

KING SABATA DALINDYEBO MUNICIPALITY



OTP- 02 UPGRADING OF MQANDULI INTERNAL ROADS PHASE 1

SCM NO:	017/2022/23
CIDB CATEGORY:	7CE OR HIGHER

TENDER CLOSES ON 23 DECEMBER 2022 AT 12:00

NAME OF TENDERER:	
TENDER PRICE (INCL. VAT):	
CIDB GRADING	
CSD SUPPLIER NUMBER	
EMPLOYER: KING SABATA DALINDYEBO MUNICIPALITY Munitata Building Cnr Owen and Sutherland Street Mthatha 5100 Tel: 047 501 4308 Email: nondlazis@ksd.gov.za	CONSULTANT: LEKO ENGINEERING CONSULTANTS Leko House 30 Blakeway Road Mthatha 5099 Tel: 047 531 0037 Email: bantu@leko.co.za

CHECK LIST

The Tenderer is to indicate in the checkboxes provided that 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						
	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					
	Schedule: 1F	Schedule of Plant and Equipment available for the Contract					
	Schedule: 1G	Schedule of Work satisfactorily carried out by the Tenderer					
	Schedule: 1H	Certificate of Attendance at Clarification Meeting					
	Schedule: 1I	Proposed Amendments and Qualifications					
	Schedule: 1J	Cashflow Projections Schedule					
	Schedule: 1K	Proof of CIDB Registration					
	Schedule: 1L	Proof of COID Registration					
	Schedule: 2A	Centralized Supplier Database (CSD)					
	Schedule: 2B	Proof of Authority of Signatory					
	Schedule: 2C	Original Valid Tax Clearance Certificate					
	Schedule: 2D	Reference Letters					
	Schedule: 2E	Organogram					
	Schedule: 2F	CVs and Qualification of Key Personnel					
	Schedule: 2G	Methodology					
	Schedule: 2H	Gantt Chart					
	Schedule: 2I	Proof of Plant Ownership					
	Schedule: 2J	JV Agreement					
	MBD Forms	MBD 4, MBD 6, MBD 7, MBD 8 AND MBD 9					
	C1.1	Form of Offer and Acceptance					
	C1.2	Contract Data (Part B)					
	C2.2	Completed Schedule of Quantities					

Contractor

Witness 1

Witness 2

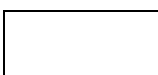
Employer

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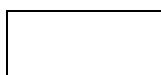
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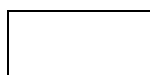
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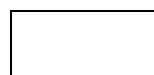
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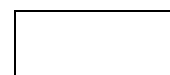
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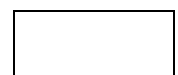
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Employer



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PART T1: TENDERING PROCEDURES

PART A INVITATION TO BID

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE KING SABATA DALINDYEBO MUNICIPALITY					
BID NUMBER:	SCM NO.: 017/2022/23	CLOSING DATE:	23 DEC 2022	CLOSING TIME:	12h00
DESCRIPTION	UPGRADING OF MQANDULI INTERNAL ROADS TO BLACKTOP SURFACE ROADS				
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)					
KING SABATA DALINDYEBO MUNICIPALITY					
MUNITATA BUILDING					
CNR OWEN AND SUTHERLAND STREET					
MTHATHA					
5099					
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	SCM		DEPARTMENT	Technical Services	
CONTACT PERSON	Mr. N. Zibi		CONTACT PERSON	Ms S Nondlazi	
TELEPHONE NUMBER	047 501 4118		TELEPHONE NO	047 501 4308	
FACSIMILE NUMBER	NA		FACSIMILE NUMBER	NA	
E-MAIL ADDRESS	zibin@ksd.gov.za		E-MAIL ADDRESS	nondlazi@ksd.gov.za	

Contractor

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Witness 2

Employer

Witness 1

Witness 2

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:

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BID NOTICE

King Sabata Dalindyebo LM hereby calls upon accredited service providers to bid for the following tender:

No.	Project Name	CIDB Grading	Bid Number	Closing Date	Enquiries
1	OTP 02 – Upgrading of Mqanduli internal roads – Phase 1	7CE or Higher	SCM: 017/2022/23	Date: 23/12/2022 Time: 12H00	Technical Enquiries may be directed to: Ms S. Nondlazi (Technical services). Tel: 047 501 4308

Bidders must take note of the following bid conditions:

Place of Tender box: **1st Floor, Munitata Building, Next to Room 147.** All bids must be put in a sealed envelope and clearly marked with SCM Number and Project Name and be placed in a tender box. Tender documents can be downloaded free of charge from the National Treasury's tender portal (<http://www.etenders.gov.za/content/advertised-tenders>) from the King Sabata Dalindyebo site (www.ksd.gov.za) as from the **22nd of November 2022**

NO HARD COPIES OF THE TENDER DOCUMENT ARE AVAILABLE FOR SALE, ONLY THE ELECTRONIC VERSION WHICH IS TO BE DOWNLOADED AS PER THE ABOVE WEBSITES IS TO BE USED.

NO COMPULSORY BRIEFING IS APPLICABLE FOR ALL BIDS

Bidders must take note of the following bid conditions: -

- Failure to submit comprehensive JV agreement (where applicable), failure to do so will result in a tender deemed non-responsive.
- Individual partners of JV are to comply and submit all relevant documents. Failure to do so will result in a tender deemed non-responsive.
- Failure to complete properly and/ or in full tender forms, MBD 1 to MBD 9 and Annexures A to F will result in a tender deemed non-responsive.
- Failure to submit or complete supplementary information will result in the tender being null, void and non-responsive.
- The KSD Municipality does not bind itself to accept the lowest or any bid and reserves the right to accept the whole or part of the bid or to withdraw the bid.
- All certified copies submitted with a tender document must not be older than six months, failure to do so will result tender deemed non-responsive.
- All alterations in prices/quotes must be signed for and failure to sign will result in tender deemed non-responsive
- Use of tipex is prohibited and the bidder will be deemed non-responsive.
- The bidder to submit Audited financial statements for the past three financial years for any offer amounting to or exceeding R10 million inclusive of VAT.
- Bidders must sign MBD 5 for any offer amounting or exceeding R10 million.
- Bidders must be registered with CIDB and have a valid CIDB Contractor Grading designation as per above with proof
- Bids submitted will hold good for a period of **90** days.
- Failure to be registered on Central Supplier Database registration will result in a tender being disqualified.
- Bids that are late, incomplete, unsigned or submitted by fax, mail or electronically including copy of a tender document, will not be accepted.
- All bids must be put in a sealed envelope and clearly marked with SCM Number and Project Name and be placed in a tender box; failure to do so the document will not be considered.
- BBBEE must be SANAS and IRBA Approved or Sworn affidavit must be from DTI failure to do so tenderers will lose point.
- Preferential Procurement Policy Framework ACT 2017 (PPPFA) Points will be evaluated based on the following criteria
 - Stage 1 Pre –qualification evaluation
 - Stage 2 Price and BBB EE Points

The tender will be evaluated and adjudicated on the basis of the Preferential Procurement Policy Framework Act, and the regulations pertaining thereto (2017 Regulations), as well as the King Sabata Dalindyebo Municipality's Supply Chain Management policy. The 80/20 preference point system will be used as per the KSDLM SCM policy. The tender will be evaluated and adjudicated on the basis of SCM bid compliance, functionality and price.

All bids speculated above bidders will have to score a minimum of 70 points out of a maximum of 100 points for functionality in order to proceed to the pricing stage.

SCM related enquiries may be directed to Mr N. Zibi (General Manager: SCM) 047 501 4118

**MR . N PAKADE
MUNICIPAL MANAGER**

OTP – Upgrading of Mqanduli Internal Roads Phase 1

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Bid Notice



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Witness 2



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Witness 1



Witness 2

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).

As published in Annexure F of the CIDB Standard for Uniformity for construction Procurement, Board Notice 136 Government Gazette No 38960 of 10 July 2015

F.1 General

F.1.1 Actions

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

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

Note:

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

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

F.1.2 Tender Documents

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

F.1.3 Interpretation

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

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

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

- a) **conflict of interest** means any situation in which:
- i) someone in a position of trust has competing professional or personal interests which make it difficult to fulfil his or her duties impartially;
 - ii) an individual or organisation is in a position to exploit a professional or official capacity in some way for their personal or corporate benefit; or
 - iii) incompatibility or contradictory interests exist between an employee and the organisation which employs that employee.

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- b) **comparative offer** means the price after the factors of a non-firm price and all unconditional discounts it can be utilised to have been taken into consideration;
- 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;
- 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) **functionality** means the measurement according to the predetermined norms of a service or commodity designed to be practical and useful, working or operating, taking into account quality, reliability, viability and durability of a service and technical capacity and ability of a tenderer.

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 Cancellation and Re-Invitation of Tenders

F1.5.1 An organ of state may, prior to the award of the tender, cancel a tender if-

- (a) due to changed circumstances, there is no longer a need for the services, works or goods requested; or
- (b) funds are no longer available to cover the total envisaged expenditure; or
- (c) no acceptable tenders are received.

F1.5.2 The decision to cancel a tender must be published in the CIDB website and in the government Tender Bulletin for the media in which the original tender invitation was advertised.

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.

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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.2.2 Cost of tendering

F.2.2.1 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 comply with requirements.

F.2.2.2 The cost of the tender documents charged by the employer shall be limited to the actual cost incurred by the employer for printing the documents. Employers must attempt to make available the tender documents on its website so as not to incur any costs pertaining to the printing of the tender documents.

F.2.3 Check documents

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

F.2.4 Confidentiality and copyright of documents

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

F.2.5 Reference documents

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

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F.2.6 Acknowledge addenda

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

F.2.7 Clarification meeting

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

F.2.8 Seek clarification

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

F.2.9 Insurance

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

F.2.10 Pricing the tender offer

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

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

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

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

F.2.11 Alterations to documents

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

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.2.12.3 An alternative tender offer may only be considered in the event that the main tender offer is the winning tender.

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.

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Contractor

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Witness 1

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Employer

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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 or premature opening of the tender offer if the outer package is not sealed and marked as stated.

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

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

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

F.2.15 Closing time

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

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

F.2.16 Tender offer validity

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

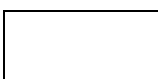
F.2.16.2 If requested by the employer, consider extending the validity period stated in the tender data for an agreed additional period with or without any conditions attached to such extension.

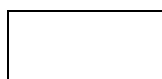
F.2.16.3 Accept that a tender submission that has been submitted to the employer may only be withdrawn or substituted by giving the employer's agent written notice before the closing time for tenders that a tender is to be withdrawn or substituted.

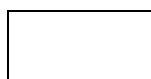
F.2.16.4 Where a tender submission is to be substituted, submit a substitute tender in accordance with the requirements of F.2.13 with the packages clearly marked as "SUBSTITUTE".

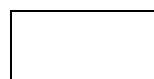
F.2.17 Clarification of tender offer after submission

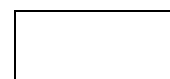
Provide clarification of a tender offer in response to a request to do so from the employer during the evaluation of tender offers. This may include providing a breakdown of rates or prices and correction of arithmetical errors by the adjustment of certain rates or item prices (or both). No change in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

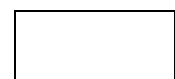

Contractor


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Witness 2


Employer


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Witness 2

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), preferencing arrangements, or samples of materials, considered necessary by the employer for the purpose of a full and fair risk assessment. Should the tenderer not provide the material, or a satisfactory reason as to why it cannot be provided, by the time for submission stated in the employer's request, the employer may regard the tender offer as non-responsive.

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

F.2.19 Inspections, tests and analysis

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

F.2.20 Submit securities, bonds and policies

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

F.2.21 Check final draft

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

F.2.22 Return of other tender documents

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

F.2.23 Certificates

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

F.3 The employer's undertakings

F.3.1 Respond to requests from the tenderer

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

F.3.1.2 Consider any request to make a material change in the capabilities or formation of the tendering entity (or both) or any other criteria which formed part of the qualifying requirements used to 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

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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, number of points claimed for its BBBEE status level 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 Were 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 functionality 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 functionality evaluation more than the minimum number of points for functionality stated in the tender data, and announce the score obtained for the technical proposals and the total price and any points claimed on BBBEE status level. Return unopened financial proposals to tenderers whose technical proposals failed to achieve the minimum number of points for functionality.

F.3.6 Non-disclosure

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

F.3.7 Grounds for rejection and disqualification

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

F.3.8 Test for responsiveness

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

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

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

- a) detrimentally affect the scope, quality, or performance of the works, services or supply identified in the Scope of Work,
- b) significantly change the Employer's or the tenderer's risks and responsibilities under the contract, or

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- c) affect the competitive position of other tenderers presenting responsive tenders, if it were to be rectified.

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

F.3.9 Arithmetical errors, omissions and discrepancies

F.3.9.1 Check 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.3.9.2 The employer must correct the arithmetical errors in the following manner:

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

Consider the rejection of a tender offer if the tenderer does not correct or accept the correction of the arithmetical error in the manner described above.

F.3.10 Clarification of a tender offer

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

F.3.11 Evaluation of tender offers

F.3.11.1 General

Appoint an evaluation panel of not less than three persons. Reduce each responsive tender offer to a comparative offer and evaluate 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: Price and Preference

In the case of a price and preference:

- 1) Score tender evaluation points for price
- 2) Score points for BBBEE contribution
- 3) Add the points scored for price and BBBEE.

F.3.11.3 Method 2: Functionality, Price and Preference

In the case of a functionality, price and preference:

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- 1) Score functionality, rejecting all tender offers that fail to achieve the minimum number of points for functionality as stated in the Tender Data.
- 2) No tender must be regarded as an acceptable tender if it fails to achieve the minimum qualifying score for functionality as indicated in the tender invitation.
- 3) Tenders that have achieved the minimum qualification score for functionality must be evaluated further in terms of the preference points system prescribed in paragraphs 4 and 4 and 5 below.

