form of communication from the Client shall be construed as an acceptance by the Client of any obligation that absolves the Principal Contractor from achieving the required level of performance and compliance with legal requirements. Further, there is no acceptance of liability by the Client which may result from the Principal Contractor failing to comply with the OHSS, i.e. the Principal Contractor remains responsible for achieving the required performance levels.

1.2 Implementation of the Occupational Health and Safety Specification

This OHSS forms an integral part of the Contract, and Principal Contractors are required to make it an integral part of their Contracts with Contractors and Suppliers. It will be disseminated by the Client to persons responsible for the design of the infrastructure works, who will ensure that it is included in the Tender Document(s) issued to prospective Contractors. The prospective Contractors shall incorporate the requirements of the OHSS in their submission of Tenders to the Client. Some of the requirements of the OHSS are detailed in Annexure A.

This specification must be read in conjunction with the OHS Act No 85 of 1993 (as amended)(The Act), the Regulations as published in Government Gazette No 37305 of 07 February 2014 as well as the General Safety Regulations published in Government notice No. R 1031 of 30 May 1986, as amended, the General Administrative Regulations, GAR 929 of 25 June 2003, as amended and any other regulations falling under the Act (collectively known as the Regulations).

The OHS Act Agreement in Section 9 of the Tender Document (Contract Forms) must be fully completed by the Contractor. These documents shall be deemed to form part of the Contract Documents. They must be obtained by the Principal Contractor and copies held on site.

2. SCOPE

This OHSS covers the requirements for eliminating and mitigating incidents and injuries in all Client controlled projects.

The scope also addresses legal compliance, hazard identification and risk control, promoting a health and safety culture amongst those working on MM projects and those affected by the activities taking place in and around them.

2.1 Interpretations

2.2 Application

The OHSS contains clauses that are generally applicable to building / construction and that impose pro-active controls associated with activities that impact on human health and safety as they relate to plant and machinery.

Compliance to the requirements of the OHSA, Construction Regulations and General Safety Regulations is in addition to the requirements of the OHSS and is part of the Principal Contractor's responsibility. The Client will through the Agents, as appointed, monitor that the Principal Contractor complies with the requirements of the OHSA and will not prescribe to the Principal Contractor how such compliance is achieved.

2.2.1 Definitions

The definitions used will be those set out in the Regulation Gazette No 37305 of 07 February 2014 with the following additions:

Client: Okhahlamba Local Municipality

Engineer: Means a competent person appointed by the Client to design, supervise and monitor construction on their behalf.

Hazard: Source of exposure to danger

Hazard Identification and Risk Assessment and Risk Control:

Means a documented plan, which identifies hazards, assesses the risks and details the control measures and safe working procedures which are to be used to mitigate and control the occurrence of hazards and risks during construction or operation phases.

Health and Safety Management Plan:

Means a documented plan which addresses the hazards identified and includes safe working procedures to mitigate, reduce or control the hazards identified.

Induction Training:

Means once off introductory training on general health and safety issues given to all employees and visitors to the site before commencement of work on site.

Risk:

Means the probability or likelihood that a hazard can result in injury or damage.

Regulations: Shall mean the relevant regulations promulgated in terms of the Occupational Health and Safety Act, 1993 (ACT NO. 85 of 1993)

Site:

Means the area in the possession of the Principal Contractor for the construction of the works. Where there is no demarcated boundary it will include all adjacent areas and haul roads, which are reasonably required for the activities for the Principal Contractor, and approved for such use by the Engineer.

The Act:

Means, unless the context indicates otherwise, the Occupational Health and Safety Act, 1993 (ACT NO. 85 of 1993) and Regulations promulgated thereunder.

3. REQUIREMENTS AT TENDER STAGE

The Principal Contractor shall make available the following with his completed Tender:

- (a) A Preliminary Health and Safety Plan as described in Regulation 5 of the Construction Regulations. The Safety Plan must be based on the Construction Regulations February 2014 and this specification and will be subject to approval by the Client or his agent. This will include a Hazard Identification and Risk Assessment Analysis appropriate to the project. Material Safety Data Sheets (MSDSs) and chemical risks must be included in the HIRA
- (b) A declaration to the effect that he has the competence and necessary resources to carry out the work safely in compliance with the Construction Regulations 2014.

Failure to submit the foregoing with his Tender or during Tender evaluation, may lead to the conclusion that the Principal Contractor is not be able to carry out the work under the contract safely in accordance with the Construction Regulations and may result in the Tender being disqualified.

4. NOTIFICATION OF COMMENCEMENT OF CONSTRUCTION WORK

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

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

The notification must be done in the form of the pro forma given in Annexure A to the Construction Regulations. A copy of the notification form must be kept on site, available for inspection by inspectors, Client, Engineer, employees and persons on site. Proof of submission must also be provided.

5. GUIDELINES FOR THE DEVELOPMENT OF A HEALTH AND SAFETY PLAN

5.01 Background

In terms of the Construction Regulations [Regulation 4 (1) (a)] of the Occupational Health and Safety Act, No 85 of 1993, the Client is required to compile an Occupational Health and Safety Specification for each of its projects and the Principal Contractor, appointed by the Client in terms of Regulation 4 (1) (c), is required to prepare an Occupational Health and Safety Plan. This plan has to be prepared in terms of Regulation 5 (1) as well as the Client's Occupational Health & Safety Specification. In terms of Regulation 4 (2), the Client and the Principal Contractor are required to agree on the Occupational Health and Safety Plan before any work may commence.

5.02 Framework for an Occupational Health and Safety Plan

5.02.1 Introduction

The Principal Contractor has to demonstrate to the Client that he has a suitable and sufficiently documented Occupational Health and Safety Plan as well as the necessary competencies, experience and resources to perform the construction work safely. The Principal Contractor is required to submit at, or before, the site handover meeting, the following documentation for perusal and verification by the Client:

- Management Structure including an organogram
- Quality Plan
- Human Resources Plan
- Registered Workplace Skills Plan
- "Letter of good standing" issued by the Compensation Commissioner or licensed compensation insurer.
- Proof of induction and other training of employees
- Example: copies of minutes of previous Occupational Health and Safety Committee meetings and copies of Incident Investigation Reports for other projects undertaken by the Tenderer.

5.02.2 Contents of an Occupational Health and Safety Plan

The Occupational Health and Safety Plan shall include the following:

- **An Occupational Health and Safety Management Programme**
- **A Statement Regarding the Communication and Management of the Work**
- A suitable list of contents for the Occupational Health and Safety Plan is given in Annexure E

6. APPOINTMENT OF HEALTH AND SAFETY (H&S) PERSONNEL

6.01 Construction Supervisor

In terms of Section 16 of the Act, the Chief Executive Officer of the Principal Contractor may delegate, in writing, part or all of his powers to a suitable person on the site.

The Principal Contractor shall appoint a full-time **Construction Supervisor**, in writing, in terms of Section 6.1 of the Regulations with the duty of supervising the performance of the construction work.

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

6.02 Construction Health and Safety officer

In terms of Section 6 (6) of the Regulations the Principal Contractor shall appoint in writing a full-time **Construction Safety Officer**.

Should the Principal Contractor wish to appoint a part time Construction Safety Officer, this shall only be done after consultation with the Client.

The Construction Safety Officer shall have the necessary competence and resources to perform his duties diligently.

Provision will be made in the schedule of quantities to cover the cost of a dedicated construction safety officer appointed after award of the contract.

A CV, and training records, of the proposed Construction Safety Officer must be submitted at the Contract Handover Meeting.

The Construction Safety Officer shall not be the same person as the Traffic Safety Officer unless with the written permission of the Client.

6.03 Health and safety representatives

In terms of **Sections 17 and 18 of the Act (OHSA 1993)** the Principal Contractor shall appoint, in writing, a **health and safety representative** whenever he has more than 20 employees in his employ on the works. The health and safety representative must be selected from employees who are employed in a full-time capacity at a specific workplace and at least half must be elected according to the wishes of the workforce.

Representatives from local labour can be appointed to represent such labour for the duration of the contract. The functions of the H&S Representatives are as outlined in the OH&S Act.

6.04 Health and safety committee

In terms of **Sections 17, 18 and 19 of the Act (OHSA 1993)** the Principal Contractor (as employer), shall establish one or more **health and safety committee(s)** where there are two or more health and safety representatives at a workplace. The persons selected by the Principal Contractor to serve on the committee shall be designated in writing.

The function of the health and safety committee shall be to hold meetings at monthly intervals, to review the health and safety measures on the contract, to discuss incidents related to health and safety with the Principal Contractor's representative and any Department of Labour inspector, and to make recommendations regarding health and safety to the Principal Contractor and to keep record of meetings, recommendations and reports made by the committee.

6.05 Competent persons

In accordance with the Construction Regulations the Principal Contractor shall appoint, in writing, **competent persons** responsible for supervising construction work for the following work situations that may be expected on the site of the works, as applicable to the project. A CV of the person/s concerned should form part of the Health and Safety File

- (a) Risk assessment (Regulation 7);
- (b) Fall protection (Regulation 8);
- (c) Structures (Regulation 9);
- (d) Formwork and support work (Regulation 10);
- (e) Excavation work (Regulation 11);
- (f) Demolition work (Regulation 12);
- (g) Tunnelling (Regulation 13);
- (h) Scaffolding work (Regulation 14);
- (i) Suspended platform operations (Regulation 15);
- (j) Boatswain chairs (Regulation 16);
- (k) Material Hoists (Regulation 17);
- (l) Batch plant operations (Regulation 18);
- (m) Explosive powered tools (Regulation 19)
- (n) Cranes (Regulation 20);
- (o) Construction vehicle and mobile plant (Regulation 21(1));
- (p) Electrical installation and machinery on construction site (Regulation 22);
- (q) Use of temporary storage of flammable liquids on construction site (Regulation 23);
- (r) Water environments (Regulation 24);
- (s) Housekeeping on construction sites (Regulation 25)
- (t) Stacking and storage on construction sites (Regulation 26);
- (u) Fire precautions on construction sites (Regulation 27); and
- (v) Construction welfare facilities
- (w) Incident Investigator
- (x) Construction Supervisor and Assistants (Regulation 6)
- (y) Construction Safety Officer (Regulation 6) and Traffic Safety Officer

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

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

6.06 Use of Crushers

Where a crusher is established on site, and where quarries are worked, this facet of the project falls within the requirements of the Mines Health and Safety Act (Act No 29 Of 1996) and the regulations in respect of Health and safety will apply. The District Mining Engineer will carry out audits on this aspect of the project.

7. PROJECT / SITE SPECIFIC REQUIREMENTS

A description of the works to be constructed can be found in the Project Specifications, Part A, in the Tender Document.

A list of activities and considerations that have been identified for the project and the construction site and for which Risk Assessments, Standard Working Procedures (SWP), management and control measures and Method Statements (where necessary) have to be developed by the Principal Contractor is given in Annexure D. This list is not to be considered as inclusive and other items must be added as required

In addition, the following health risks should be taken into account. It may become necessary to include others according to the requirements of the project.

Health risks

- Health risks arising from neighbouring as well as own activities and from the environment e.g. threats by dogs, bees, snakes, lightning etc.
- Exposure to noise
- Exposure to vibration
- Working at heights
- Working over water
- Protection against dehydration and heat exhaustion
- Exposure to dust resulting in pneumoconiosis and potential silicosis
- Unprotected exposure to wet and cold conditions
- Exposure to hazardous substances, including the use of radioactive materials in testing equipment, and chemicals used on site.
- HIV / Aids

Noise Risks

The Principal Contractor or Contractor or owner of the construction plant shall take noise level readings for each type of construction plant to be used on the project and establish a noise zone for each type in terms of Section 9 of the Noise-Induced Hearing Loss Regulations where required in terms of the Regulations, suitable hearing protective equipment shall be issued and worn. Where several items of construction plant are in operation at or near to each other, the noise zone for the combined plant should be established and suitable hearing protective equipment used within this zone.

Based on the results of this monitoring, the contractor may have to make budgetary provision for the medical screening of all employees working in an area where the OEL is exceeded.

Construction traffic

The Principal Contractor must state at what maximum speed traffic, especially haulers, shall be allowed to travel at on site and on haul roads. This limit must be strictly adhered to by all construction traffic. Unreasonable limits may be revised by the Engineer or OHS agent.

Emergency Procedures

The Principal Contractor shall submit a detailed Emergency Procedure for approval by the Client prior to commencement on site. The procedure shall detail the response plan including the following key elements:

- List of key competent personnel;
- Details of emergency services;
- Actions or steps to be taken in the event of the specific types of emergencies;
- Information on hazardous material/situations.

Emergency procedure(s) shall include, but shall not be limited to, fire, spills, accidents to employees, use of hazardous substances, bomb threats, major incidents/accidents, etc. The Principal Contractor shall advise the Client, Agent, Engineer and all relevant authorities forthwith, of any emergencies, together with a record of action taken. This shall be confirmed in writing as soon as possible after the incident. A contact list of all service providers (Fire Department, Ambulance, Police, Medical and Hospital, etc) must be maintained and available to site personnel. These procedures shall form part of the Health and Safety Plan.

First Aid Boxes and First Aid Equipment

The Principal Contractor and all Contractors shall appoint in writing First Aider(s). If not already accredited, the appointed First Aider(s) are to be sent for accredited first aid training. Unless agreed with the Client, at least one first aider shall be certified as Level 3. Valid certificates are to be kept on site. The Principal Contractor shall provide an on-site First Aid Station with first aid facilities, including first aid boxes containing, at least the requirements of the Annexure to Section 3 of the General Safety Regulations. All Principal Contractors with more than 5 employees shall supply their own first aid box. Principal Contractors with more than 10 employees shall have a trained and certified First Aider on site at all times.

It is suggested that all supervisors carry a first aid kit in their vehicles at all times.

Personal Protective Equipment (PPE) and Clothing

The Principal Contractor shall ensure that all workers, temporary or permanent, are issued with and shall wear hard hats, protective footwear, reflective bibs or vests and overalls as well as any other necessary PPE as set out in Section 2.3 of the General Safety Regulations. Principal Contractors must provide reflective vests for all their staff. The Principal Contractor and all Contractors shall make provision and keep adequate quantities of SABS approved PPE on site at all times. This shall include necessary safety gear for visitors. The Principal Contractor shall clearly outline procedures to be taken when PPE or Clothing is:

- Lost or stolen;
- Worn out or damaged.
- Issued to temporary labour or staff.

The above procedure applies to Principal Contractors and their Contractors, as they are all Employers in their own right.

PPE must also be issued to the Consultant's staff, as set out in the Specifications or as requested by the Engineer.

Medical Certificates and Medical Surveillance

Medical certificates provided by a registered Health and Safety Practitioner must be obtained for all persons involved in:

- Exposure to Hazardous chemicals (HCSR Reg 7)
- Working at Heights (CR Reg 8 (2))
- Operation of Construction Vehicles (CR Reg 21 (d))
- "Listed" activities in terms of Section 12(c) of the Act.

In the case of permanent employees of the Principal, Contractor or sub-contractor no payment will be made for these certificates as they are deemed to be already issued. In the case of temporary employees, payment will be made in terms of payment item.

Exposure to hazardous materials

The Principal Contractor shall, in his Health and Safety Plan, state what methods will be used to determine the exposure of workers to any hazardous materials used on site. Particular attention must be given to those who are exposed for long periods of time. This is particularly important in the cases of workers exposed to bituminous materials. Regular medical surveillance must form part of the Principal Contractor's Health and Safety Plan.

Environmental monitoring results and risk assessments are to be made available to the occupational health professionals doing the medical surveillance, as well as Job specifications per job category.

Occupational Health and Safety Signage

The Principal Contractor shall provide adequate on-site OHS signage. This should include but is not limited to: 'no unauthorised entry', 'report to site office', 'site office', 'beware of overhead work', 'hard hat area' in the appropriate positions. Signage shall be posted up at all entrances to site as well as on site in strategic locations e.g. access routes, stairways, entrances to structures and buildings, scaffolding, and other potential risk areas/operations. These signs shall be in accordance with the requirements of the General Safety Regulations as amended.

Signs shall be posted at all entrances to the site indicating that a construction site is being entered and that persons should take note of safety requirements.

Induction of employees and visitors

In terms of section 7(7); (8) and (9) inductions must be carried out for employees and visitors to the site. The Contractor's Health and Safety Plan must set out how this will be done as well as how the entrance of visitors to the site will be regulated. The type of proof of induction contemplated in Section 7 (9) shall also be stated.

8. HEALTH AND SAFETY FILE

The Principal Contractor shall in terms of Construction Regulation 5(7) maintain a Health and Safety File on site at all times. The Health and Safety File is a file or other permanent record containing information on aspects of the construction project - which will be necessary to ensure the health and safety of any person who may be affected by the construction work.

The Principal Contractor shall appoint a suitably qualified person to prepare the Health and Safety File and to keep it up to date for the duration of the contract. The Health and Safety file shall include at least the following information:

- All Documents as required by the Act and Regulations
- Notification of construction work
- Proof of registration with the Compensation Commissioner or FEMA
- All reports of inspections and audits
- All non-conformity reports
- A record of all working drawings, calculations and design where applicable
- Detailed list of Contractors with contact details
- List of all hazardous materials used and stored on site with Data Sheets and Materials Hazard Data sheets
- All Hazard Identification and Risk Assessments carried out for the project.
- All Health and Safety Plans for the project.
- All method statements
- Minutes of all relevant meetings
- Incident records, including investigations and results
- Record of all appointments under the Regulations
- Medical certificates of fitness.
- Record of Competencies
- Training Records

Annexure B is a list of the records to be kept on site. The inclusion of other, relevant documents is encouraged.

The Health & Safety File shall be handed over to the Client on completion of the contract. It must contain all the documentation as set out above, or as instructed, as well as any handed to the Principal Contractor by any subcontractors.

9. RISK ASSESSMENT

Before commencement of any construction work during the construction period, the Principal Contractor shall have a risk assessment performed and recorded in writing by a competent person. (Refer Regulation 7 of the Construction Regulations 2014).

Risk is a measure of the likelihood that the harm from a particular hazard will be realised, taking into account the possible severity of the harm. Harm to people includes death, injury (permanent or temporary), physical or mental health or any combination thereof. Risk management in health and safety includes the identification of hazards, assessing risks, taking action to eliminate or reduce the risk, monitoring the effectiveness and performing regular reviews of the entire process. The Principal Contractor shall compile method statements to address or handle the following:

- Hazards particulars to the contract

- Identify what could go wrong and how
- Identify the likelihood of this happening
- Identify the persons at risk
- Identify the extent of possible harm
- Eliminating or reducing this risk
- A monitoring plan
- A review plan

Principal Contractors must ensure that all subcontractors conduct risk assessments for their scope of work as well.

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

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

10. ARRANGEMENTS FOR MONITORING AND REVIEW

The Client, or his agent, will conduct a Monthly Audit to audit compliance with Construction Regulation 4 (1) (d) to ensure that the Principal Contractor has implemented and is maintaining the agreed and approved OH&S Plan. Annexure C can be used as a format when conducting the audit.

The Client reserves the right to conduct other ad hoc audits and inspections as deemed necessary.

A representative of the Principal Contractor must accompany the Client, or his agent, on all audits and inspections and may conduct his own audit/inspection at the same time. Each party will, however, take responsibility for the results of his own audit/inspection results.

11. NONCONFORMITIES

Should, at any time, the works, or part of the works, be stopped in terms of Section 4 subsection (e) the Principal Contractor shall have no claim for extension of time or any other compensation.

12. REPORTING

All accidents and incidents as defined in Regulation 8 of the General Administrative Regulations must be recorded on the form as set out in Annexure 1 to the Regulations and investigated in terms of Regulation 9. Records must be retained as required by section 9 of the GAR.

The Site Safety Officer must compile a safety report on a monthly basis, setting out all incidents and accidents and any other information relating to safety on the site. This is to be presented to the most convenient site meeting and a copy held on the Health and Safety file.

13. MEASUREMENT AND PAYMENT

Payment items to cover the contractor's cost related to OCCUPATIONAL HEALTH AND SAFETY SPECIFICATIONS are included in the bill of quantities. These items are described under Section 1300 in Section B: Matters Relating to the Standard Specifications of the Works Specification.

**ANNEXURE A
RECORDS TO BE KEPT ON SITE**

ITEM	CR	RECORD TO BE KEPT	RESPONSIBLE PERSON
1.	3(3)	Notification to Provincial Director – Annexure A Available on site	Principal Contractor
2.	4(3)	Copy of Principal Contractor's Health & Safety Plan Available on request	Client (Consultant)
3.	5(6)	Copy of Principal Contractor's Health & Safety Plan As well as each Contractor's Health & Safety Plan Available on request	Principal Contractor
4.	5(7)	Health & Safety File opened and kept on site (including all documentation-required in respect of the OHSA & Regulations Available on request	Principal Contractor
5.	5(8)	Consolidated Health & Safety File handed to Client on completion of Construction work. To include all documentation required by the OHSA & Regulations.	Principal Contractor
6.	5(9)	Comprehensive and Updated List of all Contractors on site, the agreements between the parties and the work being done Included in Health & Safety file and available on request	Principal Contractor
7.	6(7)	Keep record on the Health & Safety File of the input by Construction Safety Officer [CR 6 (6)] at design stage or on the Health & Safety Plan	Principal Contractor
8.	7(2)	Risk Assessments, kept up to date and available on site for inspection	Principal Contractor
9.	7(9)	Proof of Health & Safety Induction Training	Every Employee on site
10.	8(3)	Construction Supervisor [CR 6 (1)] has latest updated version of Fall Protection Plan [CR 8 (1)]	Principal Contractor
11.	9(2)(b)	Inform Principal Contractor in writing of dangers and hazards relating to construction work	Designer of Structure
12.	9(3)	All drawings pertaining to the design of structure On site available for inspection	Principal Contractor
13.	9(4)	Record of inspection of the structure [First 2 years – once every 6 months, thereafter yearly]	Owner of Structure
14.	9(5)	Maintenance records – safety of structure Available on request	Owner of Structure
15.	10(1)(d)	Drawings pertaining to the design of formwork/support work structure Kept on site, available on request	Principal Contractor
16.	11(3)(h)	Record of excavation inspection On site available on request	Principal Contractor
17.	15(11)	Suspended Platform inspection and performance test records Kept on site available on request	Principal Contractor
18.	17(8)(c)	Material Hoist daily inspection entered and signed in record book kept on the premises	Principal Contractor
19.	17(8)(d)	Maintenance records for Material Hoist Available on site	Principal Contractor
20.	18(9)	Records of Batch Plant maintenance and repairs On site available for inspection	Principal Contractor
21.	19(2)(g) (ii)	Issuing and collection of cartridges and nails or studs (Explosive Powered Tools) recorded in register – recipient signed for receipt as well as return	Principal Contractor
22.	21(1)(d)	Findings of daily inspections (prior to use) of Construction Vehicles and Mobile Plant	Principal Contractor
23.	22(d)	Record of temporary electrical installation inspections [once a week] and electrical machinery [daily before use] in a register and kept on site	Principal Contractor
24.		Copies of all appointments made in regard to safety supervisors	Principal Contractor

		and inspectors	
25		Record of safety inspections on equipment using radioactive materials.	Principal Contractor

ANNEXURE B

OCCUPATIONAL HEALTH AND SAFETY AUDIT SYSTEM

ADMINISTRATIVE & LEGAL REQUIREMENTS

Subject	Requirements	Yes/No	COMMENTS
Notice of carrying out Construction work	Department of Labour notified Copy of Notice available on Site		
Copy of OH&S Act (Act 85 of 1993)	Updated copy of Act & Regulations on site Readily available for perusal by employees		
Registration with Compens. Insurer	Written proof of registration / Letter of good standing available on Site		
OH&S Specification & Plan	OH&S Specification received from Client OH&S plan developed Updated regularly		
Hazard Identification & Risk Assessment	Hazard Identification carried out/Recorded Risk Assessment and Plan drawn up/Updated Risk Assessment Plan available on Site Employees/Subcontractors informed/trained		
Assigned duties (Managers)	Responsibility of complying with the OH&S Act assigned to other person/s by CEO.		
Designation of Person Responsible on Site	Competent person appointed in writing as Construction Supervisor		
Designation of Subordinate Person	Competent person appointed in writing as Sub-ordinate Construction Supervisor		

Subject	Requirements	Yes/No	COMMENTS
Designation of Occupational Health & Safety Representatives	More than 20 employees - one OH&S Representative, one additional OH&S Rep. for each 50 employees or part thereof. Designation in writing, period and area of responsibility specified. Meaningful OH&S Rep. reports. Reports actioned by Management.		
Occupational Health & Safety Committee/s	OH&S Committee/s established. Members appointed in writing. Meetings held monthly. Minutes kept. Actioned by Management.		
Agreement with Mandataries (Subcontractors)	Written agreement with Subcontractors. List of Subcontractors displayed. Proof of Registration with Compensation Insurer/Letter of Good Standing Construction Work Supervisor designated Written arrangements concerning OH&S Reps & OH&S Committee Written arrangements regarding First Aid		
Fall Prevention & Protection	Competent person appointed to draw up and supervise the Fall Protection Plan Proof of appointees competence available on Site Risk Assessment carried out for work at heights Fall Protection Plan drawn up/updated Available on Site		

Subject	Requirements	Yes/No	COMMENTS
Structures	Information re. The structure being erected received from the Designer including: Geo-science technical report where relevant The design loading of the structure The methods & sequence of construction -Anticipated dangers / hazards / special Measures to construct safely Risk Assessment carried out Method statement drawn up All above available on Site Structures inspected before each shift. Inspections register kept		
Formwork & Support work	Competent person appointed in writing to supervise erection, maintenance, use and dismantling of Support & Formwork Design drawings available on site Risk Assessment carried out Support & Formwork inspected before use/inspection Before pouring of concrete Weekly whilst in place - Before stripping/dismantling. Inspection register kept		
Scaffolding	Competent persons appointed in writing to: Erect scaffolding (Scaffold Erector/s) Act as Scaffold Team Leaders Inspect Scaffolding weekly and after inclement weather (Scaffold Inspector/s) Written Proof of Competence of above appointees available on Site Copy of SABS 085 available on Site Risk Assessment carried out Inspected weekly/after bad weather. Inspection register/s kept		
Suspended Scaffolding	Competent persons appointed in writing to: Erect Susp. Scaffolding (Scaffold Erector/s) Act as Susp. Scaffold Team Leaders Inspect Susp. Scaffolding weekly and after inclement weather (Scaffold Inspector/s) Risk Assessment conducted Certificate of Authorization issued by a registered professional Engineer available on Site/copy forwarded to the Department of Labour The following inspections of the whole installation carried out by a competent person After erection and before use		

Subject	Requirements	Yes/No	COMMENTS
	Daily prior to use. Inspection register kept The following tests to be conducted by a competent person: Load test of whole installation and working parts every 12 months - Hoisting ropes/hooks/load-attaching devices quarterly. Tests log book kept Employees working on Susp. Scaffold medically examined for physical & psychological fitness. Written proof available		
Excavations	Competent person/s appointed in writing to supervise and inspect excavation work Written Proof of Competence of above appointee/s available on Site Risk Assessment carried out Inspected: Before every shift After any blasting After an unexpected fall of ground After any substantial damage to the shoring After rain. Inspections register kept Method statement developed where explosives will be/ are used		
Demolition Work	Competent person/s appointed in writing to supervise and control Demolition work Written Proof of Competence of above appointee/s available on Site Risk Assessment carried out Engineering survey and Method Statement available on Site Inspections to prevent premature collapse carried out by competent person before each shift. Inspection register kept		
Materials Hoist	Competent person appointed in writing to inspect the Material Hoist Written Proof of Competence of above appointee available on Site. Materials Hoist to be inspected weekly by a competent person. Inspections register kept.		
Explosive Powered Tools	Competent person appointed to control the issue of the Explosive Powered Tools & cartridges and the service, maintenance and cleaning. Register kept of above Empty cartridge cases/nails/fixing bolts returns recorded Cleaned daily after use		

Subject	Requirements	Yes/No	COMMENTS
Batch Plants	Competent person appointed to control the operation of the Batch Plant and the service, maintenance and cleaning. Register kept of above Risk Assessment carried out Batch Plant to be inspected weekly by a competent person. Inspections register kept		
Cranes & Lifting Machines Equipment	Competent person appointed in writing to inspect Cranes, Lifting Machines & Equipment Written Proof of Competence of above appointee available on Site. Cranes & Lifting tackle identified/numbered Register kept for Lifting Tackle Log Book kept for each individual Crane Inspection: All cranes - daily by operator -Tower Crane/s - after erection/6monthly Other cranes - annually by comp. Person Lifting tackle (slings/ropes/chain slings Etc.) - 3 monthly Risk Assessment carried out		
Inspection & Maintenance of Electrical Installation & Equipment (including portable electrical tools)	Competent person appointed in writing to inspect/test the installation and equipment. Written Proof of Competence of above appointee available on Site. Inspections: Electrical Installation & equipment inspected after installation, after alterations and quarterly. Inspection Registers kept Portable electric tools and - lights and extension leads identified/numbered. Monthly visual inspection by User/Issuer/ Storeman. Register kept.		
Designation of Stacking & Storage Supervisor.	Competent Person/s with specific knowledge and experience designated to supervise all Stacking & Storage Written Proof of Competence of above appointee available on Site		
Designation of a Person to Co-ordinate Emergency Planning And Fire Protection	Person/s with specific knowledge and experience designated to co-ordinate emergency contingency planning and execution and fire prevention measures Emergency Evacuation Plan developed:		

Subject	Requirements	Yes/No	COMMENTS
	<p>Drilled/Practiced Plan & Records of Drills/Practices available on Site Fire Risk Assessment carried out All Fire Extinguishing Equipment identified and on <i>register</i>. Inspected weekly. Inspection Register kept Serviced annually</p>		
First Aid	<p>Every workplace provided with sufficient number of First Aid boxes. (Required where 5 persons or more are employed) First Aid freely available Equipment as per the list in the OH&S Act. One qualified First Aider appointed for every 50 employees. (Required where more than 10 persons are employed) List of First Aiders and Certificates Name of person/s in charge of First Aid box/es displayed. Location of F/Aid box/es clearly indicated. Signs instructing employees to report all Injuries/illness including first aid injuries</p>		
Personal Safety Equipment (PSE)	<p>PSE Risk Assessment carried out Items of PSE prescribed/use enforced Records of Issue kept Undertaking by Employee to use/wear PSE</p>		
*Inspection & Use of Welding/Flame Cutting Equipment	<p>Competent Person/s with specific knowledge and experience designated to Inspect Electric Arc, Gas Welding and Flame Cutting Equipment Written Proof of Competence of above appointee available on Site Equipment identified/numbered and entered into a register Equipment inspected monthly. Inspection Register kept</p>		
*Control of Storage & Usage of HCS	<p>Competent Person/s with specific knowledge and experience designated to Control the Storage & Usage of HCS Written Proof of Competence of above appointee available on Site Risk Assessment carried out Register of HCS kept/used on Site</p>		
Vessels under Pressure (VUP)	<p>Competent Person/s with specific knowledge and experience designated to supervise the use, storage, maintenance, statutory inspections & testing of VUP's</p>		

Subject	Requirements	Yes/No	COMMENTS
	<p>Written Proof of Competence of above appointee available on Site</p> <p>Risk Assessment carried out</p> <p>Certificates of Manufacture available on Site</p> <p>Register of VUP's on Site</p> <p>Inspections & Testing by Approved Inspection Authority (AIA):</p> <p>After installation/re-erection or repairs</p> <p>Every 36 months.</p> <p>Register/Log kept of inspections, tests. Modifications & repair</p>		

Subject	Requirements	Yes/ No	COMMENTS
Construction Vehicles & Earth Moving Equipment	Operators/Drivers appointed to: Carry out a daily inspection prior to use Drive the vehicle/plant that he/she is competent to operate/drive Written Proof of Competence of above appointee available on Site Record of Daily inspections kept		
Inspection of Ladders	Competent person appointed in writing to inspect Ladders Ladders inspected at arrival on site and monthly thereafter. Inspections register kept		
Ramps	Competent person appointed in writing to Supervise the erection & inspection of Ramps. Inspection register kept.		
OTHER	Any items which are not covered in the audit but require attention by the PC (e.g. updated method statements, safe work procedures etc.).		