The 80/20 preference point system for acquisition of services, works or goods up to Rand value of R50 million.

- 1) (a)(i) The following formula must be used to calculate the points for price in respect of tenders with a rand value equal to, or above R 30 000 and up to Rand value of R 50 000 000 (all applicable taxes included):

$$Ps = 80(1 - \frac{Pt - Pmin}{Pmin})$$

Where

Ps = Points scored for price of tender or offer under consideration;

Pt = Price of tender or offer under consideration; and

P_{min} = Price of lowest acceptable tender or offer

- 2) The following table must be used to calculate the score out of 20 for B-BBEE:

B-BBEE status level of contributor	Number of points
1	20
2	18
3	14
4	12
5	8
6	6
7	4
8	2
Non-compliant contributor	0

- 3) A tenderer must submit proof of its B-BBEE status level of contributor.
- 4) A tenderer failing to submit proof of B-BBEE status level of contributor or is a non-complaint contributor to BBEE may not be disqualified but-
 - a) may only score points of 80 for price; and
 - b) scores 0 points out of 20 for B-BBEE
- 5) A tenderer may not be awarded points for B-BBEE status level of contributor if the tender documents indicate that the tenderer intends subcontracting more than 25% of the value of the contract to any other person not qualifying for at least the points that tenderer qualifies for, unless the intended subcontractor is an EME that has the capacity to execute the subcontract.
- 6) The points scored by a tenderer of B-BBEE in terms of sub regulation (2) must be added to the points scored for price under sub regulation (1)
- 7) The points scored must be rounded off to the nearest two decimal places.
- 8) Subject to sub regulation (9) and regulation (11), the contract must be awarded to the tenderer scoring the highest points.
- 9) (a) If the price offered by a tenderer scoring the highest points is not market related, the organ of state may not award the contract to that tenderer.
(b) The organ of state may –
 - negotiate a market related price with the tender scoring the highest points or cancel the tender;
 - if the tenderer does not agree to a market related price, negotiate a market related price with the tenderer scoring the second highest points or cancel the tender.

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- if the tenderer scoring the second highest points does not agree to a market related price, negotiate a market related price with the tenderer scoring the third highest points or cancel the tender.
- (c) If a market related price is not agreed as envisaged in paragraph (b)(iii), the organ of state must cancel the tender.

The 90/10 preference points system for acquisition of services, works or goods with a Rand value above R 50 million

- 1) a)(i) The following formula must be used to calculate the points for price in respect of tenders with a rand value above R 50 000 000 (all applicable taxes included):

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

Where

P_s = Points scored for price of tender or offer under consideration;

P_t = Price of tender or offer under consideration; and

P_{min} = Price of lowest acceptable tender or offer

- 2) The following table must be used to calculate the score out of 10 for B-BBEE:

B-BBEE status level of contributor	Number of points
1	10
2	9
3	6
4	5
5	4
6	3
7	2
8	1
Non-compliant contributor	0

- 3) A tenderer must submit proof of its B-BBEE status level of contributor.
- 4) A tenderer failing to submit proof of B-BBEE status level of contributor or is a non-complaint contributor to B-BBEE may not be disqualified but-
- may only score points of 90 for price; and
 - scores 0 points out of 10 for B-BBEE
- 5) A tenderer may not be awarded points for B-BBEE status level of contributor if the tender documents indicate that the tenderer intends subcontracting more than 25% of the value of the contract to any other person not qualifying for at least the points that tenderer qualifies for, unless the intended subcontractor is an EME that has the capacity to execute the subcontract.
- 6) The points scored by a tenderer of B-BBEE in terms of sub regulation (2) must be added to the points scored for price under sub regulation (1)
- 7) The points scored must be rounded off to the nearest two decimal places.
- 8) Subject to sub regulation (9) and regulation (11), the contract must be awarded to the tenderer scoring the highest points.
- 9) (a) If the price offered by a tenderer scoring the highest points is not market related, the organ of state may not award the contract to that tenderer.
- (b) The organ of state may –
- negotiate a market related price with the tender scoring the highest points or cancel the tender;
 - if the tenderer does not agree to a market related price, negotiate a market related price with the tenderer scoring the second highest points or cancel the tender.
 - if the tenderer scoring the second highest points does not agree to a market related price, negotiate a market related price with the tenderer scoring the third highest points or cancel the tender.
- (c) If a market related price is not agreed as envisaged in paragraph (b)(iii), the organ of state must cancel the tender.

To earn these points a potential bidder must have a B-BBEE certificate that has been issued by a verification agency accredited by the South African Accreditation System (SANAS) or the bidder must issue an affidavit stating its B-BBEE status level of contributor. Exempt Micro Enterprises (EME's) must complete an affidavit regarding their B-BBEE status

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level of contributor – no verification is required. This is also applicable to Qualifying Small Enterprises (QSE's) with 51% or more black ownership.

The various B-BBEE status level of contributor that an EME can achieve through an affidavit are:

- EME's that are not Black-owned automatically qualifies as a Level 4 contributor to B-BBEE,
- EME's that have 51% or more (but not 100%) black ownership qualifies as a Level 2 contributor to B-BBEE and
- EME's that have 100% black ownership qualifies as a Level 1 contributor to B-BBEE.

A 100% Black-owned EME will therefor earn maximum points (either 20 or 10, depending on the value of the tender) on the Preference Point System.

A valid B-BBEE certificate of B-BBEE affidavit is very important in the Tender Process. The higher your B-BBEE status level of contributor, the more points on the Preference Point System you are going to score. Ensure your business scores the highest possible score on its B-BBEE certificate or B-BBEE affidavit.

F.3.11.6 Decimal places

Score price, preference and functionality, as relevant, to two decimal places.

F.3.11.7 Scoring Price

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

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

where: N_{FO} is the number of tender evaluation points awarded for price.

W_1 is the maximum possible number of tender evaluation points awarded for price as stated in the Tender Data.

A is a number calculated using the formula and option described in Table F.1 as stated in the Tender Data.

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

Formula	Comparison aimed at achieving	Option 1 ^a	Option 2 ^a
1	Highest price or discount	$A = \frac{(1 + (P - P_m))}{P_m}$	$A = P / P_m$
2	Lowest price or percentage commission / fee	$A = \frac{(1 - (P - P_m))}{P_m}$	$A = P_m / P$
^a P_m is the comparative offer of the most favourable comparative offer. P is the comparative offer of the tender offer under consideration.			

F.3.11.8 Scoring preferences

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

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

F.3.11.9 Scoring 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:

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

where: S_o is the score for quality allocated to the submission under consideration;

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M_s is the maximum possible score for quality in respect of a submission; and

W_2 is the maximum possible number of tender evaluation points awarded for the quality as stated in the tender data

F.3.12 Insurance provided by the employer

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

F.3.13 Acceptance of tender offer

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

- a) is not under restrictions, or has principals who are under restrictions, preventing participating in the employer's procurement,
- b) can, as necessary and in relation to the proposed contract, demonstrate that he or she possesses the professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience and reputation, expertise and the personnel, to perform the contract,
- c) has the legal capacity to enter into the contract,
- d) is not insolvent, in receivership, under Business Rescue as provided for in chapter 6 of the Companies Act, 2008, bankrupt or being wound up, has his affairs administered by a court or a judicial officer, has suspended his business activities, or is subject to legal proceedings in respect of any of the foregoing,
- e) complies with the legal requirements, if any, stated in the tender data, and
- f) is able, in the opinion of the employer, to perform the contract free of conflicts of interest.

F.3.14 Prepare contract documents

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

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

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

F.3.15 Complete adjudicator's contract

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

F.3.16 Notice to unsuccessful tenderers

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

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

F.3.17 Provide copies of the contracts

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

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F.3.18 Provide written reasons for actions taken

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

F3.19 Transparency in the procurement process

F3.19.1 The CIDB prescripts require that tenders must be advertised and be registered on the CIDB i-Tender system.

F3.19.2 The employer must adopt a transparency model that incorporates the disclosure and accountability as transparency requirements in the procurement process.

F3.19.3 The transparency model must identify the criteria for selection of projects, project information template and the threshold value of the projects to be disclosed in the public domain at various intervals of delivery of infrastructure projects.

F3.19.4 The client must publish the information on a quarterly basis which contains the following information:

- ☐ Procurement planning process
- ☐ Procurement method and evaluation process
- ☐ Contract type
- ☐ Contract status
- ☐ Number of firms tendering
- ☐ Cost estimate
- ☐ Contract title
- ☐ Contract firm(s)
- ☐ Contract price
- ☐ Contract scope of work
- ☐ Contract start date and duration
- ☐ Contract evaluation reports

F3.19.5 The employer must establish a Consultative Forum which will conduct a random audit in the implementation of the transparency requirements in the procurement process.

F3.19.6 Consultative Forum must be an independent structure from the bid committees.

F3.19.7 The information must be published on the employer's website.

F 3.19.8 Records of such disclosed information must be retained for audit purposes.

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T1.2.2: TENDER DATA: APPLICABLE TO THIS TENDER

The conditions of tender are the Standard Conditions of Tender as contained in Annex F of the CIDB Standard for Uniformity in Construction Procurement (see www.cidb.org.za).

The Standard Conditions of Tender make several references to the Tender Data for details that apply specifically to this tender. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the standard conditions of tender. Each item of data given below is cross-referenced to the clause in the Standard Conditions of Tender to which it mainly applies.

Clause	Wording (Data)
F.1.1	The employer is the KING SABATA DALINDYEBO MUNICIPALITY.
F.1.2	The tender documents issued by the employer comprise: PART T1: TENDERING PROCEDURES T1.1: Tender Notice and Invitation to Tender T1.2: Tender Data PART T2: RETURNABLE DOCUMENTS T2.1: List of Returnable Documents T2.2: Returnable Schedules PART C1: AGREEMENTS AND CONTRACT DATA C1.1: Form of Offer and Acceptance C1.2: Contract Data C1.3: Form of Guarantee C1.4: Adjudicator's Agreement (if applicable) PART C2: PRICING DATA C2.1: Pricing Instructions C2.2: Bills of Quantities PART C3: SCOPE OF WORKS C3.1 Standard Specification C3.2 Project Specification C3.3 Particular Specification PART C4: SITE INFORMATION C4.1 Locality of Site
F.1.3	The Employer's agent is: Name: LEKO ENGINEERING CONSULTANTS Address: 30 Blakeway Road, Mthatha, 5099 Tell No: 047 531 0037 Email: bantu@leko.co.za
F.2.1	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

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	grading designation determined in accordance with the sum tendered for a 7CE or Higher class of construction work, are eligible to submit tenders.
	Joint ventures are eligible to submit tenders provided that: - every member of the joint venture is registered with the CIDB; - the lead partner has a contractor grading designation in the 7CE 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 7CE class of construction works.
F.2.7	The arrangements for a compulsory clarification meeting are: Not Applicable
F.2.12	No Alternative Offers will be accepted on this tender.
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	The Employer's address for delivery of tender offers and identification details to be shown on each tender offer package are: Location of tender box: 1st Floor, Munitata Building, next to Room 147 Identification details: OTP – UPGRADING OF MQANDULI INTERNAL ROADS PHASE 1 Closing Date: 23 December 2022 Closing Time: 11h00 Name of tenderer:
F.2.15.1	A two-envelope procedure will not be followed.
F.2.15.2	The closing date for tenders is 23 December 2022
F.2.16	The tender offer validity period is 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	The tenderer is required to submit the following certificates with his tender:
	- 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. - 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);
	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
	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).

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Witness 1

Witness 2

F3.4	The time and location for opening of the tender offers are in accordance with F.1.8 and F.1.10
F.3.11	The procedure for the evaluation of responsive tenders is Method 2. Scoring financial offer: The financial offer will be scored using Formula 2 (Option 1) where the value of W_1 is: 1) 80 where the financial value inclusive of VAT of one or more responsive tender offers equals up to R 50 000 000.
F.3.13.1	Tender offers will only be accepted on condition that: 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
	d) the tenderer has not: i) abused the Employer's Supply Chain Management System; or ii) failed to perform on any previous contract and has been given a written notice to this effect; and 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.
F.3.18	The number of paper copies of the signed contract to be provided by the Employer is ONE (1).
5.11.9	The functionality and maximum score in respect of each of the criteria are as follows: - Company Experience in Road Construction Works - Key Personnel Experience - Methodology Only Bidders, who score 70 points or more for functionality, will qualify for evaluation for POINTS and PREFERENCE. Functionality is evaluated out of 100 points, and the points are allocated for each Criteria listed above. The evaluation of Functionality and allocation of points for Functionality is explained further in next page.:

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

FUNCTIONALITY EVALUATION

SECTION 7: CRITERIA FOR EVALUATION OF PROPOSALS

PRE-QUALIFICATION REQUIREMENTS

NO.	CRITERIA	WEIGHTING
1.	Experience	40
2.	Expertise	40
3.	Methodology	20
GRAND TOTAL		100

FUNCTIONALITY ASSESSMENT – POINTS SCORING			
Functionality Category & Description			Points Allocation
QUALITY CRITERIA	SUB CRITERIA	Points allocation	Maximum Points to be scored
Experience			Total = 40
Past Experience of the company in similar projects completed by the Bidder with contactable references. Projects submitted; >R20m.....30pts List of projects must be submitted under “Returnable Documents”, Schedule 1G,	Confirmed Experience of firm in similar <u>Upgrading of Gravel Road to Surface Road</u> minimum of 4 projects (attach relevant appointment letters and completion certificates or reference letter – 7.5pts for each) 7.5 points can be scored for each similar project. (maximum of 30 points can be awarded)	7.5 points per Similar Project	30
	Additional 10 points can be scored for each confirmed similar Project executed in an <u>Urban Built-up area</u> completed in the past 5 years. (maximum of 10 points can be awarded)	5 points per Similar Project	10
Expertise			Total = 40
	Contracts Manager (CM) – Min Qualification (B Tech/BEng/BSc in Civil Engineering)		40
	CM has 7 years’ experience and has completed similar projects i.e. Road Asphalt Construction	20	
	If CM has 5 years’ experience and has completed similar projects i.e. Road Asphalt Construction	10	