ANNEXURE C

HAZARDOUS TASK IDENTIFICATION

(The list given is not inclusive and other hazardous tasks may be identified as the construction progresses)

MAIN TASK	SUB TASK
ACCOMMODATION OF TRAFFIC	Manning of stop/go signs
	Dust
	Traffic speed
	Provision of safety equipment
	Working next to traffic
	Erection of signage
CONCRETE WORK	Operation of small mixers
	Placing concrete with ready mix trucks/dumpers
	Placing concrete manually
	Finishing of concrete surfaces
	Operations in pre-cast yard
DEMOLITION	Using hand breakers
	Using manual labour
	Removal of spoil
EARTHMOVING AND LAYERWORKS	Use of earthmoving plant, e.g. bulldozers, graders and excavators
	Use of rollers
	Use of tip trucks and other transportation
EXCAVATING	By manual labour
	By excavating equipment e.g. TLB
	Operations inside excavations
	In narrow trench
FIRE	Use and placement of fire extinguishers
	Fire fighting
SHUTTERING AND FORMWORK	Off loading and handling
	Storage
	Erection and removal
MISCELLANEOUS	Site Establishment
	Housekeeping
	General storage
	Movement of equipment
	Use of personal transport
SURFACING	Use, storage and handling of bituminous products
	Distributors
	Spraying by hand
	Use of paving machines (Chip spreader)
	Use of rollers
	Use of heating apparatus
CULVERTS AND STORM WATER	Moving and placing of pipes
Other than noted in previous sections	Bedding
	Placing and compacting fill
WORKSHOPS	Use of small electrical tools
	Gas and Flame Cutting
	Welding
	Explosive powered tools
	Use of general workshop equipment
	Tyre repair
	Use of jacking and lifting apparatus
HAZARDOUS MATERIALS	Petrol
To be added to as required	Diesel
Materials safety data sheets as required	Lubricants

	Cement and cement bags
	Road lime and lime bags
	Flammable materials
	Gas bottles

pdf

ANNEXURE D

CONTENTS OF THE PRINCIPAL CONTRACTOR'S OCCUPATIONAL HEALTH AND SAFETY PLAN

CONTENTS

- 1.0 INTRODUCTION
- 2.0 SCOPE
- 3.0 LEGAL REQUIREMENTS
- 4. STRUCTURE & RESPONSIBILITY FOR OCCUPATION HEALTH & SAFETY
- 5.0 GENERAL OH&S PROVISIONS

How the following will be managed:

- 5.1. Risk Assessment
- 5.2. Administrative Controls & OH&S File
- 5.3. OH&S Goals & Objectives
- 5.4. Training, Awareness & Competence (including the induction of workers, staff and visitors)
- 5.5. Consultation & Communication: with the Client, Consultant and Workforce.
- 5.6. Checking, Reporting & Corrective Action
- 5.7. Incident Reporting
- 5.8. Accident/ Incident Investigation
- 5.9. Occupational Health and Safety issues
- 6.0. OPERATIONAL CONTROL
 - 6.1. Notification of Construction Work
 - 6.2. Emergency Preparedness, Contingency Planning & Response
 - 6.3. First Aid
 - 6.4. Security
 - 6.5. Excavation Work
 - 6.6. Fall Protection
 - 6.7. Cranes & Lifting Equipment
 - 6.8. Construction Vehicles & Mobile Plant
 - 6.9. Electrical Installations
 - 6.10. Electrical & Mechanical Lock-out
 - 6.11. Use & Storage of Flammables
 - 6.12. Housekeeping
 - 6.13. Stacking & Storage
 - 6.14. Storage of Hazardous Chemical Substances (including flammables)
 - 6.15. Fire Prevention & Protection
 - 6.16. Eating, Changing, Washing and Toilet Facilities
 - 6.17. Personal Protective Equipment
 - 6.18. Portable Electrical Tools & Equipment
 - 6.19. Public Health & Safety
 - 6.20. Protection of Overhead & Underground Services
 - 6.21. Protecting the Environment
 - 6.22. Welding & Flame Cutting
 - 6.23. Contractors
 - 6.24. Method statements and Safe Work procedures

7.0. SITE SPECIFIC REQUIREMENTS

8.0 ANNEXURES

Annexure 1:	Legal Compliance Audit			
Annexure 2:	Measuring Injury Experience			
Annexure 3:	OHS Risk Management Report			
Annexure 4:	Guide to Risk Assessment			
Annexure 5:	Guideline to the Development of a Health & Safety Plan			
Annexure 6:	List	of	Risk	Assessments

C3.3.3 Construction Environmental Management Plan

WORKS SPECIFICATIONS

PART C: ENVIRONMENTAL MANAGEMENT PLAN

PES1 GENERAL

The Contract shall be conducted in accordance with the principles of Integrated Environmental Management (IEM) "in an environmentally and socially responsible manner" (DEAT 1992). This section details the controls and procedures necessary to achieve this goal.

The Contractor will be required to comply with the Project Environmental Specifications contained in this section. Should any conflict arise between the specifications contained in this section, and any other specification, the Project Environmental Specifications shall prevail.

The specifications detailed in this section relate to those construction activities which could have an adverse impact on the environment and which therefore require mitigation measures.

Items have been included in the Preliminary and General section of the Bill of Quantities to reflect compliance with the Project Environmental Specifications. Where no item is provided in the Bill of Quantities, the Contractors rates will be deemed to be inclusive of any costs incurred for compliance with the Project Environmental Specification.

PES2 WORKING AREA

An area of the site will be defined by the Engineer for use by the contractor. This area will include the designated areas listed below and the contractor will not be permitted access beyond this defined area, except for the security personnel will be required to patrol a wider area to prevent informal settlements.

Within the defined working area mentioned above, certain areas will be specifically designated by the Engineer for the following activities:

- site camp
- stockpiling and storage of construction materials

In order to minimise the potential for erosion, vehicle access between the above-mentioned areas will be restricted to corridors defined by the Engineer, and multiple access tracks across the veld will not be permitted. Should excessive vehicle tracks be made, the Contractor shall be required to rehabilitate the extra tracks at his own cost. Rehabilitation shall involve ripping of the compacted earth to a depth of 150mm to loosen the earth, and grass seeding according to specification.

PES3 SITE CAMPS

Where site camps are to be established the topsoil is to be removed to the base of the A-horizon or to a depth of 150mm, whichever is the greater, and stockpiled according to the SANS specifications.

The site shall be located more than 20m from watercourses. Runoff from the site must be prevented from entering the watercourse or wetland.

Site camps and surrounds are to be maintained in a clean orderly and presentable condition at all times.

Waste water from kitchen and ablution facilities shall be led to soak pits and shall not be discharged to rivers or streams.

Tanks for fuels oils etc. shall be bounded with earth berms adequate to contain any possible spills.

After completion of the Works the contractor shall restore the area used by him to its former condition, including removal of rubble and foundations, and to the satisfaction of the Engineer.

PES4 SANITATION

Adequate toilet facilities are to be provided within 200m of the Works. All toilets shall be maintained by the Contractor in a clean sanitary condition to the satisfaction of the Engineer. Toilets shall not be located on flood plains where the possibility of flooding exists.

Contractors shall instruct their staff and sub-contractors that they must use the toilets provided and not the veld, bush or streams.

PES5 REFUSE

The site is to be kept clean, neat and tidy to the Engineer's satisfaction. The Contractor shall provide bins at the Work sites and shall be responsible for disposal of refuse and waste generated by his staff on a daily basis. Domestic litter or construction waste may not be left lying about on site.

Refuse and construction waste shall be disposed of at an approved dump site.

No burning of refuse is permitted.

PES6 DUST

Dust is regarded as a nuisance when it reduces visibility, soils private property or is aesthetically displeasing. Dust also reduces the value of grazing grasses and retards plant growth.

Dust generated by construction related activities must therefore be minimised.

The Contractor shall control dust over the site of the Works, on access roads/tracks, on stockpiles and spoil sites or borrow pits.

Control of dust shall involve spraying with water. The quantities of water used should not be large enough or applied with sufficient force to generate run off which could result in soil erosion. A water cart shall be provided by the Contractor to control dust levels.

PES7 NOISE

Noise levels are to be kept within reasonable norms as determined by the Engineer, taking into account the context of the rural setting.

Silencers shall be fitted to all machinery and vehicles shall be well maintained.

The Contractor shall inform residents of any excessive noise that is anticipated due to construction activities, for example blasting for excavation. This notice shall be given at least 2 days before the event generating higher noise levels.

Any complaints received by the Engineer regarding noise will be recorded and communicated to the Environmental Control Officer.

PES8 SOCIAL DISRUPTION

The Contractor's staff shall in no way be a nuisance to residents in the vicinity of construction activities. Any complaints received by the Engineer will be addressed and the relevant persons will face suspension from the project.

No access to private property will be allowed.

PES9 INFORMAL SETTLEMENTS

The Contractor shall require his security personnel to patrol the entire site (not just the site of current operations as defined in PES3), and report any sign of informal shack development within three hours of commencement of such activity.

PES10 TRAFFIC

Traffic, especially heavy vehicle traffic, has the potential to draw complaints from other road users and neighbours. The Contractor will be expected to address any complaints received.

The Contractor shall instruct his drivers, suppliers, plant operators and any other vehicle operators travelling to and from the site as a result of the construction contract, that vehicles will be expected to comply with all roads ordinances, particularly with regard to;

- Speed limits
- Preventing Overloading
- Roadworthiness
- Securing of loads
- Covering of any loads that could generate dust
- Avoiding spillage of liquids, sand, soil or other material

General consideration and courtesy to other road users will also be expected of drivers.

PES11 OVERHEAD POWER LINES

Where work is being carried out in the vicinity of overhead power lines, the Contractor is responsible for ensuring that all persons working in such areas are aware of the relatively large distance that high voltage electricity can 'short' to earth when large masses of steel such as steel pipes or machinery are close to power lines. The Contractor's attention is drawn to OHSA (1993) which gives safe clearances for various voltages.

PES12 REMOVAL OF PROTECTED PLANTS FROM SITE

Certain species of indigenous plants that occur on the site are protected by law. A horticulturist has been designated the responsibility for relocating these plants from the "Working Area" prior to the Contractor moving on site.

No removal of any plants from beyond the Working Area will be permitted. The Contractor shall be responsible to ensure that no unauthorized removal of plants is allowed. In the event of removal of legally protected species, the persons responsible shall be liable for prosecution under the relevant provincial ordinance. Security Staff will report any infringements related to this.

The Contractor shall confirm with the ECO that the horticulturist has removed the said plants from the Working Area before the Contractor moves on site.

PES13 FIRE PREVENTION AND CONTROL

The Contractor and his staff are expected to be very conscious of fire risks. The Contractor shall hold fire prevention talks with staff to create an awareness of the risks of fire. Regular reminders to staff on this issue are required.

The Contractor shall at all times ensure that fires do not start or spread within the site or the environs thereof as a result of the Works or the actions of employees. In the event of such fire the Contractor shall immediately employ such plant and labour as is at his disposal and shall take all other necessary action to bring any such fire under control, all at his own cost.

A fire extinguisher must be on hand whenever welding or any other spark generating activity is conducted.

In addition, rubber beaters are to be on hand at all work stations at all times as these represent the quickest form of response to fire.

No fires may be made other than for the purpose of cooking. Cooking fires must be contained in a fire drum and be in a designated area approved by the Engineer. All fires are to be extinguished with water once they have

served their purpose.

No fire is to be left unattended at any time.

No burning of grassland to clear is permitted.

No cutting of timber for firewood will be allowed.

No fires are to be allowed when the Fire Danger Index is high (46 and above) i.e. fire alert stage yellow.

The Contractor shall be liable for all costs and damages resulting from fire and firefighting.

PES14 ENVIRONMENTAL TRAINING

The Contractor shall be responsible for conducting Environmental Training amongst his employees to ensure that they have the necessary knowledge to comply with the Environmental Specifications. Employees should be made aware of the Environmental Specifications and the reasons for them.

PES15 WORK STOPPAGE

The Engineer shall have the right to order work to be stopped in the event of significant infringements of the Environmental Specifications until the situation is rectified in compliance with the specifications. In this event the Contractor shall not be entitled to claim for delays.

This clause shall apply in the case of infringements of a nature whereby full remediation of circumstances arising from the infringement will not be possible at a later date. For example mixing topsoil with subsoil; activities that are polluting or may cause pollution of water.

PES16 ENVIRONMENTAL MONITORING

The Engineer will monitor the Contractor's performance in relation to the Environmental Specifications on a daily basis. He will be assisted in this regard by the Environmental Control Officer.

The ECO shall inspect the site on a regular basis. After each ECO site visit a report will be submitted to the Engineer and Okhahlamba Local Municipality. The content of these reports will be made known to the Contractor by the Engineer. Any infringement of the Environmental Specification will be indicated in the report. These reports will also aim to anticipate problems which may arise so that the Contractor can be alerted to potential environmental risks and take appropriate action.

PES17 MEASUREMENT AND PAYMENT

The Tendered rates shall be deemed to cover all costs associated with the compliance with the Environmental Specification.

C3.3.4 DRAWINGS

1. Bound into this Document

<u>Drawing Number</u>	<u>Description</u>
FIG 1	Locality Plan

2. Attached to this Document

<u>Drawing Number</u>	<u>Description</u>
V05-01-04-001-SB-T-00	Sheleni Name Board Drawing
V05-01-04-002-LYT-T-00	Sheleni Gravel Access Road Layout Plan
V05-01-04-003-LS-T-00	Sheleni Gravel Road Layout & Long Section 1
V05-01-04-004-LS-T-00	Sheleni Gravel Road Layout & Long Section 2.1
V05-01-04-005-LS-T-00	Sheleni Gravel Road Layout & Long Section 2.2
V05-01-04-006-SDTLS-T-00	Sheleni Gravel Road Culvert Details, 2 x 900
V05-01-04-007-SDTLS-T-00	Sheleni Gravel Road Culvert Details, 3 x 900
V05-01-04-008SDT-LS-T-00	Sheleni Gravel Road Standard Details

NOTE:

Originals of reduced drawings are available for inspection at the offices of the Engineer, or copies may be purchased by arrangement with the Engineer. No claims for misunderstanding reduced drawings will be considered.



FIG 1 – Locality Plan

C3.4. LABOUR SPECIFICATIONS

This part of the project Specifications contains comprehensive additional specifications for matters not covered by and work, which is not carried out in terms of the Standard Specifications.

The number of each clause and each payment item in this part of the Project Specification is prefixed with an L to differentiate these clauses and items as additional works.

The following additional specifications are covered under this part of the Scope of Work:

L.1 EMPLOYMENT OF LOCAL LABOUR AND TRAINING REQUIREMENTS

L1.1 SCOPE

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

L1.2 DEFINITIONS

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

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

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

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

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

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

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

'Workforce' means the aggregate body comprising of all workers and shall, unless the context dictates otherwise, include the workforces of the Contractor and all subcontractors.

L1.3 ENGAGEMENT OF LOCAL LABOUR

The temporary workforce shall, as far as practically possible, and with the exception of key personnel, be recruited /selected from the local communities living in WARD 03.

Prior to the award of the Contract, the Employer shall, at his own cost, take all necessary actions to advertise within the local communities of the fact that the Contract will provide temporary employment opportunities and preference will be given to the use of the Local Labour on this Contract. Labourers and workers of the local community required by the Contractor shall be recruited/chosen from a Labour Register and appointed for work to enable the Contractor to comply with the specific minimum

target value set for the Contract Participation Goal (CPG) for the Contract. Labourers and workers of the Local community who are engaged by other employers in paid positions of employment shall not be eligible for inclusion on the Labour Register.

L1.3.1 Employment of Local Labourers

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

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

L1.3.2 Selection of Local Labourers

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

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

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

After making his selection, the Contractor shall advise the CLO and the Engineer thereof in writing, and the Engineer, with the assistance of the CLO has the right to call a meeting with PSC and the Local Community for the purpose of ratifying the Contractor's selection. The Contractor shall attend such meeting and where reasonably required, shall motivate his selection. Should the Engineer or the Local Community make reasonable objection to the selection of any particular applicant by the Contractor, the Contractor shall not employ such applicant and shall select another suitable applicant acceptable to the Engineer and the Local Community as a replacement of the rejected applicant, in order to finalize the composition of the workforce.

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

L1.4 CONTRACTUAL REQUIREMENTS

L1.4.1 Legislation

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

L1.4.2 Labour content

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

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

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

Content Percentage.

L1.4.3 Targeted labour

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

The Contractor shall engage targeted labour directly in the execution of the Works to the extent that the monetary value (Labour Content) of such engagement, expressed as a percentage of the Award Value (Contract Price exclusive of VAT, Provisional Sums, Prime Cost Sums and allowances for contingencies and escalation), is not less than the Contract Participation Goal (CPG).

L1.4.4 Records and reporting

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

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

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

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

L1.4.5 SANCTIONS

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

$$P = 0,01 \times (L_M - L_A) \times V_A.$$

Where:

P = Rand value of penalty payable.

V_A = Award value (Contract Price exclusive of VAT, Provisional Sums, Prime Cost Sums and allowances for contingencies and escalation)

L_M = Local Labour Goal stated in the Project Document

L_A = The local labour component which the Employer's Representative certifies as being achieved upon completion of the contract.

L1.5 PROJECT STEERING COMMITTEE

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

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

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

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

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

L1.6 COMMUNITY LIAISON OFFICER

L1.6.1 Appointment

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

L1.6.2 Duties of the Community Liaison Officer

The Community Liaison Officer shall:

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

L1.6.3 Remuneration

The remuneration of the Community Liaison Officer shall be determined jointly by the Contractor, Engineer and the Employer. A Provisional Sum is provided in the Schedule of Quantities to cover the remuneration of the Community Liaison Officer. The current LOCAL RATE for payment of a CLO at Okhahlamba is R4000.00 / Month.

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

L1.7 TRAINING REQUIREMENTS

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

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

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

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

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

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

L1.7.1 Training of Local Labourers

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

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

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

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

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

L1.7.2 Training for Emerging Contractors (SMME's)

The Contractor shall closely monitor the performance of the principals of Emerging Contractors (SMME's), the execution of their subcontracts and shall identify those who, in his opinion, display the potential to benefit from formal Training provided for in the Contract, and when required by the Engineer, the Contractor shall make recommendations in this regard. The final list of candidates will be decided on between the Contractor and the Engineer.

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

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

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

L1.7.3 Labourers remunerated during training

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

L1.7.4 Non-compliance

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

The Contractor shall be obliged to make Local Labourers and other employees available for Training when so required by the

Engineer.

L1.8
L1.8.1 **FORMAL TRAINING**
General

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

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

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

- (a) Sufficient skilled, competent and accredited trainers to deliver the training programme to all workers in accordance with the training programme;
- (b) A suitably furnished venue (if required)
- (c) Transport to and from the works (as necessary)
- (d) Tools, equipment and teaching aids;
- (e) Stationery and all other necessary materials

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

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

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

L1.8.2 **Accredited training and attendance**

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

The Contractor shall facilitate in the delivery of training by instructing and motivating the hired local Labour, supervisors and subcontractors regarding attendance and participation.

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

L1.8.3 **Supervisors**

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

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

L1.8.4 **Training records and certificates**

The Contractor shall keep comprehensive records of the formal training given to each Labourer and principal of the Emerging Contractor and whenever required shall provide copies of such records to the Engineer. At the successful completion of each course each participant shall be issued with certificate indicating the course contents as proof of attendance and completion.

L1.8.5 **Labour / Training Agent**

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

L1.8.6 Training centre

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

L2 SPECIFICATION FOR LABOUR-INTENSIVE CONSTRUCTION (EPWP)

L2.1 SCOPE

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

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

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

L2.2 DEFINITIONS

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

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

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

'Workforce' means the aggregate body comprising of all workers and shall, unless the context dictates otherwise, include the workforces of the Contractor and all subcontractors.

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

L2.3 LABOUR-INTENSIVE COMPETENCIES OF CONTRACTOR'S STAFF

L2.3.1 Eligibility requirements

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

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

L2.3.2 Labour-intensive competencies of supervisory and management staff

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

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

Table 1: Skills programme for supervisory and management staff

Personnel	NQF Level	Unit standard titles	Skills programme description
Team leader / supervisor	2	Apply Labour Intensive Construction Systems and Techniques to Work Activities	This unit standard must be completed, and
		Use Labour Intensive Construction Methods to Construct and Maintain Roads and Storm water Drainage	Any one of these 3 unit standards
		Use Labour Intensive Construction Methods to Construct and Maintain Water and Sanitation Services	
		Use Labour Intensive Construction Methods to Construct, Repair and Maintain Structures	
Foreman/ supervisor	4	Implement labour Intensive Construction Systems and Techniques	This unit standard must be completed, and
		Use Labour Intensive Construction Methods to Construct and Maintain Roads and Storm water Drainage	Any one of these 3 unit standards
		Use Labour Intensive Construction Methods to Construct and Maintain Water and Sanitation Services	
		Use Labour Intensive Construction Methods to Construct, Repair and Maintain Structures	
Site Agent / Manager (i.e. the contractor's most senior representative that is resident on the site)	5	Manage Labour Intensive Construction Processes	Skills Programme against this single unit standard
Details of these skills programmes may be obtained from the CETA ETQA manager (e-mail: gerard@ceta.co.za, Tel: 011-265 5900)			

L2.4 STANDARD CONDITIONS OF EMPLOYMENT FOR EXPANDED PUBLIC WORKS PROGRAMME (EPWP) PROJECTS

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

L2.4.1 Introduction

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

Additional Definitions:

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

- “department”** means any department of the State, implementing agent or contractor;
- “employer”** means any department, implementing agency or contractor that hires workers to work in elementary occupations on a EPWP;
- “worker”** means any person working in an elementary occupation on a EPWP;
- “elementary occupation”** means any occupation involving unskilled or semi-skilled work;
- “management”** means any person employed by a department or implementing agency to administer or execute an EPWP;
- “task”** means a fixed quantity of work;
- “task-based work”** means work in which a worker is paid a fixed rate for performing a task;
- “task-rated worker”** means a worker paid on the basis of the number of tasks completed;
- “time-rated worker”** means a worker paid on the basis of the length of time worked.

L2.4.2 Terms of Work

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

L2.4.3 Normal Hours of Work

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

L2.4.4 Meal Breaks

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

L2.4.5 Special Conditions for Security Guards

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

L2.4.6 Daily Rest Period

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

L2.4.7 Weekly Rest Period

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

L2.4.8 Work on Sundays and Public Holidays

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

L2.4.9 Sick Leave

- (a) Only workers who work four or more days per week have the right to claim sick-pay in terms of this clause.

- (b) A worker who is unable to work on account of illness or injury is entitled to claim one day's paid sick leave for every full month that the worker has worked in terms of a contract.
- (c) A worker may accumulate a maximum of twelve days' sick leave in a year.
- (d) Accumulated sick leave may not be transferred from one contract to another contract.
- (e) An employer must pay a task-rated worker the worker's daily task rate for a day's sick leave.
- (f) An employer must pay a time-rated worker the worker's daily rate of pay for a day's sick leave.
- (g) An employer must pay a worker sick pay on the worker's usual payday.
- (h) Before paying sick-pay, an employer may require a worker to produce a certificate stating that the worker was unable to work on account of sickness or injury if the worker is:
 - i) Absent from work for more than two consecutive days; or
 - ii) Absent from work on more than two occasions in any eight-week period.
- (i) A medical certificate must be issued and signed by a medical practitioner, a qualified nurse or a clinic staff member authorized to issue medical certificates indicating the duration and reason for incapacity.
- (j) A worker is not entitled to paid sick-leave for a work-related injury or occupational disease for which the worker can claim compensation under the Compensation for Occupational Injuries and Diseases Act.

L2.4.10 Maternity Leave

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

L2.4.11 Family responsibility leave

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

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

L2.4.12 Statement of Conditions

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

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

L2.4.13 Keeping Records

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

L2.4.14 Payment

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

L2.4.15 Deductions

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

L2.4.16 Health and Safety

- (a) Employers must take all reasonable steps to ensure that the working environment is healthy and safe.
- (b) A worker must:
 - i) work in a way that does not endanger his/her health and safety or that of any other person;

- ii) obey any health and safety instruction;
- iii) obey all health and safety rules of the SPWP;
- iv) use any personal protective equipment or clothing issued by the employer;
- v) report any accident, near-miss incident or dangerous behaviour by another person to their employer or manager.

L2.4.17 Compensation for Injuries and Diseases

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

L2.4.18 Termination

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

L2.4.19 Certificate of Service

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

L2.5 VARIATIONS TO STANDARD CONDITIONS OF EMPLOYMENT FOR EXPANDED PUBLIC WORKS PROGRAMME (EPWP) PROJECTS

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

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

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

For the purposes of this contract, the following variations to the above-mentioned Ministerial Determination, Expanded Public Works Programmes, issued in terms of the Basic Conditions of Employment Act of 1997 by the Minister of Labour in Government Notice No. R63 of 25 January 2002 shall apply. The Sub-clause numbers refer to the relevant Sub-clause number under Sub-clause E2.4 above.

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

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

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

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

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

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

L2.6 EMPLOYMENT OF UNSKILLED AND SEMI-SKILLED WORKERS IN LABOUR INTENSIVE WORKS

L2.6.1 Requirements for the sourcing and engagement of labour.

- (a) Unskilled and semi-skilled labour required for the execution of all labour intensive works shall be engaged strictly in accordance with prevailing legislation, SANS 1914-5, Participation of Targeted Labour and the Works Specification.
- (b) **The current minimum daily wage rate for unskilled labour is as determined by EPWP.**
- (c) Tasks established by the contractor must be such that:
 - i) The average worker completes 5 tasks per week in 40 hours or less; and
 - ii) The weakest worker completes 5 tasks per week in 55 hours or less.
- (d) The contractor must revise the time taken to complete a task whenever it is established that the time taken to complete a weekly task is not within the requirements of sub-sub-clause E2.6.1 (c) above.
- (e) The Contractor shall, through all available community structures, inform the local community of the labour intensive works and the employment opportunities presented thereby. Preference must be given to people with previous practical experience in construction and / or who come from households:
 - i) Where the head of the household has less than a primary school education;
 - ii) That have less than one full time person earning an income;
 - iii) Where subsistence agriculture is the source of income; and
 - iv) Those that are not in receipt of any social security pension income
- (g) The Contractor shall endeavour to ensure that the expenditure on the employment of temporary workers is in the following proportions:
 - i) 40% women;
 - ii) 20% youth who are between the ages of 18 and 35; and
 - iii) 2% persons with disabilities.

L2.6.2 Specific provisions pertaining to SANS 1914-5

(a) Definitions

Targeted labour: Unemployed persons who are employed as local labour on the project.

(b) Contract participation goals

- i) The specified contract participation goal for the contract is 20% of the award value. The contract participation goal shall be measured in the performance of the contract to enable the employment provided to targeted labour to be quantified.
- ii) The wages and allowances used to calculate the contract participation goal shall, with respect to both time-rated and task rated workers, comprise all wages paid and any training allowance paid in respect of agreed training programmes.

(c) Terms and conditions for the engagement of targeted labour

Further to the provisions of clause 3.3.2 of SANS 1914-5, written contracts shall be entered into with targeted labour.

(d) Variations to SANS 1914-5

- i) The definition for net amount shall be amended as follows:
- ii) Financial value of the contract upon completion, exclusive of any value added tax or sales tax, which the law requires the employer to pay the contractor.
- iii) The schedule referred to in clause 5.2 shall in addition reflect the status of targeted labour as women, youth and persons with disabilities and the number of days of formal training provided to targeted labour.

L2.6.3 Training of targeted labour

- (a) The Contractor shall provide all the necessary on-the-job training to targeted labour to enable such labour to master the basic work techniques required to undertake the work in accordance with the requirements of the contract in a manner that does not compromise worker health and safety.
- (b) The cost of the formal training of targeted labour will be funded by the local office of the Department of Labour. This training will take place as close to the project site as practically possible. The contractor must access this training by informing the relevant regional office of the Department of Labour in writing, within 14 days of being awarded the contract, of the likely number of persons that will undergo
- (c) training and when such training is required. The Employer and the Department of Public Works (Fax: 012 3258625/ EPWP Unit, Private Bag X65, Pretoria 0001) must be furnished with a copy of this request.
- (d) The Contractor shall do nothing to dissuade targeted labour from participating in training programmes and shall take all reasonable steps to ensure that each beneficiary is provided with two days of formal training for every 22 days worked.
- (e) An allowance equal to 100% of the task rate or daily rate shall be paid by the contractor to workers who attend formal training, in terms of sub clause E2.6.3(c) above.
- (f) Proof of compliance with the requirements of sub-clause E2.6.3 (b) to (d) must be provided by the Contractor to the Employer prior to submission of the final payment certificate.

L2.7 GENERIC LABOUR-INTENSIVE SPECIFICATION

L2.7.1 Applicable Standardized Specification

The Construction and Management Requirements for Works Contracts:

Specification SANS 1921-5: 2004, Part 5: Earthworks Activities, which are to be performed by Hand, shall apply as additional Works Specifications to this contract. The South African National Standard SANS 1921-5: 2005 Specification is not bound in this document and it may be obtained from South African Standards (website www.sansa.co.za) or viewed by appointment at the offices of the Employer's Representative during normal working hours.

L2.7.2 Variations to SANS 1921-5: 2004, Part 5: Earthworks activities, which are to be performed by hand

Clause 4.2: Trench excavation

Add the following to sub-clause 4.2.1:

"The trenches which are to be excavated by hand are up to 1,5m deep."

Clause 4.4: Excavations other than in trenches

Replace sub-sub-clause 4.4.1 with the following:

"All material excavatable by hand related to the items listed in Table 4.13/1 shall be excavated by hand."

Clause 4.7: Loading

Delete and replace with the following:

"Loading of material in areas difficult for the specialised equipment (restricted areas) shall be done by hand."

Clause 4.8: Haul

Add the following:

"This clause shall not apply to this contract."

Clause 4.10: Spreading

Add the following:

"This clause shall apply to this contract only provided the material can be economically spread by hand."

Add the following new clauses 4.13 and 4.14:

"4.13: Labour-intensive Work

The items/activities that shall be done by hand are listed/provided in Part C4: Site Information. These listed items and others indicated by the prefix LI in the Bill of Quantities are compulsory and may not be executed in any other way.

The contractor may identify further activities to increase the labour component of the contract.