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Experience of the key staff assessed using years of Experience post Academic Qualification. The CV and certified copies of Academic Qualifications of the proposed key staff must be submitted under “Returnable Documents”, Schedule 1E. The bidder must ensure that the minimum qualification and experience level of the actual key staff is as per the submitted CV.	If CM has 3 years’ experience and has completed similar projects i.e. Road Asphalt Construction	5	
	If CM has NO Min Qualification or has NOT completed similar projects in last 3 years, regardless of other experience i.e. Road Asphalt Construction	0	
	Site Manager (SM) - Min Qualification (National Diploma in Civil Engineering)		
	If SM has 7 years’ experience and has completed similar projects	10	
	If SM has 5 years’ experience and has completed similar projects	5	
	If SM has 3 years’ experience and has completed similar projects	2	
	If SM has NOT completed similar projects in last 3 years, regardless of other experience	0	
	Site Supervisor/Foreman (SS/F) - Min Qualification (Requisite Experience in surfaced roads construction)		
	If SS/F has 15 years’ experience and has completed similar projects	5	
	If SS/F has 10 years’ experience and has completed similar projects	4	
	If SS/F has 5 years’ experience and has completed similar projects	3	
	If SS/F has =<4 years’ experience and has completed similar projects	0	
	Health and Safety Officer (OHS) - Min Qualification (SAMTRAC)		
	If HSO has 10 years’ experience and has completed similar projects	5	
	If HSO has 7 years’ experience and has completed similar projects	4	
	If HSO has 5 years’ experience and has completed similar projects	3	
	If HSO has =<2 years’ experience and has completed similar projects	0	

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Methodology			Total = 20
Approach paper which responds to the proposed scope of work and outlines proposed approach / methodology, Preliminary Programme and Cashflow (Methodology) be submitted under "Returnable Documents", Schedule 1J, 2G and 2H respectively	Cash Flow projections	5	20
	Works Programme (Gantt-chart) for the project showing critical path	5	
	Detailed Methodology on how to execute works (Traffic accommodation, stormwater, earthworks & paving)	10	

Bidders should take note of the above Pre-qualification criteria.

- [a] All the necessary documentation must be submitted for the Evaluation Panel to make an informed evaluation. Evaluation of the Technical (Quality) Requirements will be based on the information provided by the bidder.
- [i] **Experience** - The experience annexure must be completed. Only list projects of a similar nature undertaken in Wellness Program
 - [ii] **Expertise** – The qualifications and capacity of the company/team to undertake the work must be provided for evaluation purposes.
 - [iii] **Methodology** – The bidder must clearly demonstrate how the contract will be managed, detailing a work plan with time frames and clearly explaining how the works will be implemented.
- [b] Bids that do not meet a minimum of **70** out of **100** in total for the criteria listed above will not be considered further.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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

1. DURATION OF CONTRACT

The project must be completed within sixteen (16) months from contract start date.

2. 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 15th of each month. No payments will be made to the contractor if it does not adhere to the EPWP requirements.

3. SERVICE LEVEL AGREEMENT

- 3.1 A service level agreement will be entered into with the successful bidder.
- 3.2 Negotiations in respect of the service level agreement must be finalised within fourteen (14) calendar days of receipt of the letter of acceptance by the successful bidder."
- 3.3 Service level agreement entered into with the successful bidder will capture the time frames for performance applying to this contract.
- 3.4 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.

4. PENALTIES

Penalty for the Project is R8050/day
Penalties will be administered in terms of the principles of the General Conditions of Contract **2015 Clause 4.12.3**.

5. PRICE

Contract Price Adjustment **is** applicable to this Tender.

6. 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.

7. BID COMPLIANCE

The Bid must comply with the following:

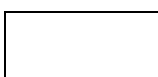
The VAT component of the price must be indicated separately.

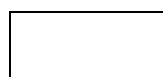
This bid or part thereof may not be ceded.

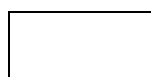
The bid documents submitted must be in the form and order as issued by the Municipality in order to assist the Municipality with the evaluation of same

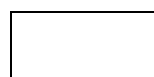
8. MEETINGS

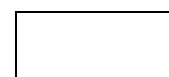
Progress meetings will be held once a month as agreed with the Engineer and Technical Meetings will be on an ongoing basis as and when is deemed necessary by the Engineer.

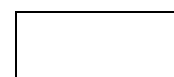

Contractor


Witness 1


Witness 2


Employer


Witness 1


Witness 2

9. PROGRAMME/PERFORMANCE

The Service provider will be required to submit a program of confirmed activities to be undertaken in the project which 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.

10. 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 King Sabata Dalindyebo Municipality reserves the right to disqualify a bid in the event that the bidder does not fully comply with this provision.

11. MANDATORY OBJECTION PERIOD

All administrative actions and decisions taken by the King Sabata Dalindyebo 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 King Sabata Dalindyebo Municipality in writing.

12. 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 twenty-eight (28) 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 King Sabata Dalindyebo Municipality.

The appointed contractor will not be allowed to increase the retention amount to 10% in lieu of a valid performance security.

13. 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.

14. EPWP

The contract should be in line with the EPWP program.

15. THIS BID DOCUMENT WILL ONLY BE ACCEPTED IF IT IS COMPLETED IN BLACK INK.


Contractor


Witness 1


Witness 2


Employer


Witness 1


Witness 2

PART T2: RETURNABLE DOCUMENTS

TABLE OF CONTENTS

T2.1	List of Returnable Documents	28
T2.2	Returnable Schedules	29

T2.1: LIST OF RETURNABLE DOCUMENTS

The following documents are to be completed and returned as they constitute the tender. Whilst many of the returnable 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 SCHEDULES REQUIRED FOR TENDER EVALUATION PURPOSES (included hereafter for completion)	
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
Schedule: 1F	Schedule of Plant and Equipment available for the Contract
Schedule: 1G	Schedule of Work satisfactorily carried out by the Tenderer
Schedule: 1H	Certificate of Attendance at Clarification Meeting
Schedule: 1I	Proposed Amendments and Qualifications
Schedule: 1J	Cash flow Projection Schedule
Schedule: 1K	Proof of CIDB Registration
Schedule: 1L	Proof COID registration
2. OTHER DOCUMENTS REQUIRED FOR TENDER EVALUATION PURPOSES	
Schedule: 2A	Centralized Supplier Database (CSD)
Schedule: 2B	Proof of Authority of Signatory
Schedule: 2C	Original Valid Tax Clearance Certificate
Schedule: 2D	Reference Letters
Schedule: 2E	Organogram
Schedule: 2F	Curriculum vitae and certified qualifications of key personnel
Schedule: 2G	Methodology
Schedule: 2H	Gantt Chart
Schedule: 2I	Proof of Plant Ownership
Schedule: 2J	JV Agreement
MBD FORMS	MBD4, MBD6, MBD7, MBD8 and MBD9

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

SCHEDULE 1A: COMPULSORY ENTERPRISE QUESTIONNAIRE

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

Section 1: Name of enterprise:

Section 2: VAT registration number, if any:

Section 3: CIDB registration number, if any:

Section 4: Particulars of sole proprietors and partners in partnerships

Name*	Identity number*	Personal income tax number*

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

Section 5: Particulars of companies and close corporations

Company registration number

Close corporation number

Tax reference number

Section 6: Record of service of the state

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

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

If any of the above boxes are marked, disclose the following: (insert separate page if necessary)

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



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

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

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

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

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

* Insert separate page if necessary

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

- i) authorizes the Employer to obtain a tax clearance certificate from the South African Revenue Services that my / our tax matters are in order;
- ii) confirms that neither the name of the enterprise or the name of any partner, manager, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears on the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004;
- iii) confirms that no partner, member, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears, has within the last five years been convicted of fraud or corruption;
- iv) confirms that I / we are not associated, linked or involved with any other tendering entities submitting tender offers and have no other relationship with any of the tenderers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest;
- v) confirms that the contents of this questionnaire are within my personal knowledge and are to the best of my belief both true and correct.

Signed _____ Date _____

Name _____ Position _____

Enterprise name _____

* The schedule should be used where tenders are subject to the local Government: Municipal Finance Management Act



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

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 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 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 authorize Mr/Ms _____
, authorized signatory of the company _____
, acting in the capacity of lead partner, to sign all documents in
connection with the tender offer for Contract _____ and any contract resulting from it on
our behalf.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

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
Contract

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

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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: <i>Must be CIDB Grade 4 or Higher.</i>		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.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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

Enterprise name



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

SCHEDULE 1E: PERSONNEL SCHEDULE

We confirm that the following Personnel will be made available for the full duration of the Project.
(Qualifications and CVs to be attached to Schedule 2F to score functionality points.)

Job Description	Highest Qualification	NQF Level 7 CETA certification for (LIC). (Yes/No)	Years of Relevant Experience post Qualification
Contracts Manager			
Site Agent			

Signed Date

Name Position

Enterprise name



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

**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

Enterprise name



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

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

The following is a statement of similar work successfully executed by myself/ourselves: Copies of Signed Copies of Reference Letters from Clients, Appointment Letters and Completion Certificates of Similar Projects must be attached onto Schedule 2D of Returnable Schedules.

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

Signed Date

Name Position

Enterprise name



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

SCHEDULE 1H: CERTIFICATE OF ATTENDANCE AT CLARIFICATION MEETING

This is to certify that

(Tenderer)

of(address)

.....
was represented by the person(s) named below at the compulsory meeting held for all tenderers at

..... (Location) on(date), starting at

We acknowledge that the purpose of the meeting was to acquaint ourselves with the site of the works and / or matters incidental to doing the work specified in the tender documents in order for us to take account of everything necessary when compiling our rates and prices included in the tender.

Particulars of person(s) attending the meeting:

Name Signature

Capacity

Name Signature

Capacity

Attendance of the above persons at the meeting is confirmed by the Employer's representative, namely:

Name Signature

Capacity Date & Time.



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

SCHEDULE 1I: PROPOSED AMENDMENTS AND QUALIFICATIONS

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

The Tenderer's attention is drawn to clause F.3.8 of the Standard Conditions of Tender referenced in the Tender Data regarding the employer's handling of material deviations and qualifications.

Page	Clause or Item	Proposal

Signed Date

Name Position

Enterprise name



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

SCHEDULE 1J: CASHFLOW PROJECTIONS	
--	--

MONTH	MONTHLY EXPENDITURE	CUMULITIVE EXPENDITURE
TOTAL		

If spaces provided are insufficient, please attach to this page cash flow projections.

Signed _____ Date _____

Name	Position
------	----------

Enterprise name

Witness 2

SCHEDULE 1K: CONSTRUCTION INDUSTRY DEVELOPMENT BOARD REGISTRATION

The Tenderer is to affix to this page: -

- Written proof of registration with the CIDB as a Category 7CE/6CEPE or higher Contractor.

Note:-

1. All subcontractors are required to be registered in the relevant categories for them to participate in this contract.
2. Tender to furnish the Contractor CIDB registration number and name of the tender. Tenders forming a joint venture should furnish details of their registration for each partner forming the joint venture in the space provided below:

NO.	NAME OF COMPANY	CIDB REGISTRATION NO.

i) Each member forming the Joint Venture must attach proof of registration with CIDB.

Signed Date

Name Position

Enterprise name



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

SCHEDULE 1L: COMPENSATION INJURIES DISEASE OCCUPATION ACT

The Tenderer is to affix to this page: -

- Written proof of registration with the Department of Labour for COID

NOTE:

ii) Proof of registration must be valid and active.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

SCHEDULE 2A: CENTRALIZED SUPPLIER DATABASE (CSD)

The Tenderer must attach to this page a copy of their recent CSD not older than a month.



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

SCHEDULE 2B: PROOF OF AUTHORITY OF SIGNATORY

The Tenderer must attach to this page an original letter of proof of Authority of Signatory.



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

SCHEDULE 2C: ORIGINAL VALID TAX CLEARANCE CERTIFICATE AND PIN

The Tenderer must attach to this page the Original Valid Tax Clearance Certificate and Pin.



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

SCHEDULE 2D: REFERENCE LETTER/COMPLETION CERTIFICATES OF SIMILAR PROJECTS
--

The Tenderer must attach to this page Reference Letters or Completion Certificates of Similar Projects in order score points on Functionality

--

Contractor

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Witness 1

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Witness 2

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Employer

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Witness 1

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Witness 2

SCHEDULE 2E: ORGANOGRAM

The Tenderer must attach to this page a copy Detailed Organogram of the Personnel that will be made available for the full duration of the project in order to score points for Functionality under Expertise.



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

SCHEDULE 2F: QUALIFICATION AND CVs OF KEY PERSONNEL
--

The Tenderer must attach to this page a certificated copy of Qualifications and CVs of the Personnel listed under Schedule 1G in order to score points for Functionality under Expertise.



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

SCHEDULE 2G: METHODOLOGY

The Tenderer must attach to this page a Proposed Implementation Plan and Methodology Statement in order to score points for Functionality under Methodology.



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

SCHEDULE 2H: GANTT CHART

The Tenderer must attach to this page an A3 size copy of the Gantt Chart on MS Projects in order to score points for Functionality under Methodology.