4.14: Manufactured Elements

Elements manufactured or designed by the Contractor, such as manhole rings and cover slabs, precast concrete planks and pipes, masonry units and edge beams shall not individually, have a mass of more than 320kg. In addition the items shall be large enough so that four workers can conveniently and simultaneously acquire a proper hand hold on them.

The Contractor may also propose to the Engineer additional labour based activities, or alternative activities in place of any of the above-mentioned activities that cannot be executed using labour based methods due to unforeseen and abnormal circumstances.

The Contractor shall take cognizance of his General Obligations and the contribution of Targeted Labour to the Contractor Participation Goal (CPG) specified for the contract.

Before commencing with any labour-intensive operations the Contractor shall discuss his intentions with the Engineer, and shall submit to the Engineer on a weekly basis, daily labour returns indicating the numbers of temporary personnel employed on the works and the activities on which they were engaged."

L2.8 MEASUREMENT AND PAYMENT

Prescribed Labour-intensive work

Those parts of the Works included in the contract, which are to be constructed using labour-intensive methods have been marked in the Schedule / Bill of Quantities. The pay items or sub-items of the works, or parts of the works which are to be constructed using labour-intensive methods only are marked by the letter LI as included in the

Payment Refers Column for that item. The use of plant to provide such works, other than plant specifically provided for in the Scope of Work, is a variation to the contract. The items marked with LI are not necessarily an exhaustive list of all the activities which may be done by hand, and this clause does not over-ride any of the requirements in the generic labour intensive specification in this Works Specifications.

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

PART C4: SITE INFORMATION

4.1 GEOTECHNICAL INVESTIGATION REPORT

The Geotechnical Investigation Report will be made available to the successful Tenderer but may be viewed at the Engineers office from Monday to Friday between 8.30 to 15.00.

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WHITE BACKGROUND

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BACKGROUND

OKHAHLAMBA MUNICIPALITY

PROJECT NAME: **SHELENI GRAVEL ACCESS ROAD**

CONTRACT NUMBER: **XXXXXXXXXXXXX**

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REPUBLIC OF SOUTH AFRICA DEPARTMENT OF PUBLIC WORKS

EXPANDED PUBLIC WORKS PROGRAMME

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CONSULTANT:
SIKONE ENGINEERS
SUITE 1, BROZITE BLOCK
KLOOF
Telephone (031) 2207289

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CONTRACTOR:

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(EMBLEM OF RELEVANT
PROFESSIONAL
ASSOCIATION)

- NOTES:
1. CLEAR AND REMOVE ALL DEBRIS, UNMARKED TREES, GRASS AND RUBBLE FROM PLATFORM AREA, TREES MARKED BY LANDSCAPE ARCHITECT TO BE RETAINED.
 2. EXCAVATE TO SPOIL ALL TOPSOIL EXCEPT THAT REQUIRED FOR LANDSCAPING, WHICH MUST BE STOCKPILED AS DIRECTED BY THE LANDSCAPE ARCHITECT.
 3. CONSTRUCT PLATFORMS TO LEVELS SHOWN.
 4. DURING CONSTRUCTION STORMWATER RUNOFF MUST BE CONTROLLED TO PREVENT DAMAGE TO THE WORKS AND TO EXISTING STRUCTURES.
 5. ALL SLOPE BANKS TO BE 1:2. IF THE EMBANKMENT SLOPE OF 1:2 CANNOT BE SAFELY CONSTRUCTED, THE REVISED SLOPES MUST BE AGREED ON BY THE ENGINEER ON SITE.
 6. ALL EARTHWORKS TO BE IN ACCORDANCE WITH SABS 1200 / COTO SPECIFICATION.
 7. ALL COMPACTION TESTS REQUIRED AS PER ENGINEERS SPECIFICATION.
 8. THE CONTOURS AND NATURAL GROUND LEVELS INDICATED ON THIS DRAWING ARE AS PER THE SURVEY DATA SUPPLIED. THE CONTRACTOR IS TO CHECK THE ACCURACY OF THIS INFORMATION AND REPORT ANY DISCREPANCIES IMMEDIATELY.
 9. ALLOWANCE TO BE MADE FOR SHORING VERTICAL EXCAVATIONS.
 10. THE CONTRACTOR TO ALLOW FOR EROSION PROTECTION AND MAINTENANCE TO ALL EMBANKMENTS DURING THE DURATION OF THE CONTRACT.
 11. SETTING OUT COORDINATES ARE IN THE WG84 Lo 31 COORDINATE SYSTEM.
 12. CONTRACTOR WILL BE SUPPLIED WITH BENCHMARK INFORMATION BEFORE CONSTRUCTION COMMENCES
 13. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND PROTECTING ALL EXISTING SERVICES ON THE SITE.
 14. ALL BELLMOUTH INTERSECTIONS TO BE CONSTRUCTED WITH SHOWN RADIUS, AS PER KZN DOT TYPE B3 ACCESS.
 15. ALL STORMWATER PIPE CROSSINGS TO BE DETERMINED ON SITE BY THE ENGINEER. 600mm/900mm Ø CONCRETE SPIGOT AN SOCKET CLASS 75D TO HAVE A MINIMUM GRADE OF 1% AND MINIMUM COVER OF 800mm BELOW FINISHED ROAD LEVEL.
 16. POINTS SHOWN INDICATE FINISHED ROAD LEVEL.
 17. ALL LEVELS AND COORDINATE POINTS ARE TO BE VERIFIED AND APPROVED BY THE RESIDENT ENGINEER ON-SITE.
 18. ROADS ARE TO BE CONSTRUCTED AS PER KZN DOT TYPE 7A LOCAL ROAD.
 19. EARTH V-DRAINS TO BE CONSTRUCTED IN CUT AREAS ALONG THE ROAD AND WILL BE DETERMINED ON SITE BY THE ENGINEER.

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REV. NO.	DATE	DESCRIPTION
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CLIENT DEPARTMENT SIGNATURES

APPROVED BY

SIGNATURE

Checked by Professional Consultant

Signature _____ MAY 2022
Date

Consultant



Sikone Engineers
Suite 1, Brozite Block
Kloof
3610
Tel: 031 220 72089
Fax: 086 206 1765
Email: info@sikone.co.za



**OKHAHLAMBA LOCAL
MUNICIPALITY**

Contract

CONSTRUCTION SHELENI GRAVEL ACCESS ROAD

Drawing description

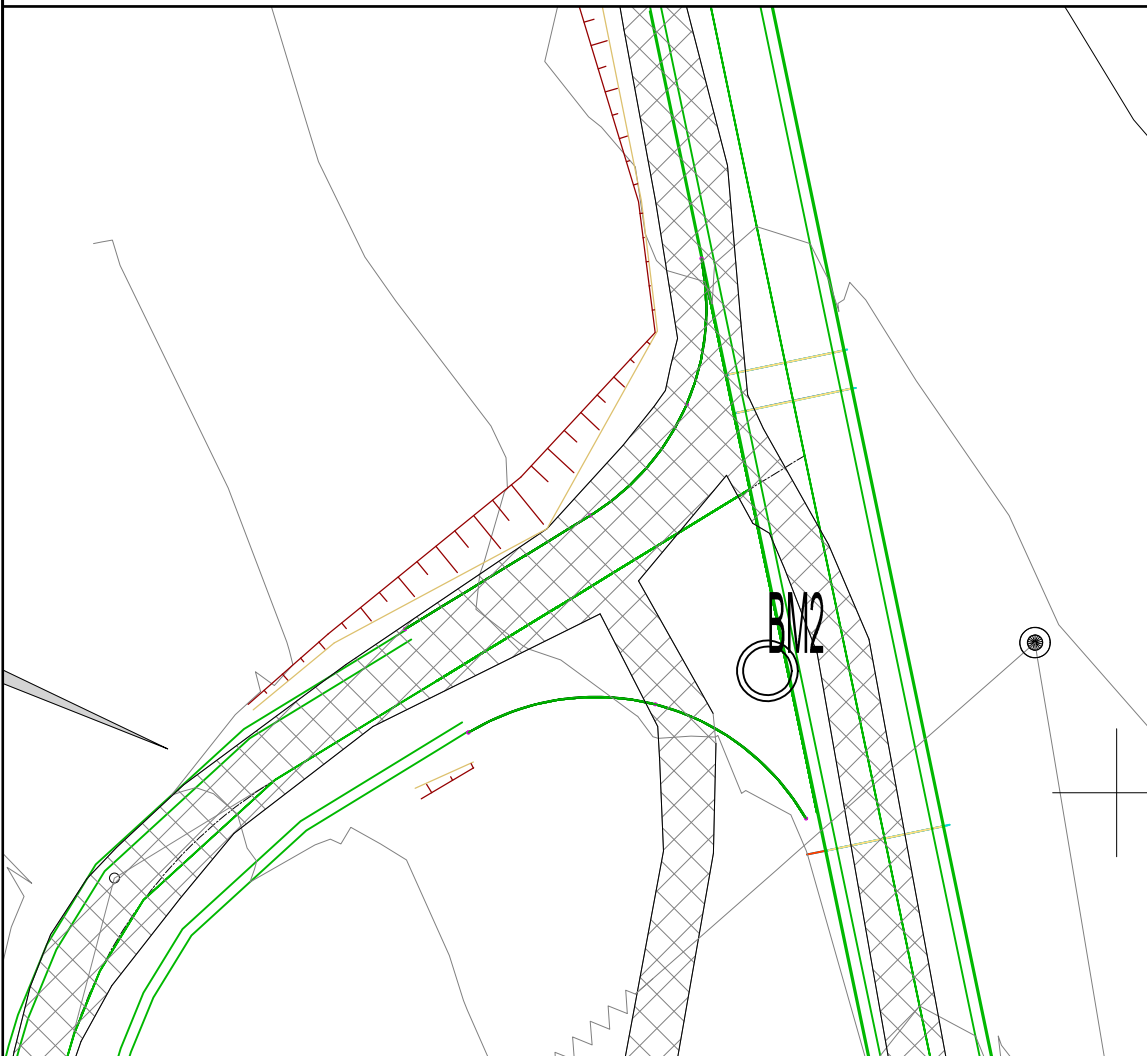
SIGN BOARD

Drawn:	Date:
B GUMEDE	07/2022
Scale(s):	Sheet No.:
AS SHOWN	SHEET 10F8
Consultant Drawing number	Drawing Size
V05-01-04-001-SB-T-00	A1
Client Drawing number	

ROAD 1 SETTING-OUT COORDINATE LIST		
Point	Y Coordinate	X Coordinate
START	-38951.054	3193173.389
200	-39338.657	3193092.533
400	-39338.657	3193092.533
600	-39536.510	3193075.580
800	-39707.389	3192971.718
1000	-39894.842	3192934.117
1200	-40084.372	3192954.264
END	-40258.834	3192951.035

ROAD 2 SETTING-OUT COORDINATE LIST		
Point	Y Coordinate	X Coordinate
START	-40152.992	3192526.788
200	-40211.097	3192713.999
400	-40264.612	3192890.127
600	-40286.662	3193084.247
END	-40196.506	3193219.114

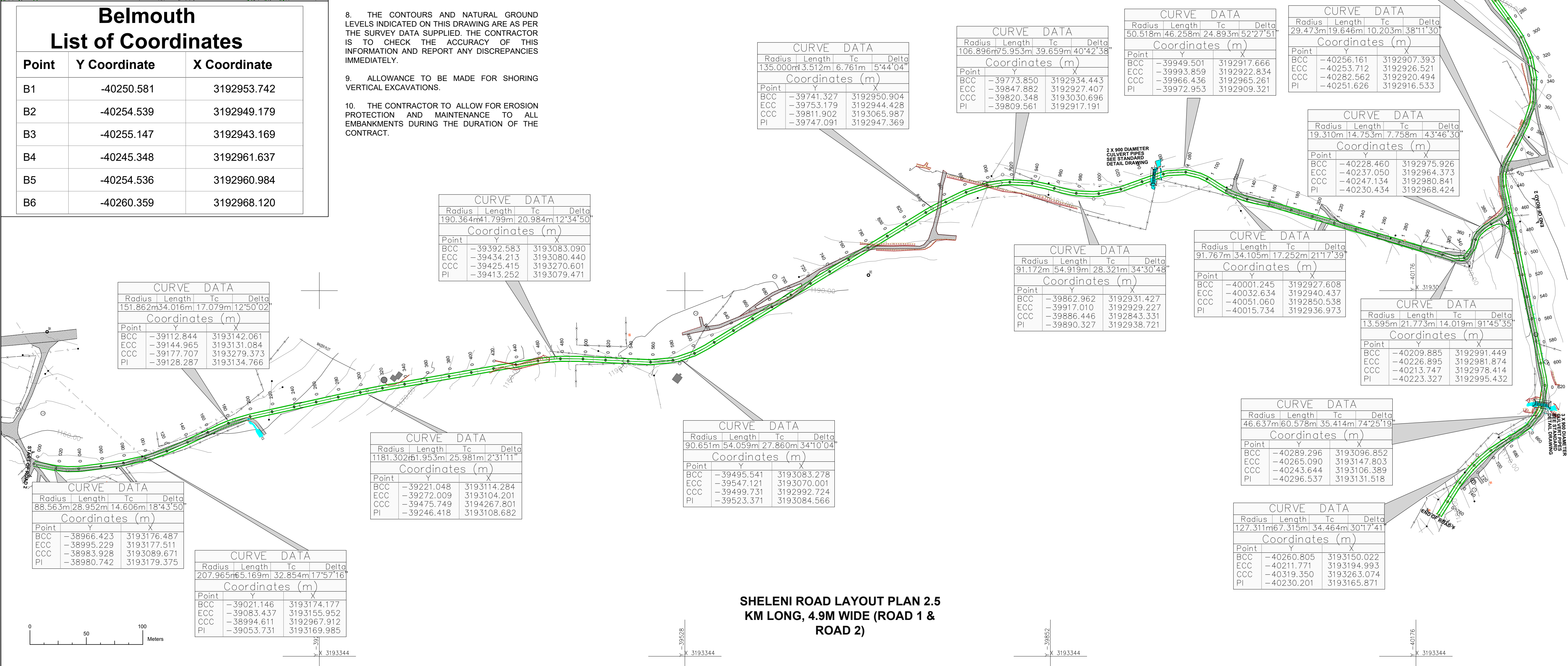
BENCHMARKS WG29 WGS84			
Point	Y Coordinate	X Coordinate	Elevation
BM 1	-40169.573	3192535.462	1137.922
BM 2	-40257.391	3192960.002	1163.498
BM 3	-39690.791	3193006.360	1188.961
BM 4	-38962.784	3193056.580	1153.868



NOTES

- CLEAR AND REMOVE ALL DEBRIS, UNMARKED TREES, GRASS AND RUBBLE FROM PLATFORM AREA, TREES MARKED BY LANDSCAPE ARCHITECT TO BE RETAINED.
- EXCAVATE TO SPOIL ALL TOPSOIL EXCEPT THAT REQUIRED FOR LANDSCAPING, WHICH MUST BE STOCKPILED AS DIRECTED BY THE LANDSCAPE ARCHITECT.
- CONSTRUCT PLATFORMS TO LEVELS SHOWN.
- DURING CONSTRUCTION STORMWATER RUNOFF MUST BE CONTROLLED TO PREVENT DAMAGE TO THE WORKS AND TO EXISTING STRUCTURES.
- ALL SLOPE BANKS TO BE 1:2. IF THE EMBANKMENT SLOPE OF 1:2 CANNOT BE SAFELY CONSTRUCTED, THE REVISED SLOPES MUST BE AGREED ON BY THE ENGINEER ON SITE.
- ALL EARTHWORKS TO BE IN ACCORDANCE WITH SABS 1200 / COTO SPECIFICATION.
- ALL COMPACTION TESTS REQUIRED AS PER ENGINEERS SPECIFICATION.
- THE CONTOURS AND NATURAL GROUND LEVELS INDICATED ON THIS DRAWING ARE AS PER THE SURVEY DATA SUPPLIED. THE CONTRACTOR IS TO CHECK THE ACCURACY OF THIS INFORMATION AND REPORT ANY DISCREPANCIES IMMEDIATELY.
- ALLOWANCE TO BE MADE FOR SHORING VERTICAL EXCAVATIONS.
- THE CONTRACTOR TO ALLOW FOR EROSION PROTECTION AND MAINTENANCE TO ALL EMBANKMENTS DURING THE DURATION OF THE CONTRACT.

Belmouth List of Coordinates		
Point	Y Coordinate	X Coordinate
B1	-40250.581	3192953.742
B2	-40254.539	3192949.179
B3	-40255.147	3192943.169
B4	-40245.348	3192961.637
B5	-40254.536	3192960.984
B6	-40260.359	3192968.120



LEGEND

BUILDINGS

FENCE

LOW VOLTAGE LINE

MEDIUM VOLTAGE

POWER POLE

TREES

EXISTING GRAVEL ROAD

EXISTING TAR ROAD

BENCHMARK

CONCRETE PIPE CULVERT

SIGN POST

REVISIONS

REV. NO.	DATE	DESCRIPTION
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CLIENT DEPARTMENT SIGNATURES

APPROVED BY

SIGNATURE

Checked by Professional Consultant


SI

Signature


07-2022

Date

Consultant



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OKHAHLAMBA LOCAL
MUNICIPALITY

Contract

CONSTRUCTION SHELENI GRAVEL ACCESS ROAD

Drawing description

OVERALL LAYOUT PLAN

Drawn: B GUMEDE

Date: 07-2022

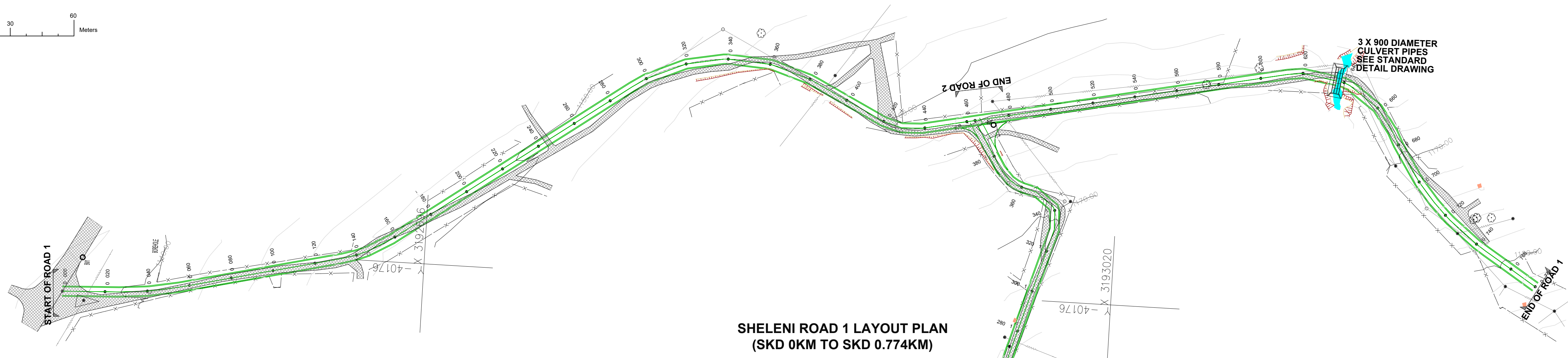
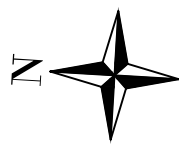
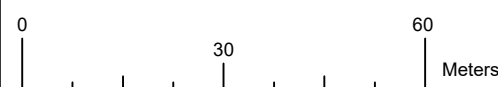
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Sheet No.: SHEET 2 OF 8

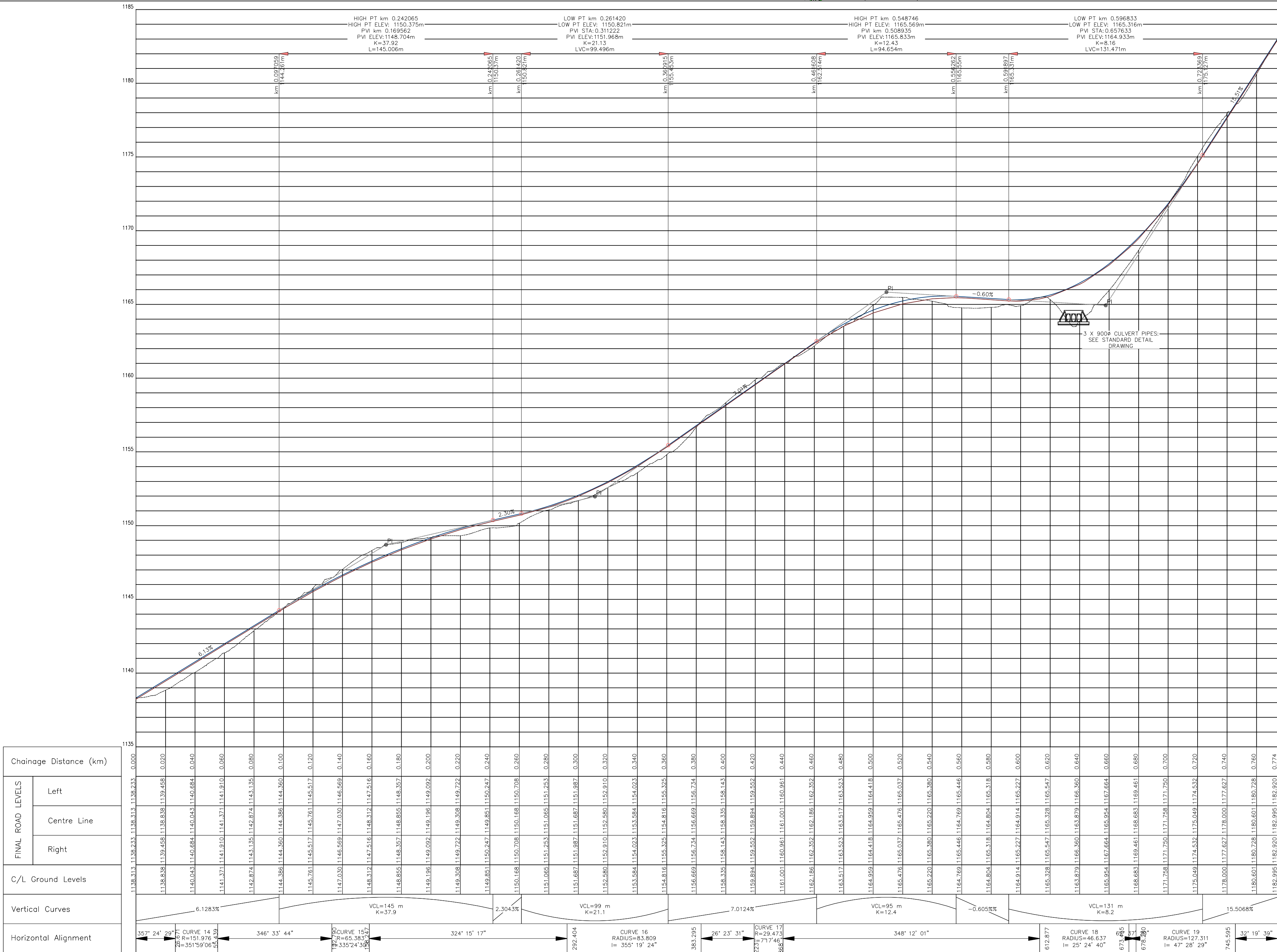
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Drawing Size: A1

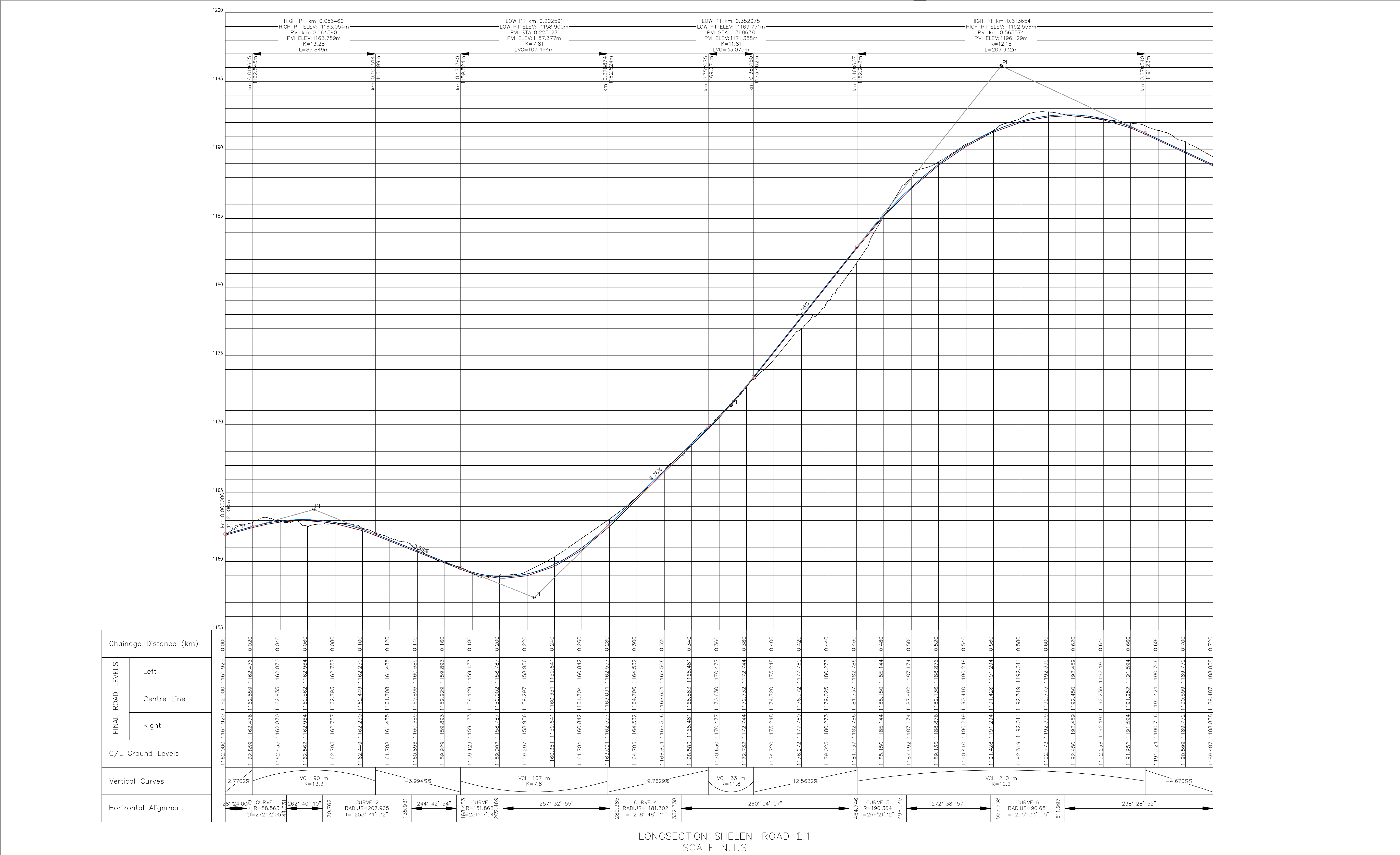
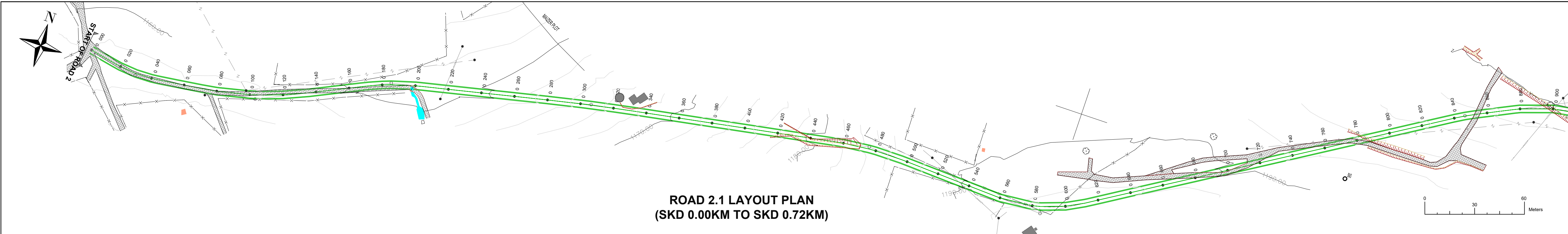
Client Drawing number



SHELENI ROAD 1 LAYOUT PLAN
(SKD 0KM TO SKD 0.774KM)



Chainage Distance (km)	
FINAL ROAD LEVELS	Left
	Centre Line
	Right
C/L Ground Levels	
Vertical Curves	
Horizontal Alignment	



LEGEND

- BUILDINGS
- FENCE
- LOW VOLTAGE LINE
- MEDIUM VOLTAGE
- POWER POLE
- TREES
- EXISTING GRAVEL ROAD
- EXISTING TAR ROAD
- BENCHMARK
- CONCRETE PIPE CULVERT
- SIGN POST

REVISIONS

REV. NO.	DATE	DESCRIPTION
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CLIENT DEPARTMENT SIGNATURES

APPROVED BY

SIGNATURE

Checked by Professional Consultant

SI

Signature

Consultant

07-2022
Date

OKHAHLAMBA LOCAL MUNICIPALITY

Contract

CONSTRUCTION SHELENI GRAVEL ACCESS ROAD

Drawing description

ROAD 2.1: LAYOUT PLAN & LONGSECTION

Drawn: B GUMEDE

Scale(s): AS SHOWN

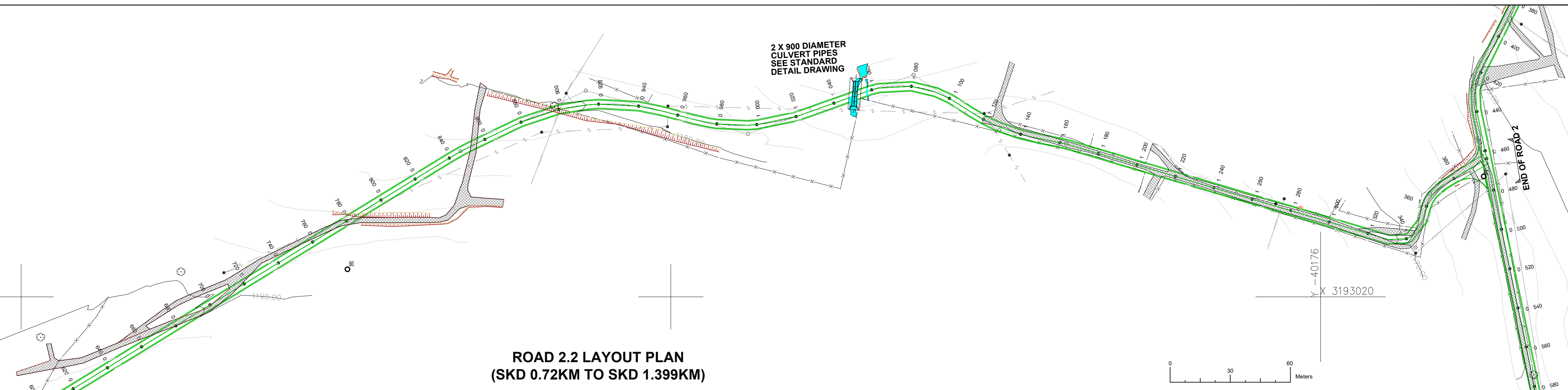
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Client Drawing number