--

Contractor

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Witness 1

--

Witness 2

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Employer

--

Witness 1

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Witness 2

SCHEDULE 2I: PROOF OF PLANT OWNERSHIP

The Tenderer must attach to this page copies of Proof of Ownership or Signed Lease Agreements for the Plant and Equipment to be used on this project in order to score points for Functionality.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

SCHEDULE 2J: JOINT VENTURE AGREEMENT

MBD 1

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

PART A INVITATION TO BID

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE (NAME OF MUNICIPALITY/ MUNICIPAL ENTITY)					
BID NUMBER:		CLOSING DATE:		CLOSING TIME:	
DESCRIPTION					
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)					
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			CONTACT PERSON		
CONTACT PERSON			TELEPHONE NUMBER		
TELEPHONE NUMBER			FACSIMILE NUMBER		
FACSIMILE NUMBER			E-MAIL ADDRESS		
E-MAIL ADDRESS					

CONT.....

MBD 1

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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:

.....



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

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.

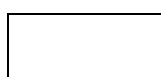
ITEM NO.	QUANTITY	DESCRIPTION	BID PRICE IN RSA CURRENCY **(ALL APPLICABLE TAXES INCLUDED)
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BIDDERS MUST DELETE WHIEVER IS NOT APLICABLE e.g YES/NO

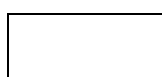
- Required by:
- At:
.....
- Brand and Model
- Country of Origin
- Does the offer comply with the specification(s)? *YES/NO
- If not to specification, indicate deviation(s)
- Period required for delivery
*Delivery: Firm/Not firm
- Delivery basis

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

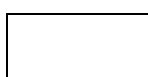
** "all applicable taxes" includes value- added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levie



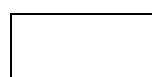
Contractor



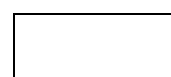
Witness 1



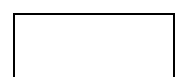
Witness 2



Employer



Witness 1



Witness 2

MBD 3.2

**PRICING SCHEDULE – NON-FIRM PRICES
(PURCHASES)**

NOTE: PRICE ADJUSTMENTS WILL BE ALLOWED AT THE PERIODS AND TIMES SPECIFIED IN THE BIDDING DOCUMENTS.

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 11:00 on.....

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

ITEM NO.	QUANTITY	DESCRIPTION	BID PRICE IN RSA CURRENCY (INCLUDING VAT)
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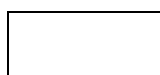
- Required by:
 - At:
 - Brand and model
 - Country of origin
 - Does offer comply with specification? *YES/NO
 - If not to specification, indicate deviation(s)
 - Period required for delivery
 - Delivery: *Firm/not firm
- *Delete if not applicable

Any enquiries regarding the bidding procedure may be directed to –
(INSERT NAME AND ADDRESS OF MUNICIPALITY / ENTITY)

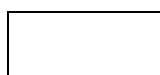
Tel:

Or for technical information –
(INSERT NAME AND TELEPHONE NUMBER OF CONTACT PERSON)

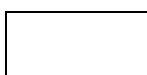
Tel:



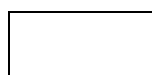
Contractor



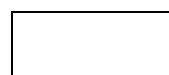
Witness 1



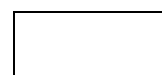
Witness 2



Employer



Witness 1



Witness 2

PRICE ADJUSTMENTS

A NON-FIRM PRICES SUBJECT TO ESCALATION

1. IN CASES OF PERIOD CONTRACTS, NON FIRM PRICES WILL BE ADJUSTED (LOADED) WITH THE ASSESSED CONTRACT PRICE ADJUSTMENTS IMPLICIT IN NON FIRM PRICES WHEN CALCULATING THE COMPARATIVE PRICES
2. IN THIS CATEGORY PRICE ESCALATIONS WILL ONLY BE CONSIDERED IN TERMS OF THE FOLLOWING FORMULA:

$$Pa = (1 - V)Pt \left(D1 \frac{R1t}{R1o} + D2 \frac{R2t}{R2o} + D3 \frac{R3t}{R3o} + D4 \frac{D4t}{D4o} \right) + VPt$$

Where:

- Pa = The new escalated price to be calculated.
 (1-V)Pt = 85% of the original bid price. **Note that Pt must always be the original bid price and not an escalated price.**
 D1, D2.. = Each factor of the bid price eg. labour, transport, clothing, footwear, etc. The total of the various factors D1,D2...etc. must add up to 100%.
 R1t, R2t..... = Index figure obtained from new index (depends on the number of factors used).
 R1o, R2o = Index figure at time of bidding.
 VPt = 15% of the original bid price. This portion of the bid price remains firm i.e. it is not subject to any price escalations.

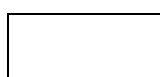
3. The following index/indices must be used to calculate your bid price:

Index..... Dated..... Index..... Dated..... Index..... Dated.....
 Index..... Dated..... Index..... Dated..... Index..... Dated.....

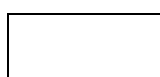
4. FURNISH A BREAKDOWN OF YOUR PRICE IN TERMS OF ABOVE-MENTIONED FORMULA. THE TOTAL OF THE VARIOUS FACTORS MUST ADD UP TO 100%.

FACTOR (D1, D2 etc. eg. Labour, transport etc.)	PERCENTAGE OF BID PRICE

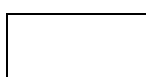
MBD3.2



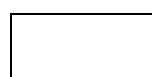
Contractor



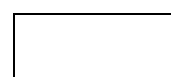
Witness 1



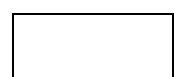
Witness 2



Employer



Witness 1



Witness 2

MBD 3.2

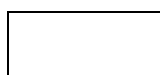
B PRICES SUBJECT TO RATE OF EXCHANGE VARIATIONS

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

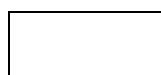
PARTICULARS OF FINANCIAL INSTITUTION	ITEM NO	PRICE	CURRENCY	RATE	PORTION OF PRICE SUBJECT TO ROE	AMOUNT IN FOREIGN CURRENCY REMITTED ABROAD
				ZAR=		
				ZAR=		
				ZAR=		
				ZAR=		
				ZAR=		
				ZAR=		

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

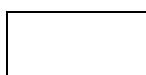
AVERAGE MONTHLY EXCHANGE RATES FOR THE PERIOD:	DATE DOCUMENTATION MUST BE SUBMITTED TO THIS OFFICE	DATE FROM WHICH NEW CALCULATED PRICES WILL BECOME EFFECTIVE	DATE UNTIL WHICH NEW CALCULATED PRICE WILL BE EFFECTIVE



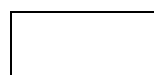
Contractor



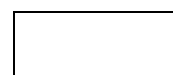
Witness 1



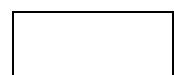
Witness 2



Employer



Witness 1



Witness 2

MBD 4

BIDDERS MUST CHOOSE THE APPLICABLE ANSWER

DECLARATION OF INTEREST

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

3.1 Full Name:

3.2 Identity Number:

3.3 Company Registration Number:

3.4 Tax Reference Number:

3.5 VAT Registration Number:

3.6 Are you presently in the service of the state^{2*} **YES / NO**

3.6.1 If so, furnish particulars.

.....
.....

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

3.7.1 If so, furnish particulars.

.....

3.8 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**

1

^{2*} MSCM 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.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

3.8.1 If so, furnish particulars.

.....
.....

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

3.9.1 If so, furnish particulars

.....
.....

3.10 Are any of the company's directors, managers, principal shareholders or stakeholders in service of the state?
YES / NO

3.10.1 If so, furnish particulars.

.....
.....

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

3.11.1 If so, furnish particulars.

.....
.....

CERTIFICATION

I, THE UNDERSIGNED (NAME)

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

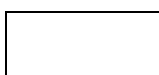
I ACCEPT THAT THE STATE MAY ACT AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....
Signature

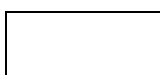
.....
Date

.....
Position

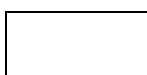
.....
Name of Bidder



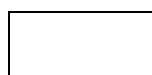
Contractor



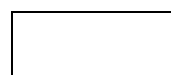
Witness 1



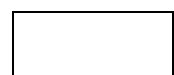
Witness 2



Employer



Witness 1



Witness 2

MBD 5

DECLARATION FOR PROCUREMENT ABOVE R10 MILLION (ALL APPLICABLE TAXES INCLUDED)

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

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

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

***YES / NO**

.....

.....

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

***YES / NO**

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

2.2 If yes, provide particulars.

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* Delete if not applicable

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

2

- 3 Has any contract been awarded to you by an organ of state during the past five years, including particulars of any material non-compliance or dispute concerning the execution of such contract? ***YES / NO**

3.1 If yes, furnish particulars

.....

.....

4. Will any portion of goods or services be sourced from outside the Republic, and, if so, what portion and whether any portion of payment from the municipality / municipal entity is expected to be transferred out of the Republic? ***YES / NO**

4.1 If yes, furnish particulars

.....

.....

CERTIFICATION

I, THE UNDERSIGNED (NAME)

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

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

FALSE.

.....
Signature

.....
Date

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MBD 6.1

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.

1. GENERAL CONDITIONS

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

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

1.2

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

1.3 Points for this bid shall be awarded for:

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

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

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

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

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

2. DEFINITIONS

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

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Contractor

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Witness 1

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Witness 2

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Employer

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Witness 1

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Witness 2

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

3. POINTS AWARDED FOR PRICE

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

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

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

Where

P_s = Points scored for price of bid under consideration
 P_t = Price of bid under consideration
 $P_{\min}$ = Price of lowest acceptable bid

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

- 4.1 In terms of Regulation 6 (2) and 7 (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

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

5. BID DECLARATION

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

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

6.1 B-BBEE Status Level of Contributor: . =(maximum of 10 or 20 points)

(Points claimed in respect of paragraph 7.1 must be in accordance with the table reflected in paragraph 4.1 and must be substantiated by relevant proof of B-BBEE status level of contributor.

7. SUB-CONTRACTING

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

(Tick applicable box)

YE S		NO	
---------	--	----	--

7.1.1 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 or QSE

(Tick applicable box)

YE S		NO	
---------	--	----	--

- v) Specify, by ticking the appropriate box, if subcontracting with an enterprise in terms of Preferential Procurement Regulations,2017:

Designated Group: An EME or QSE which is at last 51% owned by:	EME √	QSE √
Black people		
Black people who are youth		
Black people who are women		
Black people with disabilities		
Black people living in rural or underdeveloped areas or townships		
Cooperative owned by black people		
Black people who are military veterans		
OR		
Any EME		
Any QSE		

8. DECLARATION WITH REGARD TO COMPANY/FIRM

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

8.2 VAT registration number:.....

8.3 Company registration number:.....

8.4 TYPE OF COMPANY/ FIRM

- ☐ Partnership/Joint Venture / Consortium
 - ☐ One person business/sole propriety
 - ☐ Close corporation
 - ☐ Company
 - ☐ (Pty) Limited
- [TICK APPLICABLE BOX]

8.5 DESCRIBE PRINCIPAL BUSINESS ACTIVITIES

.....

--

Contractor

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Witness 1

--

Witness 2

--

Employer

--

Witness 1

--

Witness 2

.....
.....

8.6 COMPANY CLASSIFICATION

- ☐ Manufacturer
☐ Supplier
☐ Professional service provider
☐ Other service providers, e.g., transporter, etc.
[TICK APPLICABLE BOX]

8.7 MUNICIPAL INFORMATION

Municipality where business is situated:

Registered Account Number:

Stand Number:

8.8 Total number of years the company/firm has been in business:

8.9 I/we, the undersigned, who is / are duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBE status level of contributor indicated in paragraphs 1.4 and 6.1 of the foregoing certificates, qualifies the company/ firm for the preference(s) shown and I / we acknowledge that:

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

WITNESSES

.....
.....

.....
SIGNATURE(S) OF BIDDERS(S)

DATE:

ADDRESS

.....
.....

OT

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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 fulfilment 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

.....

.....

DATE:



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

MBD 7.2

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

.....

.....

DATE:

Contractor

Witness 1

Witness 2

Employer

Witness 1

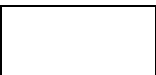
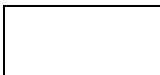
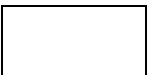
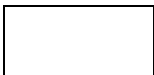
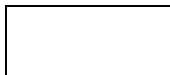
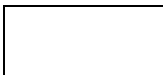
Witness 2

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. wilfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years; or
 - d. been listed in the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004).
- 4 In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

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

					
Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

4.3	Was the bidder or any of its directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years?	Yes ☐	No ☐
4.3.1	If so, furnish particulars:		
Item	Question	Yes	No
4.4	Is the bidder or any of its directors owe any municipal rates and taxes or municipal charges to the municipality / municipal entity, or to any other municipality / municipal entity, that is in arrears for more than three months?	Yes ☐	No ☐
4.4.1	If so, furnish particulars:		
4.5	Was any contract between the bidder and the municipality / municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes ☐	No ☐
4.7.1	If so, furnish particulars:		

CERTIFICATION

I, THE UNDERSIGNED (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

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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.

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.

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



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

PART C1: AGREEMENT AND CONTRACT DATA

TABLE OF CONTENTS

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C1.4	Occupational Health and Safety Agreement	80

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:

OTP-02 UPGRADING OF MQANDULI INTERNAL ROADS PHASE 1

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.

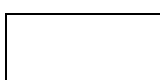
Signature(s)

Name(s)

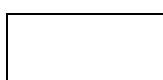
Capacity

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

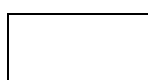
Name and signature
of witness Date



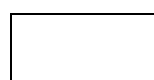
Contractor



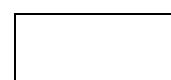
Witness 1



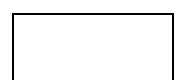
Witness 2



Employer



Witness 1



Witness 2

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.³

Signature(s)		
Name(s)		
Capacity		
for the Employer		
	(Name and address of organization)	
Name and signature		
of witness		Date

³ 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.