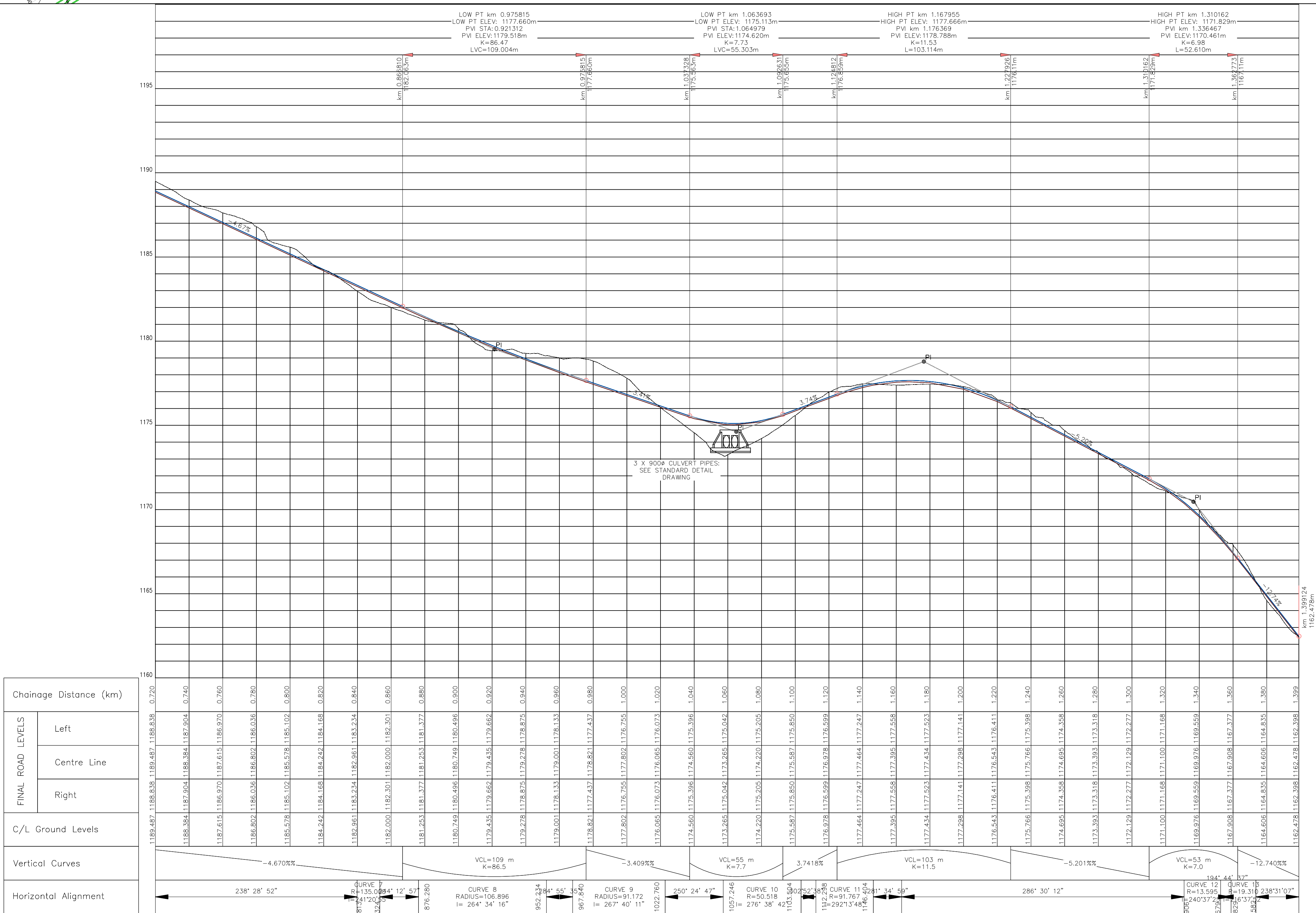
Date: 07-2022

Sheet No.: SHEET 4 OF 8

Drawing Size: A1



ROAD 2.2 LAYOUT PLAN
(SKD 0.72KM TO SKD 1.399KM)



LONGSECTION SHELENI ROAD 2.2
SCALE: N.T.S

LEGEND

- BUILDINGS
- FENCE
- LOW VOLTAGE LINE
- MEDIUM VOLTAGE
- POWER POLE
- TREES
- EXISTING GRAVEL ROAD
- EXISTING TAR ROAD
- BENCHMARK
- CONCRETE PIPE CULVERT
- SIGN POST

REVISIONS

REV. NO. DATE DESCRIPTION

CLIENT DEPARTMENT SIGNATURES

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OKHAHLAMBA LOCAL
MUNICIPALITY

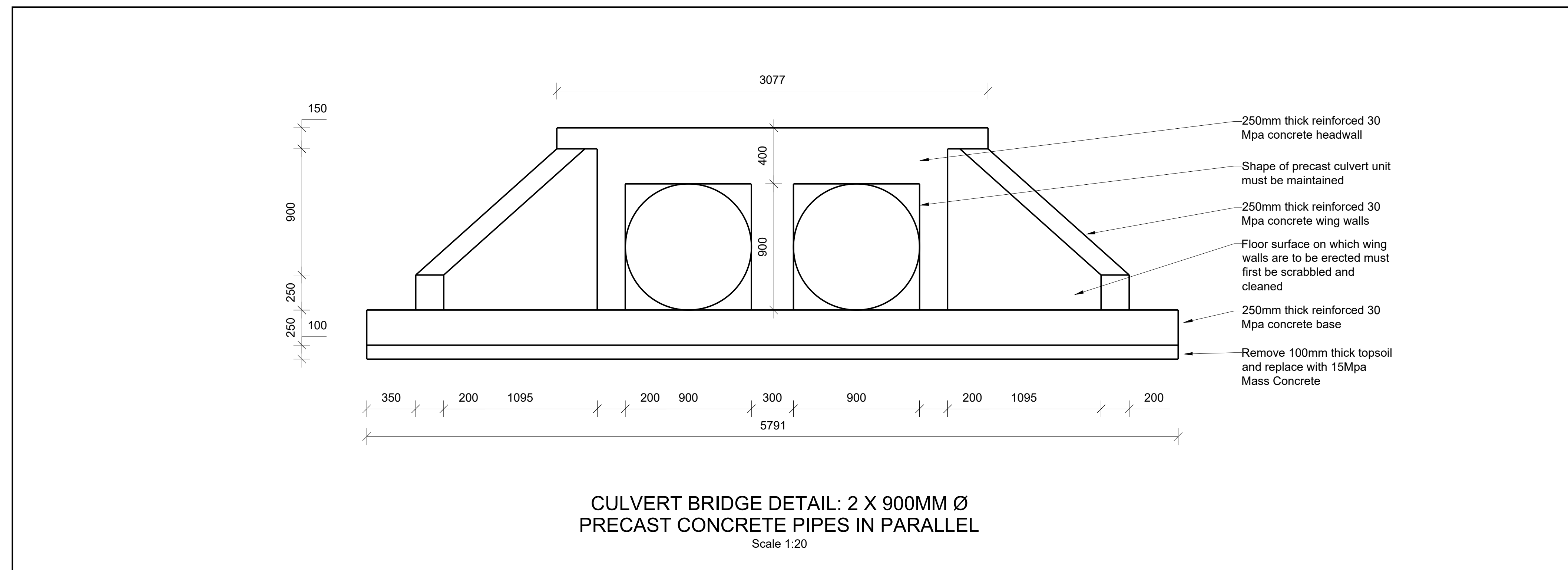
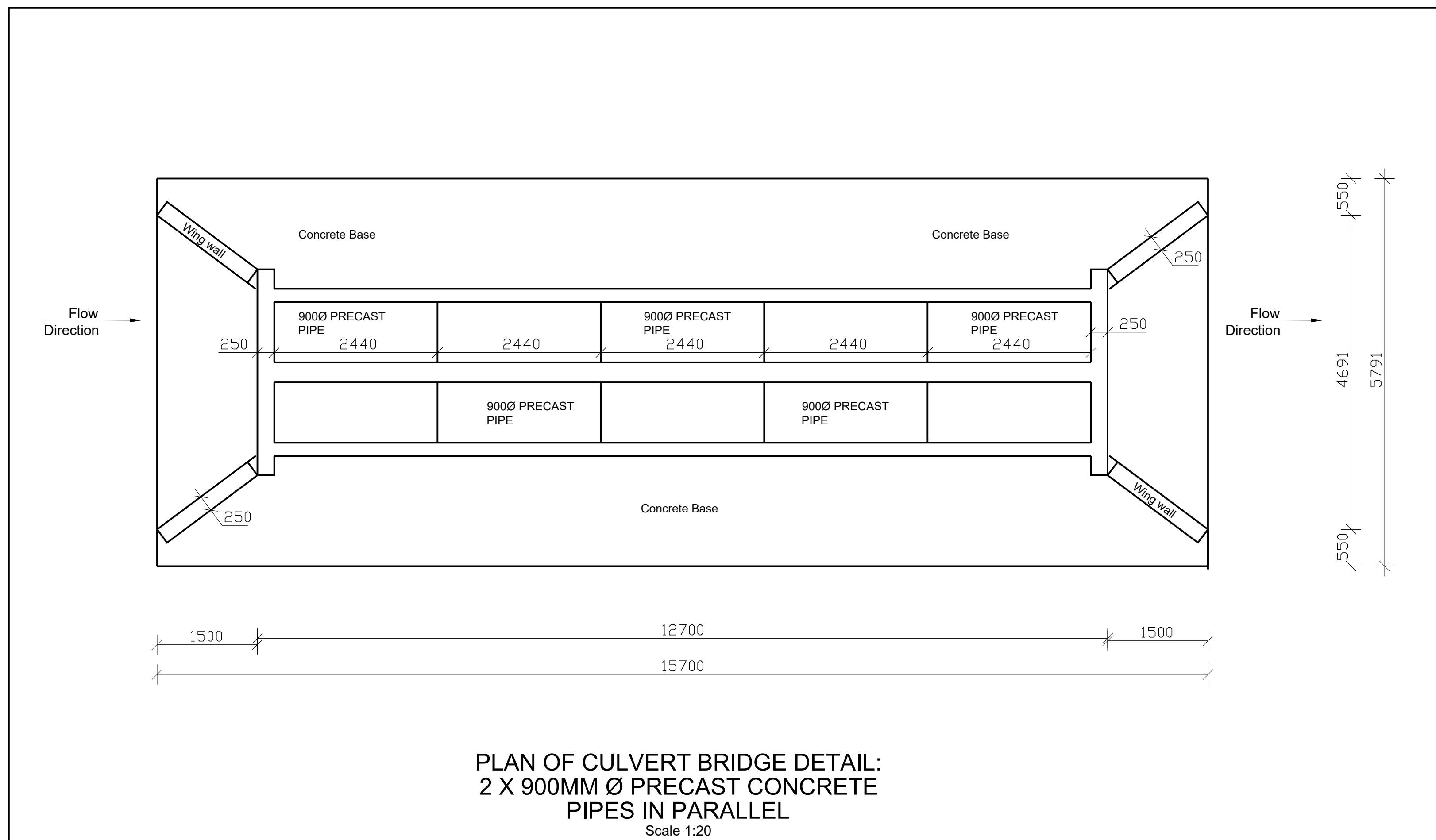
Contract

CONSTRUCTION SHELENI GRAVEL ACCESS ROAD

Drawing description

ROAD 2.2: LAYOUT PLAN & LONGSECTION

Drawn: B GUMEDE Date: 07-2022
Scale(s): AS SHOWN Sheet No.:
Consultant Drawing number V05-01-04-005-LS-T-00 SHEET 5 OF 8
Client Drawing number A1 Drawing Size:



NOTES

REVISIONS

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REV. NO.	DATE	DESCRIPTION
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CLIENT DEPARTMENT SIGNATURES

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SIGNATURE

Checked by Professional Consultant

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Signature _____ Date 07-2022

Consultant	
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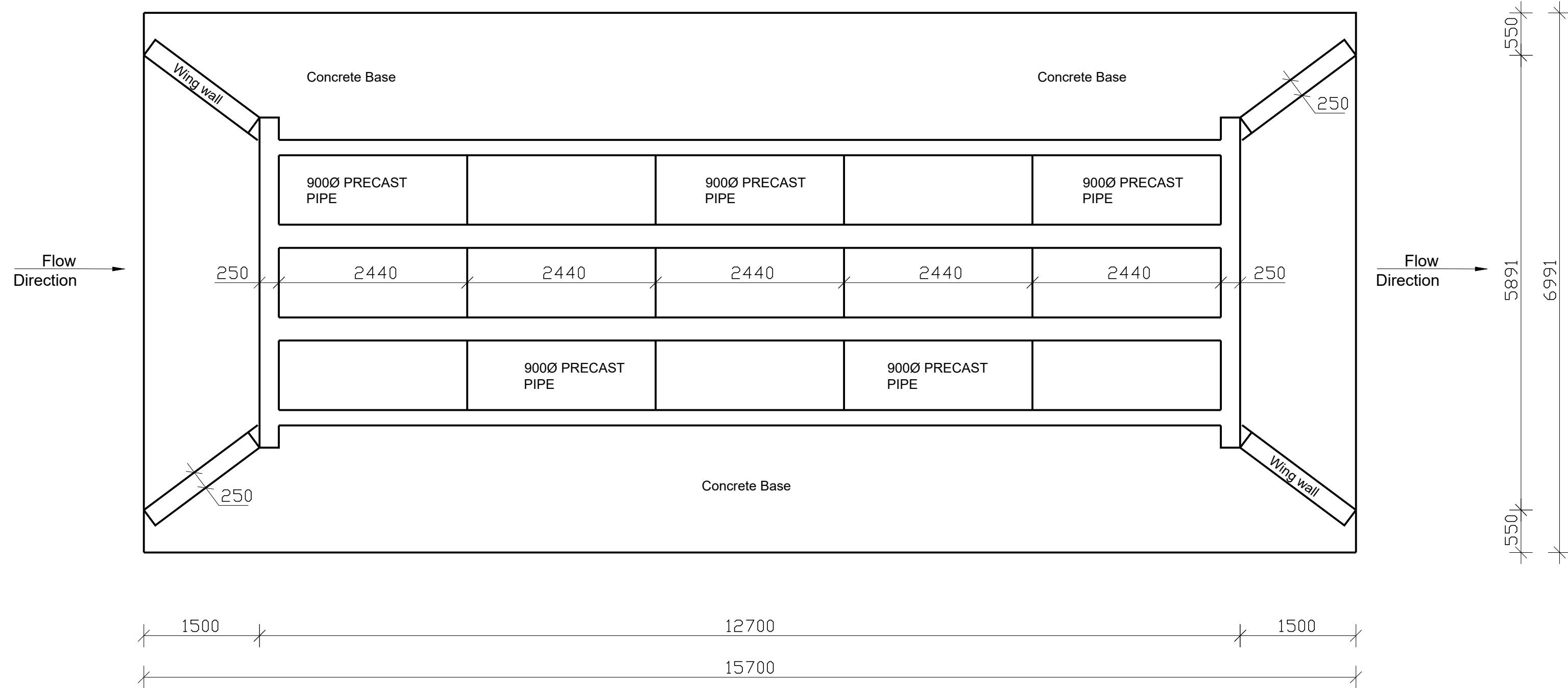
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CONSTRUCTION SHELENI GRAVEL ACCESS ROAD