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Contractor

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Witness 1

--

Witness 2

--

Employer

--

Witness 1

--

Witness 2

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.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C1.2: CONTRACT DATA

C1.2.1 CONDITIONS OF CONTRACT

C1.2.2 PART A: CONTRACT DATA PROVIDED BY THE EMPLOYER

C1.2.3 PART B: CONTRACT DATA PROVIDED BY THE CONTRACTOR

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C1.2.1 CONDITIONS OF CONTRACT

GENERAL CONDITIONS OF CONTRACT

This Contract will be based on the "General Conditions of Contract for Construction Works - Third Edition, 2015", issued by the South African Institution of Civil Engineering (Short title: "General Conditions of Contract Third Edition, 2015") and can be obtained from:

SAICE Waterfall Park Howick Gardens
Vorna Valley Half way House
Becker Street
MIDRAND
1685
Gauteng Province
Tel: (011) 805-5947/8
Fax: (011) 805-5971.

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

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

SPECIAL CONDITIONS OF CONTRACT

1. GENERAL

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

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

VARIATIONS TO THE GENERAL CONDITIONS OF CONTRACT ARE: Clause

1.1.1.5 Add the following to the Clause after the last sentence.

"The contract shall come into effect when the employer issues a letter to the contractor stating that his tender has been accepted / the contract has been awarded to the contractor, or upon receipt of the signed contract document by the contractor from the employer."



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

5.3.3 Add the following to Clause 5.3.3 after the last sentence:

"The Contractor shall not commence with the Works until they have an approved project specific health and safety plan in terms of the Occupational Health and Safety Act 1993: Construction Regulations 2014 and complied with the initial requirements thereof."

5.14.1 Practical Completion

Replace the last sentence of the second paragraph: "*Should the Engineer ... on the Due Completion Date.*" with the following:

"Should the Engineer not issue such a list within 14 days, Practical Completion shall be deemed to have been achieved on the said fourteenth day."

5.14.2 Issue of Certificate of Practical Completion

Replace "*the Engineer*" in the second line with the following:

", the Contractor shall notify the Engineer, who shall inspect the works and the Engineer"

5.14.4 Certificate of Completion

Replace "*the Engineer*" in the second line of the first paragraph with:

", the Contractor shall notify the Engineer, who shall inspect the works and the Engineer"

6.10.4 Payments:

Replace the phrase "*The employer shall pay the amount due to the Contractor within 28 days of receipt by the Employer of the payment certificate signed by the Engineer*" with the following phrase "*The Employer will make payment to the Contractor within 31 calender days from the date of stamp of Central Registry when any payment is submitted.*"

6.11 Variations exceeding 15% Replace the "15%" with "20%"

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C1.2.2: PART A: CONTRACT DATA PROVIDED BY THE EMPLOYER

CONDITIONS OF CONTRACT

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

CONTRACT SPECIFIC DATA

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

CONTRACT SPECIFIC DATA BY THE EMPLOYER

Clause	Description
1.1.1.13	The Defects Liability Period is Twelve (12) months (<i>measured from the date of the Certificate of Completion</i>).
1.1.1.14	The time for achieving Due Completion is Sixteen (16) months (<i>measured from the Commencement Date</i>).
1.1.1.15	The name of the Employer is: King Sabata Dalindyebo Municipality
1.1.1.16	The Engineer is: Leko Engineering Consultants represented by an Employee duly authorized thereto in writing.
1.1.1.26	The Pricing Strategy is: Re-measurement Contract
1.2.1.2	The Engineer's address for receipt of communications and notices is: Leko Engineering Consultants 30 Blakeway Road Mthatha 5099 Tel: 047 531 0037 Email: bantu@leko.co.za
3.3.3.1	The Engineer is required to obtain the specific approval of the Employer before executing any of the following functions or duties: i. Nominating the Engineer's Representative in terms of Cl. 3.2.1 ii. Delegation of Engineer's authority in terms of Cl. 3.2.4 iii. The issuing of instructions for dealing with fossils and the like in terms of Cl. 4.7.1 iv. Granting permission to work during non-working times in terms of Cl. 5.8.1 v. The issuing of further drawings or instructions in terms of Cl. 5.9.1 vi. Suspend the progress of the works in terms of Cl. 5.11.2 vii. The issuing of an instruction to accelerate progress in terms of Cl. 5.7.3 viii. Extension of Time for Practical Completion in terms of Cl. 5.12 ix. The reduction of a penalty for delay in terms of Cl. 5.13.2



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

	x. Variations in terms of Cl. 6.3 xi. The issuing of a variation order in terms of Cl. 6.3.2 xii. The Engineer requires the Departmental approval in order to authorise any expenditure in excess of the tender Sum as per Cl. 6.4. xiii. Issuing of instructions to carry out work on a daywork basis in terms of Cl. 6.5.1 xiv. Expenditure of Contingency Allowance in terms of Cl. 6.6.3 xv. The determination of additional or reduced costs arising from changes in legislation in terms of Cl. 6.8.4 xvi. The agreeing of the adjustment of the sums for general items in terms of Cl. 6.11.1.3 xvii. Authorizing the Contractor to repair and make good, excepted risks in terms of Cl. 8.2.2 xviii. The Engineer shall rule on any claim lodged by the Contractor, but the final approval shall be upon written approval from the Client in accordance with the standard documentation of processing claims in terms of Cl. 10.1.5. xix. The giving of a ruling on a contractor's claim in terms of Cl. 10.2.3 xx. The agreeing of an extension to the 28 period in terms of Cl. 10.2.3 xxi. The inclusion of credits in the next payment certificate in terms of Cl. 10.2.3
5.3.1	The documentation required before commencement with Works' execution are: • Health and Safety Plan (Refer to Clause 4.3) • Initial programme and cashflow (Refer to Clause 5.6) • Security (Refer to Clause 6.2) • Insurance (Refer to Clause 8.6)
5.3.2	The time to submit the documentation required before commencement with Works' execution is fourteen (14) days after appointment
5.4.2	The access and possession of Site shall not be exclusive to the Contractor but as set out in the Site Information
5.8.1	The non-working days are Sundays. The special non-working days are: • Public holidays and voting days if published prior to the tender closing date. • The year end break commencing and ending on dates as specified by SAFCEC
5.13.1	The penalty for failing to complete the works on the Due Completion Date is 0.035% of the Total Tender Sum per Day.
5.16.3	The latent defect period is ten (10) years
6.5.1.2.3:	The percentage allowance to cover overhead charges is max. 15%
6.8.2:	The value of the certificates issued shall be adjusted in accordance with the Contract Price Adjustment Schedule with the following values: $\text{Contract Price Adjustment Factor} = (1 - x) \left[\frac{aL_t}{L_o} + \frac{bP_t}{P_o} + \frac{cM_t}{M_o} + \frac{dF_t}{F_o} - 1 \right]$ rounded off to the fourth decimal place. Coefficients for calculating Contract price Adjustment Factor shall be: Value of x is 0.10 a = 0.20 b = 0.35 c = 0.35 d = 0.10

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

	L is the "Labour Index" and shall be the "Consumer Price Index – for Eastern Cape" In Release P 0141 Table A. The base month is: November 2022
6.8.3:	Price adjustments for variations in the costs of special materials are allowed.
6.10.1.5	The percentage advance on materials not yet built into the Permanent Works is: 80% on material paid by the contractor at the purchase cost but not more than 80% of the tender amount as per clause 6.10.2.
6.10.3	The Retention Money deductible shall be 10% of the value of the Works. The Limit of Retention Money shall be 5% of the Contract Sum
8.6.1.1.2	The value of Plant and materials supplied by the Employer to be included in the insurance sum is R Nil.
8.6.1.1.3	The amount to cover professional fees for repairing damage and loss to be included in the insurance sum is 10%.
8.6.1.3	The limit of liability insurance is R 5 000 000 for any single claim, the number of claims to be unlimited during construction and Defects Liability Period.
10.5.3	The number of Adjudication Board Members to be appointed is one (1).

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C1.2.3 PART B: CONTRACT DATA PROVIDED BY THE CONTRACTOR

PART 2: DATA PROVIDED BY THE CONTRACTOR.

Clause	Description
1.1.9	The Contractor is: [Enter the Legal name of the Contractor].
1.2.1.2	The Contractor's address for receipt of communications and notices is: Physical: Postal: E-mail:..... Telephone:
6.2.1	The Security to be provided by the Contractor shall be Retention withheld on the payment certificates as per Clause 6.10.3 and a Performance guarantee of 10% of the Contract Sum
6.5.1.2.3	The percentage allowance on the net cost of materials actually used in the completed work is 20%.

SIGNED ON BEHALF OF CONTRACTOR:

.....

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C1.3: FORM OF GUARANTEE

Contract No.

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

GUARANTOR DETAILS AND DEFINITIONS

“Guarantor” means:

Physical address:

“Employer” means:

“Contractor” means:

“Engineer” means:

“Works” means:

“Site” means:

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

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

Amount in words:

“Guaranteed Sum” means: The maximum aggregate amount of R.....

Amount in words:

“Expiry Date” means:

Contractor and/or Employer provided such instruction is received prior to the Expiry Date as indicated here.

CONTRACT DETAILS

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

1. VARIABLE PERFORMANCE GUARANTEE

1.1 Where a Variable Performance Guarantee has been selected, the Guarantor’s Liability shall be limited during the following periods to diminishing amounts of the Guaranteed sum as follows:

1.1.1 From including the date of signing the Guarantee up to and including the date of the interim payment certificate certifying, for the first time, more than 50% of the Contract Sum: R.....

(Amount in words.....)

1.1.2 The Employer’s Agent and/or the Employer shall advise the Guarantor in the writing of the date on which the interim payment certificate certifying, for the first time, more than 50% of the Contract Sum, has been issued and the date on which the certificate of completion of the works, whichever occurs first:

R.....

(Amount in words.....)

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

- 1.1 The Employer's Agent and/or the Employer shall advise the Guarantor in writing the date on which the interim payment certificate certifying, for the first time, more than 50% of the Contract Sum, has been issued and the date on which the Certificate of Completion of the works has been issued.

2. FIXED PERFORMANCE GUARANTEE

- 2.1 Where a fixed Performance Guarantee has been selected, the Guarantor's liability shall be limited to the amount of the Guaranteed Sum.
- 2.2 The Guarantor's period of liability shall be from and including the date on which the performance Guarantee is signed, up to and including the Expiry Date, or the date of issue by the Employer's Agent of the Certificate of Completion of the Works, or the date of payment in full of the Guaranteed Sum, whichever occurs first.
- 2.3 The Employer's Agent and/or the Employer shall advise the Guarantor in writing of the date on which the Certificate of Completion of the Works has been issued.

3. CONDITIONS APPLICATION TO VARIABLE AND FIXED PERFORMANCE GUARANTEE

- 3.1 The Guarantor hereby acknowledges that:
- 3.1.1 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 a n accessory obligation or any intention whatsoever to create a surety ship;
- 3.1.2 Its obligation under this Performance Guarantee is restricted to the payment of money.
- 3.2 Subject to the Guarantor's maximum liability referred to in 1.1 or 2.1, the Guarantor hereby undertakes to pay the Employer the sum certified upon receipt of the documents identified in 3.2.1 to 3.2.3:
- 3.2.1 A copy of 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 3.2.2;
- 3.2.2 A first written demand issued by the Employer to the Guarantor at the Guarantor's physical address with a copy to the Contractor stating that a period of seven (7) days has elapsed since the first written demand in terms of 3.2.1 and sum certified has still not been paid;
- 3.2.3 A copy of the aforesaid payment certificate which entitles the Employer to receive payment in terms of the Contract of the sum certified in 3.2.
- 3.3 Subject to the Guarantor's maximum liability referred to in 1.1 or 2.1, the Guarantor undertakes to pay to the Employer to 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:
- 3.3.1 the Contract has been terminated due to the Contractor's default and that this Performance Guarantee is called up in terms of 3.3; or
- 3.3.2 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 3.3; and
- 3.3.3 the aforesaid written demand is accompanied by a copy of the notice of termination and/or the provisional/final sequestration and/or the provisional liquidation court order.

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Contractor

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Witness 1

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Witness 2

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Employer

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Witness 1

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Witness 2

- 3.4 It is recorded that the aggregate amount of payments required to be made by the Guarantor in terms of 3.2 and 3.3 shall not exceed the Guarantor's maximum liability in terms of 1.1 or 2.1.
- 3.5 Where the Guarantor has made payment in terms of 3.3, 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.
- 3.6 Payment by the Guarantor in terms of 3.2 or 3.3 shall be made within seven (7) calendar days upon receipt of the first written demand to the Guarantor.
- 3.7 Payment by the Guarantor in terms of 3.3 will only be made against the return of the original Performance Guarantee by the Employer.
- 3.8 The Employer shall have the absolute right to arrange his affairs with the Contractor in any manner which the Employer may deem fit and the Guarantor shall not have the right to claim his release from this Performance Guarantee on account of any conduct alleged to be prejudicial to the Guarantor.
- 3.9 The Guarantor chooses the physical address as stated above for the service of all notices for all purpose in connection herewith.
- 3.10 This Performance Guarantee is neither negotiable nor transferable and shall expire in terms of 1.1.2 or 2.2, 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.
- 3.11 This Performance Guarantee, with the demand notices in terms of 3.2 or 3.3, shall be regarded as a liquid document for the purposes of obtaining a court order.
- 3.12 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).....

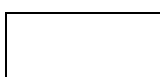
Capacity

Guarantor's signatory (2).....

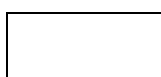
Capacity

Witness signatory (1).....

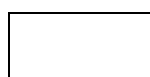
Witness signatory (2).....



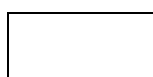
Contractor



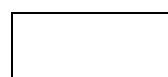
Witness 1



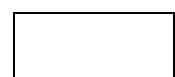
Witness 2



Employer



Witness 1



Witness 2

C1.4 : OCCUPATIONAL HEALTH AND SAFETY AGREEMENT

C1.1.3 AGREEMENT IN TERMS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT NO. 85 OF 1993)

THIS AGREEMENT made at on this the day of in the year..... between KSD

Local Municipality, (hereinafter called "the Employer") on the one part, herein represented by

.....in his capacity as

and delegate of the Employer and

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

..... in his capacity as

WHEREAS the Employer is desirous that certain works be constructed, viz

..... and has accepted a tender by the Principal Contractor for the construction, completion & maintenance of such works and whereas the Employer and the Principal Contractor have agreed to certain arrangements and procedures to be followed in order to ensure compliance by the Principal Contractor with the provisions of the Occupational Health and Safety Act 1993 (Act 85 of 1993 and the Construction Regulation, 2014);

NOW THEREFORE THIS AGREEMENT WITNESSES AS FOLLOWS:

1. The Principal Contractor shall execute the work in accordance with the contract documents pertaining to this contract.
2. This Agreement shall hold good from its commencement date, which shall be the date of a written notice from the employer or engineer requiring him to commence the execution of the Works, to either:
 - a) the date of the final approval certificate issued in terms of Clause 5.16 of the General Conditions of Contract for Construction Works 2015 (3rd Edition) as issued by the South African Institution of Civil Engineering (hereinafter referred to as "the GCC 2015"), as contained in the contract documents pertaining to this contract, or
 - b) the date of termination of the contract in terms of Clause 9 of the GCC 2015.
3. The Principal Contractor declares himself to be conversant with the following: -
 - a) All the requirements, regulations and standards of the Occupational Health and Safety Act (Act 85 of 1993), hereinafter referred to as "The Act", together with its amendments and with special reference to the following Sections of The Act.
 - i) Section 8: General duties of employers to their employees.
 - ii) Section 9: General duties of employers and self-employed persons to persons other than employees.



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

- iii) Section 37: Acts or omissions by employees or mandatories and
 - iv) Sub-section 37(2) relating to the purpose and meaning of this Agreement.
 - v) Construction Regulations 2014, and other safety regulations, as applicable.
 - b) The procedures and safety rules of the employer as pertaining to the Principal Contractor and to all his sub-contractors.
4. The Principal Contractor is responsible for the compliance with the Act by all his sub-contractors, whether or not selected and/or approved by the employer.
5. The Principal Contractor warrants that all his and his sub-contractors' employees are covered in terms of the Compensation for Occupational Injuries and Diseases Act 1993 which cover shall remain in force whilst any such employees are present on site. A letter of good standing from the Compensation Commissioner to this effect must be produced to the Employer upon signature of the agreement.
6. The Principal Contractor undertakes to ensure that he and/or his sub-contractors and/or their respective employees will at all times comply with the following conditions:
- a) The Principal Contractor shall assume the responsibility in terms of Section 16.1 of the Occupational Health and Safety Act. The Principal Contractor shall not delegate any duty in terms of Section 16.2 of this Act without the prior written approval of the Employer. If the Principal Contractor obtains such approval and delegates any duty in terms of section 16.2 a copy of such written delegation shall immediately be forwarded to the Employer.
 - b) All incidents referred to in the Occupational Health and Safety Act shall be reported by the Principal Contractor to the Department of Labour as well as to the Employer. The Employer will further be provided with copies of all written documentation relating to any incident.
 - c) The Employer hereby obtains an interest in the issue of any formal enquiry conducted in terms of section 32 of the Occupational Health and Safety Act into any incident involving the Principal Contractor and/or his employees and/or his sub-contractors.

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

SIGNED FOR AND ON BEHALF OF THE EMPLOYER:

WITNESS:

1. 2.
NAME (Print): NAME (Print):

SIGNED FOR AND ON BEHALF OF THE PRINCIPAL CONTRACTOR:

WITNESS:

1. 2.
NAME (Print): NAME (Print):

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

PRO-FORMA
ADJUDICATION BOARD MEMBER AGREEMENT

Please note that words in italics within brackets are items which should be stated

This Agreement is entered into between:

Adjudication Board Member: *(Name, physical address, postal address, e-mail address, fax number, telephone number and mobile number)*.

Contractor: *(Name, physical address, postal address, e-mail address, fax number, telephone number and mobile number)*.

Employer: *(Name, physical address, postal address, e-mail address, fax number, telephone number and mobile number)*.

The Contractor and the Employer will hereinafter be collectively referred to as the Parties.

The Parties entered into a Contract for *(name of project)* which provides that a dispute under or in connection with the General Conditions of Contract for Construction Works, Third Edition, 2015, must be referred to *(ad-hoc adjudication/standing adjudication)*.

The undersigned natural person has been appointed to serve as Adjudication Board Member and together with the undersigned Parties agree as follows:

1. The Adjudication Board Member accepts to perform his duties in accordance with the terms of the Contract, the General Conditions of Contract for Construction Works Adjudication Board Rules and this Agreement.
2. The Adjudicator undertakes to remain independent and impartial of the Contractor, Employer and Engineer for the duration of the Adjudication Board proceedings.
3. The Adjudication Board Member agrees to serve for the Adjudication Board proceedings.
4. The Parties may at any time, without cause and with immediate effect, jointly terminate this Agreement
5. Unless the Parties agree, the Adjudication Board Member shall not act as arbitrator or representative of either Party in any subsequent proceedings between the Parties under the Contract. No Party may call the Adjudication Board Member as a witness in any such subsequent proceedings.
6. The standing Adjudication Board's duties shall end upon the Adjudication Board Member(s) receiving notice from the Parties of their joint decision to disband the Adjudication Board.
7. The Adjudication Board Member shall pay in respect of time spent upon or in connection with the adjudication including time spent travelling:
 - a. A monthly retainer of *(amount)* for *(number)* of months, and/or
 - b. A daily fee of *(amount)* based on a *(number)* hour day, and/or
 - c. A hourly fee of *(amount)*, and/or
 - d. A non-recurrent appointment fee of *(amount)* which shall be accounted for in the final sums payable.
8. The Adjudication Board Member's expenses incurred in adjudication work shall be reimbursed at cost.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Upon submission of an invoice for fees and expenses to the Parties, the (*Contractor/Employer**) shall pay the full amount within 28 days of receipt of the invoice and he shall be reimbursed by the other party by half the amount so that the fees and expenses are borne equally by the Parties. Late payment of such invoice shall attract interest at prime plus 3 % points compounded monthly at the prime rate charged by Adjudication Board Member's bank.

This Agreement is entered into by:

Contractor's signature:.....

Contractor's name:.....

Place:.....

Date:

Employer's signature:

Employer's name:

Place:.....

Date:

Adjudication Board Member's

signature:

Adjudication Board Member's name:

Place:.....

Date:

**Delete the inapplicable party*

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

PART C2: PRICING DATA

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Contractor

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Witness 2

Employer

Witness 1

Witness 2

C2.1 : PRICING INSTRUCTIONS

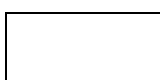
1. Measurement and payment shall be in accordance with the relevant provisions of the COLTO Standard Specification for Road and Bridge Works for State Authorities (1998 edition) as amended in the Scope of Works.
2. The units of measurement described in these Bills of Quantities are metric units. Abbreviations used in the Bills of Quantities are as follows:

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

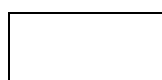
3. For the purpose of these Bills of Quantities, the following words shall have the meanings hereby assigned to them:

Unit:	The unit of measurement for each item of work as defined in the COLTO Standard Specification for Road and Bridge Works for State Authorities (1998 edition).
Quantity:	The number of units of work for each item.
Rate:	The agreed payment per unit of measurement.
Amount:	The product of the quantity and the agreed rate for an item.
Lump sum:	An agreed amount for an item, the extent of which is described in the Bills of Quantities but the quantity of work of which is not measured in any units.

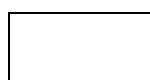
4. Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance is made for waste.
5. It will be assumed that prices included in the bills of quantities are based on Acts, Ordinances, Regulations, By-laws, International Standards and National Standards that were published 28 days before the closing date for tenders. (Refer to www.sabs.co.za or www.iso.org for information on standards) may have to be carried out.
6. The prices and rates in these Bills of Quantities are fully inclusive prices for the work described under the items. Such prices and rates cover all costs and expenses that may be required in and for the execution of the work described in accordance with the provisions of the Scope of Work, and shall cover the cost of all general risks, liabilities, and obligations set forth or implied in the Contract Data, as well as overhead charges and profit. These prices will be used as a basis for assessment of payment for additional work that may have to be carried out.
7. 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
8. An item against which no price is entered will be considered to be covered by the other prices or rates in the Bills



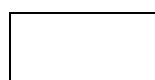
Contractor



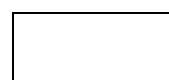
Witness 1



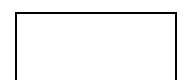
Witness 2



Employer



Witness 1



Witness 2

of Quantities. A single lump sum will apply should a number of items be grouped together for pricing purposes.

9. 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 these Bills of Quantities.
10. Reasonable compensation will be received where no pay item appears in the Pricing Schedule in respect of work required in terms of the Contract and which is not covered in any other pay item.
11. The short descriptions of the items of payment given in these Bills of Quantities are only for the purposes of identifying the items. More details regarding the extent of the work entailed under each item appear in the Scope of Work.
12. The item numbers appearing in the Bills of Quantities refer to the corresponding item numbers in the COLTO Standard Specification for Road and Bridge Works for State Road Authorities (1998 edition).

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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Witness 1



Witness 2



Employer



Witness 1



Witness 2

ITEM NO	DESCRIPTION	UNIT	QUAN-TITY	RATE	AMOUNT
	GENERAL REQUIREMENTS AND PROVISIONS				
D11.03	Training:				
	(a) Accredited training determined by Client	Prov.Sum	Prov	Sum	R 50 000.00
	(b) Students to be trained by Contractor	Prov.Sum	Prov	Sum	R 360 000.00
	(c) Contractor's handling costs, profit and all other charges in respects of subitems B12.01(a) and (b)	%	410 000		
B12.02	Excavation for services:				
	(a) Excavation in search of existing services in soft material situated within the following depth ranges below the surface level				
	(i) 0m to 2m	m ³	100		
B12.03	Relocation and protecting of existing services:				
	(a) Relocation, including lowering or raising, protection and/or repair of existing services (Eskom, Fibre, Telkom, Water, Sanitation, etc.)	Prov.Sum	Prov	Sum	R 1 650 000.00
	(b) Contractor's handling costs, profit and all other charges in respects of subitems B12.03(a)	%	1 650 000		
C12.01	Remuneration of the Community Liaison Officer				
	(a) Community Liaison Officer	Prov.Sum	Prov	Sum	R 120 000.00
	(b) Contractor's handling costs, profit and all other charges in respects of Subitems B12.04(a)	%	120 000		
C12.02	Community Participation				
	(a) Cost of community participation and PSC support	Prov.Sum	Prov	Sum	R 96 000.00
	(b) Contractor's handling costs, profit and all other charges in respects of Subitems B12.06(a)	%	96 000		
B12.09	Supply transport and erect contract signboards				
	(a) Contract singboard	No	2		
1200	Carried forward			R	

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Witness 2

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ITEM NO	DESCRIPTION	UNIT	QUAN-TITY	RATE	AMOUNT
	CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS				
13.01	The Contractor's general obligations:				
	(a) Fixed obligations	L.Sum	Lump	Sum	
	(b) Value related obligations	L.Sum	Lump	Sum	
	(c) Time-related obligations	month	16		
E10.01	Occupational Health and Safety Requirements				
	(a) Contractor's initial obligations in respect of the of the OH&S Act and Construction Regulations Plus Covid 19 as per the gazette by the minister Government Gazette volume 658 29 April 2020 and Workplace Preparedness: COVID-19	L.Sum	Lump	Sum	
	(b) Contractor's time related obligations in respect of OH&S Act and Construction Regulations Government Gazette volume 658 29 April 2020 and Workplace Preparedness: COVID-19	month	16		
	(c) Submission of the Health and Safety File	L.Sum	Lump	Sum	
E10.03	Provision for Construction Health and Safety Officer (Full-Time)	L.Sum	Lump	Sum	
E10.04	Safety Induction & Training of Personnel, incl. COVID-19	L.Sum	Lump	Sum	
E10.05	Provision of personal protective clothing and Equipment	L.Sum	Lump	Sum	
E10.06	Provision of safety fences, signs and barricades	L.Sum	Lump	Sum	
G23.01	Environmental Management Requirements				
	(a) Contractor's time related obligations in respect of the Environmental Management Plan	month	16		
1300	TOTAL CARRIED TO SUMMARY			R	

Contractor

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ITEM NO	DESCRIPTION	UNIT	QUAN-TITY	RATE	AMOUNT
	HOUSING, OFFICES AND LABORATORIES FOR THE ENGINEER'S SITE PERSONNEL				
B14.01	Office and laboratory accommodation:				
	(a) Office accommodation for resident engineer staff, including all services and carports	m ²	90		
	(e) Waterborne ablution unit and kitchen area, including fittings, services and utensils	m ²	10		
	(f) Stores	m ²	12.5		
14.02	Office and laboratory furniture:				
	(a) Chairs	No	12		
	(b) Reclinable office chair	No	3		
	(d) Desks, complete with drawers and locks	No	3		
	(f) Conference tables to seat 12 people	No	1		
B14.03	Office and laboratory fittings, installations and equipment:				
	(a) Items measured by number:				
	(i) 220/250 volt power points	No	3		
	(iii) Double 80 watt fluorescent-light fittings complete with ballast and tubes	No	3		
	(x) Fire extinguishers, 9,0 kg all purpose dry powder type, complete, mounted on wall with brackets	No	4		
	(xi) Air-conditioning units with 2,2 kW minimum capacity, mounted and with own power connection	No	3		
	(xv) Steel filing cabinets with drawers	No	3		
	(xvi) Refrigerators	No	1		
	(xix) Steel plan cabinets	No	3		
	(b) Prime-cost items and items paid for in a lump sum:				
1400	Carried forward			R	