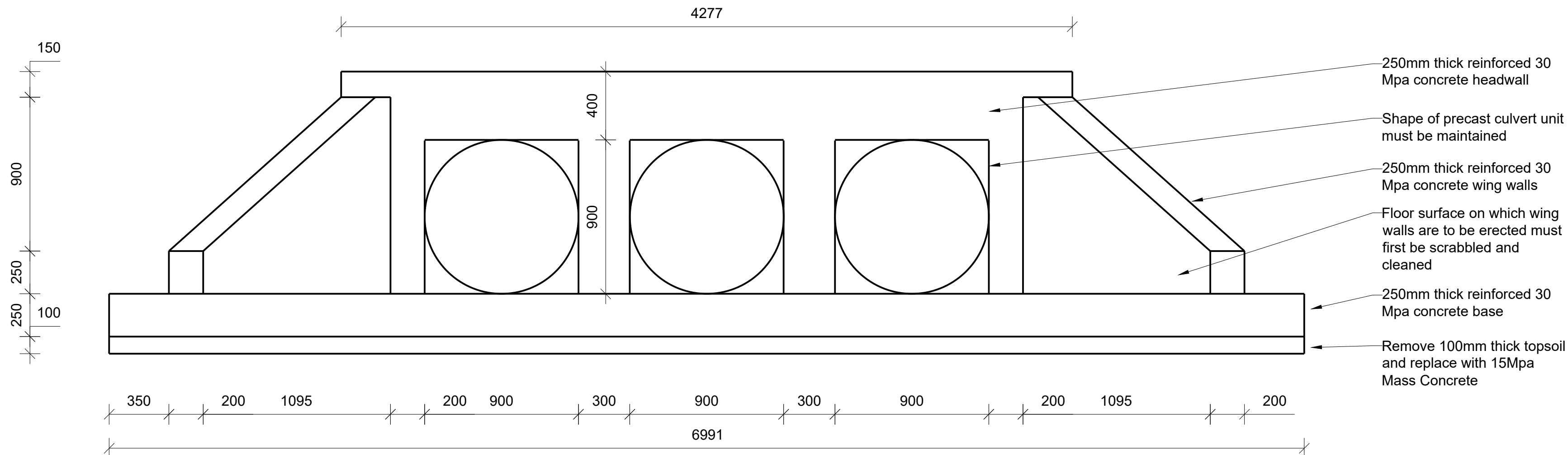
Drawing description

2 X 900Ø CULVERT DETAIL

Drawn:	L NGOBESE	Date:	07-2022
Scale(s):	AS SHOWN	Sheet No.:	SHEET 6OF8
Consultant Drawing number	V05-01-04-006-SDTLS-T-00	Drawing Size.:	A1
Client Drawing number			



PLAN OF CULVERT BRIDGE DETAIL:
3 X 900MM Ø PRECAST CONCRETE
PIPES IN PARALLEL
Scale 1:20



CULVERT BRIDGE DETAIL: 3 X 900MM Ø
PRECAST CONCRETE PIPES IN PARALLEL
Scale 1:20

NOTES

REVISIONS

REV. NO.	DATE	DESCRIPTION

CLIENT DEPARTMENT SIGNATURES

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SIGNATURE

Checked by Professional Consultant

SI

Signature _____ Date 07-2022

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OKHAHLAMBA LOCAL
MUNICIPALITY

Contract

CONSTRUCTION SHELENI GRAVEL ACCESS ROAD

Drawing description

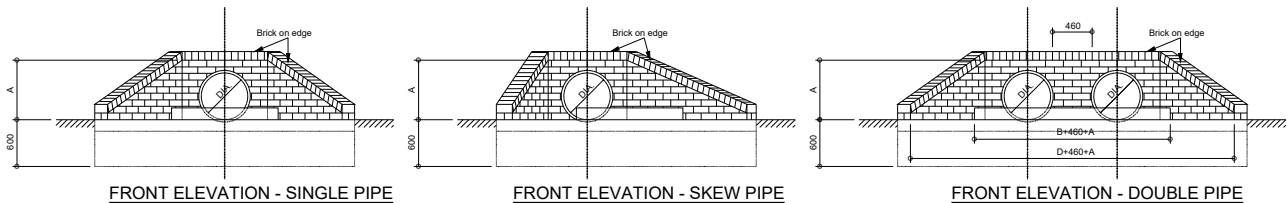
3 X 900 CULVERT DETAILS

Drawn: B GUMEDE Date: 07-2022

Scale(s): AS SHOWN Sheet No.: SHEET 7 OF 8

Consultant Drawing number V05-01-04-007-SDTLS-T-00 Drawing Size.: A1

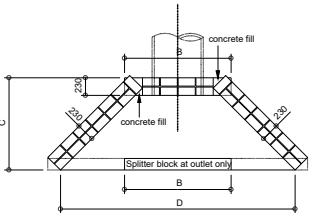
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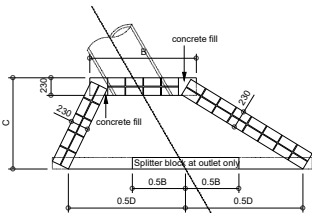
FRONT ELEVATION - SINGLE PIPE

FRONT ELEVATION - SKEW PIPE

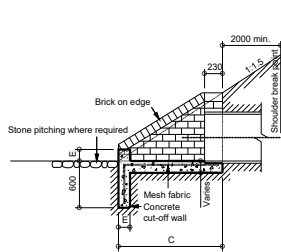
FRONT ELEVATION - DOUBLE PIPE



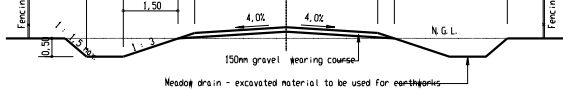
LAYOUT OF BRICKWORK



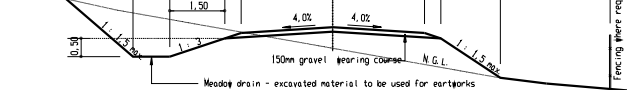
LAYOUT OF BRICKWORK



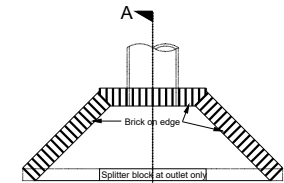
SECTION A-A



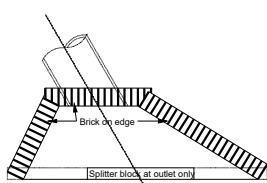
TYPE 7A LOCAL ROAD OR BY-ROAD
(FLAT TERRAIN)



TYPE 7A LOCAL ROAD OR BY-ROAD
(ROLLING TERRAIN)



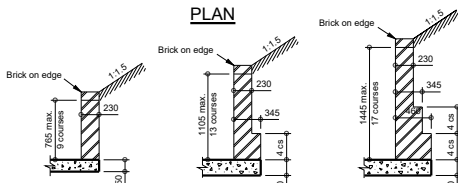
PLAN



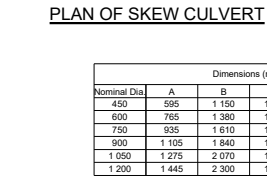
PLAN OF SKEW CULVERT

Dimensions (mm)					
Nominal Dia	A	B	C	D	E
450	595	1 150	1 050	2 700	150
600	765	1 380	1 200	3 000	150
750	935	1 610	1 350	3 300	150
900	1 105	1 840	1 500	3 600	230
1 050	1 275	2 070	1 750	3 900	230
1 200	1 445	2 300	1 900	4 200	230

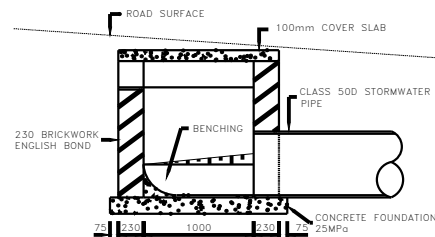
- NOTES:
- Splitter block and pitching to be provided at all outlets where erosion is likely to occur.
 - Splitter block may be omitted if discharge velocity is less than 0.9 m/s.
 - Cut-off walls may be omitted if structure is founded on rock.
 - For multiple pipe culverts increase dimensions 'E' and 'F' by (n-1)(A+460mm) - Where n = number of pipes and A = nominal diameter of pipes.
 - Pipes to be cut flush with headwall.
 - For skew pipe culverts the headwall shall be parallel to the centre line of the road.
 - If corrugated metal pipes are used 4x200mmx150mm long galvanised anchor bolts in the hollows of the corrugation are to be used.
 - All concrete is to be 20MPa.
 - Square mesh fabric (Reference S.M.F. 193) is to be placed 50mm from top in all apron slabs and centrally in cut-off walls.
 - Brickwork is to consist of good quality burnt clay common bricks in accordance with SABS 227 Specification, or cement bricks in accordance with SABS 987 Specification, uniform in size and shape laid in stretcher bond style with the skins tied together with galvanised crimped wire wall ties.
 - Brickforce is to be placed every 4th course.
 - Jointing on all visible faces to be pointed.
 - No in-fill shall be larger than a half standard brick size unless 15MPa concrete is used.
 - Pipe crossings to be verified on site.



TYPICAL RETAINING WALL DETAILS

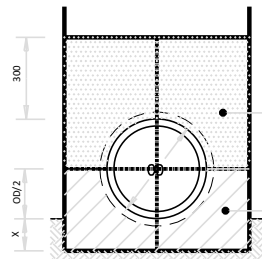


TYPICAL PIPE HEADWALL DETAILS
N.T.S.



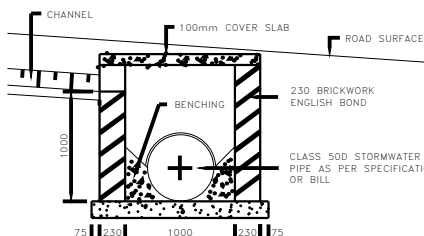
SECTION A - A

SCALE 1 : 25



CLASS B (Fm= 1.9) RIGID PIPES
DETAIL
1:10

RIGID PIPE ON CLASS B
BEDDING DETAILS
N.T.S.

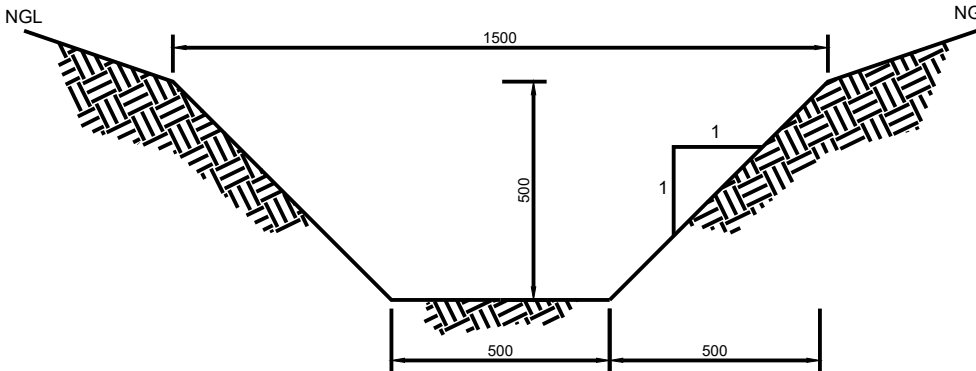


SECTION B - B

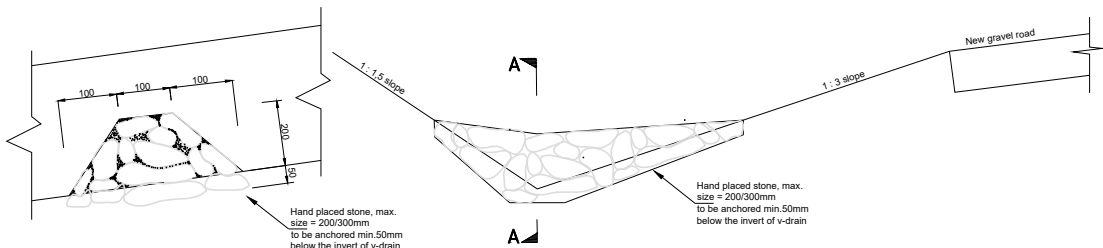
SCALE 1 : 25

NOTE
COVER SLAB REINFORCED WITH WELDED SQUARE
MESH FABRIC NO. 617

TYPICAL INLET DETAILS
N.T.S.

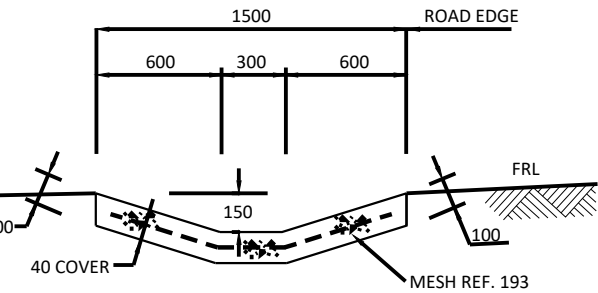


EARTH CHANNEL DETAIL
N.T.S.



BOLSTERS DETAIL
N.T.S.

SECTION A-A
N.T.S.



CONCRETE DISH DRAIN
N.T.S.

NOTE:

- CONCRETE CHANNEL TO BE 100mm THICK USING 19/25 MPa CONCRETE BITUMEN IMPREGNATED SOFTBOARD JOINTS AT 10m INTERVALS IN 2,0m CAST ALTERNATE PANELS.
- SOFTBOARD TO BE REMOVED TO A DEPTH OF 20mm AND FILLED WITH POLYSULPHIDE JOINT SEALER.
- CONCRETE CHANNEL TO BE REINFORCED WITH MESH REF. 193 MINIMUM COVER = 40mm

NOTES

- CLEAR AND REMOVE ALL DEBRIS, UNMARKED TREES, GRASS AND RUBBLE FROM PLATFORM AREA. TREES MARKED BY LANDSCAPE ARCHITECT TO BE RETAINED.
- EXCAVATE TO SPILL ALL TOPSOIL EXCEPT THAT REQUIRED FOR LANDSCAPING, WHICH MUST BE STOCKPILED AS DIRECTED BY THE LANDSCAPE ARCHITECT.
- CONSTRUCT PLATFORMS TO LEVELS SHOWN.
- DURING CONSTRUCTION STORMWATER RUNOFF MUST BE CONTROLLED TO PREVENT DAMAGE TO THE WORKS AND TO EXISTING STRUCTURES.
- IF THE EMBANKMENT SLOPE SHOWN ON THE DRAWING CANNOT BE SAFELY CONSTRUCTED, THE REVISED SLOPES MUST BE AGREED ON BY THE ENGINEER ON SITE.
- ALL EARTHWORKS TO BE IN ACCORDANCE WITH SABS 1200 SPECIFICATION.
- ALL COMPACTION TESTS REQUIRED AS PER ENGINEERS SPECIFICATION.
- THE CONTOURS AND NATURAL GROUND LEVELS INDICATED ON THIS DRAWING ARE AS PER THE SURVEY DATA SUPPLIED. THE CONTRACTOR IS TO CHECK THE ACCURACY OF THIS INFORMATION AND REPORT ANY DISCREPANCIES IMMEDIATELY.
- ALLOWANCE TO BE MADE FOR SHORING VERTICAL EXCAVATIONS.
- THE CONTRACTOR TO ALLOW FOR EROSION PROTECTION AND MAINTENANCE TO ALL EMBANKMENTS DURING THE DURATION OF THE CONTRACT.
- SETTING OUT COORDINATES ARE IN THE WGS84 L031 COORDINATE SYSTEM.
- CONTRACTOR WILL BE SUPPLIED WITH BENCHMARK INFORMATION BEFORE CONSTRUCTION COMMENCES.
- THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND PROTECTING ALL EXISTING SERVICES ON THE SITE.
- ALL BELL-OUT INTERSECTIONS TO BE CONSTRUCTED WITH A 5m RADIUS, UNLESS OTHERWISE STATED.

REVISIONS

REV. NO. DATE DESCRIPTION

CLIENT DEPARTMENT SIGNATURES

APPROVED BY

SIGNATURE

Checked by Professional Consultant

Signature Date 02-2022



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OKHAHLAMBA
LOCAL
MUNICIPALITY

Contract

CONSTRUCTION SHELENI GRAVEL ACCESS ROAD

Drawing description

STANDARD DETAILS

Drawn: B GUMEDE Date: 02-2022

Scale(s): AS SHOWN Sheet No.: SHEET 80F8

Consultant Drawing number: V05-01-04-008-SDTLS-T-00 Drawing Size: A1

Client Drawing number