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ITEM NO	DESCRIPTION	UNIT	QUAN-TITY	RATE	AMOUNT
1400	Brought forward			R	
	(iii) The provision of a cellular phone, 3G modem in connection with cell contract covering the cost of all calls and data in connection with contract for all supervisory staff	PC Sum	PC	Sum	R 12 800.00
	(iv) Handling costs and profit in respect of subsubitem 14.03(b)(iii) above	%	12 800		
	(xii) The provision of colour printing, copying and scanning facilities for the supervisory staff	PC Sum	PC	Sum	R 7 000.00
	(xiii) Handling costs and profit in respect of subsubitem 14.03(b)(xii) above	%	7 000		
	(xiv) The provision of laptop computers and mouse for the supervisory staff	PC Sum	PC	Sum	R 30 000.00
	(xv) Handling costs and profit in respect of subsubitem 14.03(b)(xiv) above	%	30 000		
	(c) Items measured by area:				
	(vii) Venetian blinds	m ²	6		
	(viii) Notice boards as specified	m ²	2		
B14.07	Rented, hotel and other accommodation:				
	(a) Provisional Sum for providing rented housing, hotel or other accommodation fully furnished and including services	Prov.Sum	Prov	Sum	R 288 000.00
	(b) Handling costs and profit in respect of subitem B14.07(a)	%	288 000		
14.08	Services:				
	(a) Services at offices and laboratories:				
	(i) Fixed costs	L.Sum	Lump	Sum	R 25 000.00
	(ii) Running costs	month	16		
B14.11	Recoverable costs for professionals for all STR phases subject to Employer authorisation	PC. Sum	PC	Sum	R 4 086 346.00
	(a) Contractor's handling costs, profit and all other charges in respects of Subitems B14.11	%	4 086 346		
1400	TOTAL CARRIED TO SUMMARY			R	

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ITEM NO	DESCRIPTION	UNIT	QUAN-TITY	RATE	AMOUNT
	ACCOMMODATION OF TRAFFIC				
B15.01	Accommodating traffic and maintaining temporary deviations				
	(a) All Roads	km	3.7		
15.03	Temporary traffic-control facilities:				
	(a) Flagmen	man-day	704		
	(b) Portable STOP and GO-RY signs	No	6		
	(e) Road signs, R- and TR-series,				
	(i) 900mm diameter	No	10		
	(ii) 1200mm diameter	No	5		
	(h) Delineators (DTG50J),tw 401 and tw 402 sides:				
	(i) Single (200mm x 800mm)	No	200		
	(i) Movable barricade/road sign combination (Chevron & Road closed types with arrow type single 200mm x 800mm)	No	10		
15.04	Relocation of traffic-control facilities	L.Sum	Lump		
15.05	Gravelling and repair of temporary deviations and existing gravel shoulders used as temporary deviations:				
	(a) Temporary deviations	m³	1 500		
15.06	Watering of temporary deviations	kilolitre	4 800		
15.07	Blading by road grader of:				
	(b) Existing roads used as temporary deviations	km-pass	29		
B15.14	The provision and maintenance of rotating lights etc. for the use of enginer and his staff				
	(a) Rotating lights	No	3		
	(b) Safety boots	No	3		
	(c) Safety vests	No	10		
1500	Carried forward			R	

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ITEM NO	DESCRIPTION	UNIT	QUAN-TITY	RATE	AMOUNT
1500	Brought forward			R	
15/16.02	Overhaul on material hauled in excess of 1,0 km (ordinary overhaul)	m ³ -km	12 750		
15/56.01	Road sign boards with painted or coloured semi-matt background. Symbols, lettering and borders in semi-matt black or Class I retro-reflective material, where the sign board is constructed from:				
	(c) Prepainted galvanized steel plate (chromadek 1.4mm thick or approved equivalent):				
	(i) Area not exceeding 2 m ²	m ²	10		
15/56.02	Extra over item 56.01 for using:				
	(a) Background of retro-reflective material:				
	(i) Class I	m ²	10		
	(b) Lettering, symbols, numbers, arrows, emblems and borders of retro-reflective material:				
	(ii) Class III	m ²	10		
15/56.03	Road sign supports (overhead road sign structures excluded):				
	(b) Timber				
	(i) 150mm diameter	m	15		
	(ii) 175mm diameter	m	15		
15/56.05	Excavation and backfilling for road sign supports (not applicable to kilometre posts)	m ³	10		
1500	TOTAL CARRIED TO SUMMARY			R	

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Witness 2

ITEM NO	DESCRIPTION	UNIT	QUAN-TITY	RATE	AMOUNT
	<u>DAYWORKS</u>				
B18.01	Personnel during normal working hours				
	a) Unskilled Labour	hr	20		
	b) Semi-skilled labour	hr	10		
	c) Skilled labour	hr	6		
	d) Ganger	hr	-		Rate Only
	e) Foreman	hr	6		
	f) Qualified surveyor with all equipment and assistants	hr	4		
B18.02	Equipment				
	a) TLB - Minimum output of 55kW	hr	8		
	b) Pneumatic roller - minimum weight 27t	hr	4		
	c) Self propelled steel vibrating roller - minimum weight 12t	hr	4		
	d) Double drum vibratory roller - minimum weight 45t	hr	-		Rate Only
	e) Dozer - CAT D7 or similar	hr	-		Rate Only
	f) Excavator - CAT 320 or similar (minimum output 96kW)	hr	10		
	g) Grader - CAT 140G (H) or similar (minimum output 138kW)	hr	10		
	h) Wheel loader - CAT 924 or similar (minimum output 83kW)	hr	10		
	i) Paver asphalt - paving with minimum 5m	hr	-		Rate Only
	j) Milling machine - minimum width 1,0m	hr	-		Rate Only
	k) 10m ³ Tipper truck	hr	2		
1800	Carried forward			R	

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ITEM NO	DESCRIPTION	UNIT	QUAN-TITY	RATE	AMOUNT
	<u>DRAINS</u>				
B21.01	Excavation for open drains:				
	(a) Excavating soft material situated within the following depth ranges below the surface level:				
	(i) 0 m up to 1,5 m	m ³	22		
	(b) Extra over subitem 21.01(a) for excavation in hard material, irrespective of depth	m ³	11		
21.03	Excavation for subsoil drainage systems:				
	(a) Excavating soft material situated within the following depth ranges below the surface level:				
	(i) 0 m and up to 1,5 m	m ³	3		
21.04	Impermeable backfilling to subsoil drainage systems	m ³	1		
21.06	Natural permeable material in subsoil drainage systems (crushed stone):				
	(b) Crushed stone obtained from commercial sources:				
	(i) Fine grade - 13.2mm	m ³	1		
21.08	Pipes in subsoil drainage systems:				
	(c) High-density type polyethylene pressure pipes and fittings, complete with couplings				
	(i) 110 mm internal dia, perforated	m	16		
21.10	Synthetic-fibre filter fabric				
	(a) Geotextile MacTex N 20.2 (195g/sqm)	m ²	23		
21.15	Overhaul for material hauled in excess of 1,0 km free-haul (normal overhaul)	m ³ -km	172		
2100	TOTAL CARRIED TO SUMMARY			R	

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ITEM NO	DESCRIPTION	UNIT	QUAN-TITY	RATE	AMOUNT
	<u>PREFABRICATED CULVERTS</u>				
22.01	Excavation:				
	(a) Excavating soft material situated within the following depth ranges below the surface level:				
	(i) 0 m up to 1,5 m	m ³	56		
	(ii) Exceeding 1,5 m and up to 3,0 m	m ³	125		
	(iii) Exceeding 3,0 m and up to 5,0 m	m ³	41		
	(iii) Exceeding 5,0 m and up to 6,0 m	m ³	4		
	(b) Extra over subitem 22.01(a) for excavation in hard material, irrespective of depth	m ³	11		
22.02	Backfilling:				
	(a) Using the excavated material compacted to 93% of modified AASHTO density	m ³	68		
	(b) Using imported selected material compacted to 93% of modified AASHTO density	m ³	225		
22.03	Concrete Pipe Culverts:				
	(b) On Class B bedding				
	(i) 600mm dia, type 100D	m	305		
	(ii) 900mm dia, type 100D	m	11		
22.12	Removing existing concrete:				
	(a) Plain concrete (manholes)	m ³	1		
	(b) Reinforced concrete (ramps)	m ³	1		
B22.17	Manholes, catchpits, inlet and outlet structures complete:				
	(a) Manholes, as shown on drg 1448-KSD-OTP-2021-22-STD-05	No	1		
	(b) Kerb inlet structures, as shown on drg 1448-KSD-OTP-2021-22-STD-04	No	4		
	(c) Outlet structure as shown on drg 1448-KSD-OTP-2021-22-STD-06	No	1		
2200	Carried forward			R	

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ITEM NO	DESCRIPTION	UNIT	QUAN-TITY	RATE	AMOUNT
2200	Brought forward			R	
	(d) Extra over or less than subitem 22.17(a) for variations in the depths of manholes from the standard depth of 2.0m designated for tendering purposes:				
	(i) 0.0 up to 0.5m	No	1		
22.16.02	Overhaul on material hauled in excess of 1,0 km (ordinary overhaul)	m ³ -km	839		
22.23	Service ducts:				
	(a) Ordinary pipes:				
	(i) 160 mm internal dia pitch-fibre pipes	m	64		
	(b) Split pipes:				
	(i) 110 mm internal dia PVC pipes	m	185		
22.24	Duct marker blocks:				
	(a) 300 mm x 300 mm x 100 mm class 20/19 concrete as shown on the drg 1448-KSD-OTP-2021-22-STD-08	No	10		
22.08	Concrete backfill for culverts, class 20MPa/19 concrete	m ³	22		
2200	TOTAL CARRIED TO SUMMARY			R	

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ITEM NO	DESCRIPTION	UNIT	QUAN-TITY	RATE	AMOUNT
	CONCRETE KERBING, CONCRETE CHANNELLING, CHUTES AND DOWNPIPES, AND CONCRETE LININGS FOR OPEN DRAINS				
23.01	Concrete kerbing:				
	(a) Prefabricated mountable kerb, SANS 927 fig 8C, as shown on the drg 1448-KSD-OTP-2021-22-STD-04	m	405		
23.02	Concrete kerbing-channelling combination:				
	(a) Prefabricated barrier kerb, SANS 927 fig 8C, with 300 mm wide cast in situ class 30/19MPa concrete channel, as shown on the drg 1448-KSD-OTP-2021-22-STD-04	m	405		
23.05	Inlet, outlet, transition and similar structures (typical designs):				
	(a) Kerb inlet transition upstream side, class 20/19MPa concrete, complete with fig. 8C as shown on the drg 1448-KSD-OTP-2021-22-STD-04	No	4		
	(b) Kerb inlet transition up/downstream side, class 20/19MPa concrete, complete with fig. 8C as shown on the drg 1448-KSD-OTP-2021-22-STD-04	No	0		
23.07	Trimming of excavations for concrete-lined open drains				
	(a) In soft material	m ²	90		
	(b) In hard material	m ²	18		
23.08	Concrete lining for open drains:				
	(a) Cast in situ class 30MPa/19 concrete lining in type v-drains	m ³	3		
	(b) Class U2 surface finish to cast in situ concrete in v-drains	m ²	1		
2300	TOTAL CARRIED TO SUMMARY			R	

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ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	<u>MASS EARTHWORKS</u>				
33.01	Cut and borrow to fill, including free-haul up to 0,5 km:				
	(a) Material in compacted layer thicknesses of 200 mm and less:				
	(ii) Compacted to 93% of modified AASHTO density	m ³	7 655		
	(c) Rock fill (as specified in Subclause 3209(c))	m ³	500		
33.04	Cut to spoil, including free-haul up to 1.0 km. Material obtained from:				
	(a) Soft excavation	m ³	21 872		
	(c) Hard excavation	m ³	328		
33.06	Variations in the number of roller passes (applicable to subsubitems 33.01(a)(iii) and 33.01(b)(iii) and item 33.11):				
	(a) Vibratory rollers	m ² -pass	500		
	(b) Oscillatory rollers	m ² -pass	500		
	(c) Grid rollers	m ² -pass	500		
33.07	Removal of unsuitable material (including free-haul of 0,5 km):				
	(a) In layer thicknesses of 200 mm and less:				
	(ii) Unstable material	m ³	1 287		
33.10	Roadbed preparation and the compaction of material:				
	(b) Compaction to 93% of modified AASHTO density	m ³	4 135		
3300	TOTAL CARRIED TO SUMMARY			R	

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ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	<u>ROAD SIGNS</u>				
B56.01	Road sign boards with retro-reflective background				
	(a) Aluminium sheet (2,0 mm thick):				
	(i) Area not exceeding 2 m ²	m ²	2		
	(ii) Area exceeding 2 m ² but not 10 m ²	m ²	2		
	(d) Prepainted galvanized steel profiles (200 mm high chromadek or approved equivalent):				
	(i) Area not exceeding 2 m ²	m ²	2		
	(ii) Area exceeding 2 m ² but not 10 m ²	m ²	2		
56.02	Extra over item 56.01 for using:				
	(b) Lettering, symbols, numbers, arrows, emblems and borders of retro-reflective material:				
	(i) Class II	m ²	4		
56.03	Road sign supports (overhead road sign structures excluded):				
	(b) Timber				
	(ii) 150mm top dia	m	1		
56.05	Excavation and backfilling for road sign supports (not applicable to kilometre posts)	m ³	1		
5600	TOTAL CARRIED TO SUMMARY			R	

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ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
9000	<u>WALKWAYS</u>				
23.01	Concrete kerbing:				
	(a) Prefabricated mountable kerb, SANS 927 fig 12, as shown on the drg 1448-KSD-OTP-2021-22-STD-04	m	184		
33.01	Cut and borrow to fill, including free-haul up to 0,5 km:				
	(a) Material in compacted layer thicknesses of 200mm and less:				
	(ii) Compacted to 93% of modified AASHTO density	m³	78		
33.04	Cut to spoil, including free-haul up to 1.0 km. Material obtained from:				
	(a) Soft excavation	m³	28		
	(c) Hard excavation	m³	1		
33.10	Roadbed preparation and the compaction of material:				
	(b) Compaction to 93% of modified AASHTO density	m³	41		
33/16.01	Overhaul on material hauled in excess of a free-haul distance of 0,5 km, for haul up to or through 1,0 km (restricted overhaul)	m³	78		
33/16.02	Overhaul on material hauled in excess of 1,0 km (ordinary overhaul)	m³-km	185		
34.01	Pavement layers constructed from gravel taken from cut or borrow including free-haul up to 1,0 km:				
	(d) Gravel subbase (chemically stabilized material) compacted to:				
	(ii) 96% of modified AASHTO density for a compacted layer thickness of 150mm	m³	41		
34/35.01	Chemical stabilization extra over unstabilized compacted layers:				
	(d) Gravel subbase, 150mm thick	m³	41		
9000	Carried forward			R	

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1800	Dayworks	R	
2100	Subsoil Drainage	R	
2200	Prefabricated Culverts	R	
2300	Concrete Kerbing, Concrete Channelling, etc.	R	
3100	Borrow Materials	R	
3300	Mass Earthworks	R	
3400	Pavement Layers of Gravel Material	R	
3600	Crushed Stone Base	R	
3900	Patching And Repairing Edge Breaks	R	
4100	Prime Coat	R	
4200	Asphalt Base and Surfacing	R	
5500	Fencing	R	
5600	Road Signs	R	
5700	Road Markings	R	
8100	Testing Material and Workmanship	R	
9000	Walkways	R	
Part D	Establishment of Sub-Contractors	R	
Sub-Total		R	
10% Contingencies		R	
Sub-Total		R	
3% CPA		R	
Sub-Total		R	
15% VAT		R	
TOTAL		R	

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C3.1 STANDARD SPECIFICATIONS

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

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

SANS 1921 –1 (2004):	Construction and Management Requirements for Works Contracts Part 1: General Engineering and Construction Works and where accommodation of traffic is involved:
SANS 1921-2 (2004):	Construction and Management Requirements for Works Contracts; and Part 2: Accommodation of Traffic on Public Roads Occupied by the Contractor.
SANS 294 (2004)	Construction procurement processes, methods and procedures.
SANS 10845-5	Targeted enterprise
SANS 10845-6	Targeted partners in joint ventures
SANS 10845-7	Local Resources
SANS 10845-8	Targeted labour
National Treasury No.R.32 (20 January 2017)	Preferential Procurement Policy Framework Act, 2000: Preferential Procurement Regulations ,2017

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C3.2 PROJECT SPECIFICATIONS

A1 MISCELLANEOUS

The Project Specifications that form part of this Contract have been written to cover all phases of work normally required for civil engineering contracts and may therefore cover items of work not applicable to this particular Contract.

The Project Specifications form an integral part of the Contract Documents, supplement the Standard Specifications, and take precedence in the event of discrepancies with the Standard Specifications, the Schedule of Quantities or the Drawings.

PART A: GENERAL

A2 PROJECT DESCRIPTION

1. Employer's Objectives

As part of its service delivery mandate the King Sabata Dalindyebo Municipality intends to appoint a Contractor to undertake the Upgrading of Internal Roads in Mqanduli to Blacktop Surface. The project is aimed at improving road network within the town of Mqanduli by upgrading all gravel roads to blacktop surface.

In addition, the project is to provide the local community with safe and accessible road that will also achieve some of the following:

- Reduce backlog in provision of basic level of service of roads in KSD LM
- Skills development and capacity building
- Showcase the Expanded Public Works Programme
- Encourage community participation in Municipal service delivery programmes

2. Project Locality

The project is in Mqanduli Town, Central Business District (CBD). The project located in Mqanduli Town, Central Business District (CBD). Mqanduli is a town in KSD in the Eastern Cape province of South Africa and it is located approximately 30km south of Mthatha and 22km north-east of Elliotdale. The roads fall within the boundaries of KSD Local Municipality under the jurisdiction of O.R. Tambo District Municipality in the Eastern Cape Province. Mqanduli is a town located approximately 30km South of Mthatha and 22km North-East of Elliotdale.

. The approximate central co-ordinates of the roads are as follows:

- Latitude : 31°49'14.19"S
- Longitude : 28°45'41.44"E

3. Extent of the Works

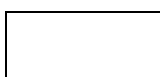
The project involves upgrading of gravel access roads with a total length of 3.7km to a 5m and 7m width, the provision of adequate associated stormwater drainage system, erosion protection and a side and mitre drains. The Works to be carried out by the Contractor under this Contract comprise mainly the following:

i. General

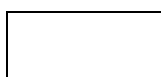
- Contractor's establishment on site
- Compliance with EMP requirements
- Compliance with OHS act requirements
- Provisions of temporary workforce
- Housing, offices and laboratories for the engineer's personnel

ii. Clearing and accommodation of traffic

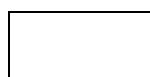
- Clearing, grubbing and removal of rubble
- Relocation of services



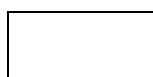
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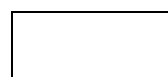
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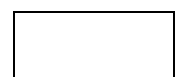
Witness 2



Employer



Witness 1



Witness 2

- Accommodation of traffic
- ✓ Construction of temporary bypasses where required
- ✓ Half width construction where required

iii. Earthworks

- Clearing and grubbing
- Cut to spoil unsuitable material and dispose to a designated area
- Advance selections of materials in borrow pits and importation
- Construction of new pavement layers

iv. Pavement Layers

Roadway

- Construction of approximately 3.7km of streets to a width of 5.5m to 7.0m, and pavement designs as follows:
- 30mm medium continuously graded Asphalt
- 150mm Base G2 compacted to 85% relative bulk density
- 1500mm Sub-base C4 compacted to 96% Mod AASHTO Density
- 150mm Selected layer G7 compacted to 95% Mod AASHTO Density
- 150mm in-situ Sub-grade rip and re-compacted to 93% Mod AASHTO Density

Walkway

- Surfacing: 30mm medium continuously graded Asphalt
- Cut to fill: 150mm C4 material compacted to 96% Mod AASHTO Density
- Roadbed: Rip and re-compact 150mm in-situ material to 93% MMADD

v. Stormwater drainage system

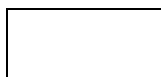
- Construction of new pipe culverts
- Construction of kerb inlets in built up areas
- Construction of manholes and junction boxes in built areas
- Construction of combination kerb and channel
- Construction of a sub-soil drain

vi. Ancillaries

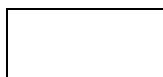
- Alterations to existing power supply, sewer, water, boundary fence and other services where required
- Protection of existing services and relocation where necessary
- Provision of traffic calming measures and mini circle
- Provision of traffic signs and road markings
- Provision of parking facilities
- Installation of road signs and road markings
- Provision of bus/taxi bays
- Re-vegetation of disturbed areas
- Provision of sidewalks
- Finishing of road reserves

vii. Typical Cross – Section of road

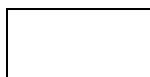
Surfaced road width	=	5m, 6m and 7m
Lane width	=	2.5m, 3m and 3.5m
Kerb with channel	=	700mm
Kerb	=	300mm
Edge beam	=	150mm



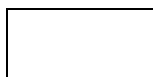
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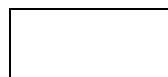
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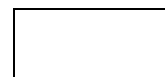
Witness 2



Employer



Witness 1



Witness 2

Walkway paving width = 1.5m

viii. Existing Services

The following existing services may be encountered within the road reserve:

- Overhead power lines
- Electrical cables
- Water supply lines
- Sewer lines

This description of the Works is not necessarily complete and shall not limit the work to be carried out by the Contractor under this Contract. Approximate quantities of each type of work are given in the Schedule of Quantities.

4. Details of the Works

A brief detail of the works for which this specification is applicable is as follows:

4.1 Road works

4.2 The pavement structure for the upgrade of Mqanduli Internal Streets summarised in the following table:

Layer	Thickness (mm)	TRH 14 Code	Description	Compaction (%)
Surfacing	40	AC	Continuously graded, medium asphalt	97% design voids-in-mix
Base	150	G2	G1 stone base from commercial sources, PI < 4	85% of apparent relative density
Sub-base	200	C4	Imported materials from designated borrow pits, Stabilized with Cement or Road lime to UCS of 0.75 to 1.5MPa at 100% mod. AASHTO density; Minimum ITS = 200 kPa at 95 - 97% mod. AASHTO density. Maximum aggregate 63mm; 5% Maximum PI = 6 after stabilization: Max. Fines loss = 30%; Field compaction 96% mod. AASHTO min.	96%
Gravel (Upper/Lower selected)	150	G7	G7 Material compacted to 95% Mod AASHTO	95%
Subgrade	150	G9	In-situ roadbed preparation and compacted to 93% Mod AASHTO	93%

The typical cross section for the road is 2 x 3m wide lanes, 300mm kerb on one side and 700mm combination kerb and channel on the other.

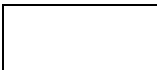
5. Material sources and quantities

The principal materials sources and approximate quantities are summarized in the following table:

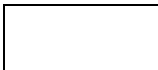
Description	Source	Approximate Quantity
Asphalt	Commercial source	26510 m ²
Base Layer	Commercial source	3977 m ³
Sub base Layer	Borrow Pit and commercial source	3860 m ³
Selected Layer	In-situ material and borrow pit sources	7655m ³
Cut to Spoil	In-situ material and borrow pit sources	21872m ³
Road Bed	In-situ material	4135 m ³

A3 DRAWINGS

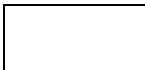
The reduced drawings that form part of the Tender Documents are to be used for tender purposes only.



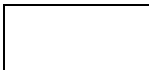
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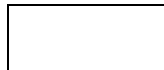
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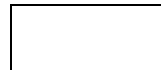
Witness 2



Employer



Witness 1



Witness 2

The Contractor will be supplied with three (3) sets of A1 plain paper print of each Drawings. These prints will be issued free of charge and the Contractor must make any additional prints he may require at his own cost.

Any information in the possession of the Contractor that is required by the Engineer's Representative to complete his as-built drawings must be supplied to the Engineer's Representative before a Certificate of Completion will be issued.

Only figured dimensions must be used and Drawings must not be scaled unless required 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 the Site and the Contractor shall submit all levels to the Engineer for confirmation before he commences construction of any structure. The Contractor shall also check all clearances given on the Drawings and shall inform the Engineer of discrepancies.

A4 POWER SUPPLY AND OTHER SERVICES

The Contractor must make his own arrangements concerning 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 of providing these services will be deemed to be included in the rates and amounts tendered for the various items of work for which these services are required.

A5 CONSTRUCTION IN CONFINED AREAS

It will be necessary for the Contractor to work in confined areas. No additional payment will be made for work in "restricted areas", except in the case of structures as described in the Standard Specifications. In certain areas the width of the fill material and pavement layers may reduce to zero and the working space may be confined. The method of construction in these confined areas 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, irrespective of the methods used to achieve these cross-sections and dimensions, and that the rates and amounts tendered will be deemed to include full compensation for any special equipment or construction methods or for any difficulty encountered in working in confined areas and narrow widths, and at or around obstructions, and that no extra payment will be made nor will any claim for payment be considered on account of these difficulties.

A6 CONTRACTOR'S CAMP SITE

The Contractor shall make his own arrangements regarding the establishment of a camp site and housing for his construction personnel and all regulations stipulated by the local authority shall be adhered to.

It is anticipated that the Contractor's choice of a camp site will be influenced by the availability of telephone and electrical connections as well as the supply of potable water.

A7 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, and no claims in this regard will be considered by the Employer. Provision is made in these specifications for the erection of a security fence around the site offices.

A8 WATER FOR CONSTRUCTION PURPOSES

The Contract will be undertaken in an area with scarce water resources. The Contractor 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.

A9 ADDITIONAL REQUIREMENTS FOR CONSTRUCTION ACTIVITIES

- (a) 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.
- (b) The contractor may not proceed with permanent works before the required offices and laboratories of the engineer's site personnel have been erected by him. This includes the provision of electricity, sanitary arrangements, potable water and telephone, e-mail and WIFI facilities. In the event where the contractor cannot obtain telephone lines timeously from Telkom, a wireless system shall be provided for telephone, e-mail and WIFI facilities.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

A10 TEMPORARY LATRINES

The Contractor shall provide sufficient waterborne latrine facilities for the use of his employees. He shall be entirely responsible for enforcing their use and for maintaining such latrines in a clean, orderly and sanitary condition to the satisfaction of the Engineer and the Employer. Latrines shall be positioned within walking distance from wherever employees or labourers are employed on the Works.

Where required, latrines shall be provided at the rate of one for ten persons and where applicable, the Contractor shall make his own arrangements and pay all charges for the removal of sewage.

A11 MOVING EXISTING SERVICES

Services belonging to any public or private authority, which require moving, shall be dealt with in the manner specified.

The plans show the positions of services determined from observations and measurement but neither the Employer nor the Engineer accepts responsibility neither for the accuracy of the information nor for the omission of any information. The Contractor shall locate and mark the positions of hidden services in advance of construction and take all reasonable steps to protect existing works against damage, which may arise as a result of his operations on the site.

The Contractor will be held responsible for direct or consequential damage to any existing works including any claims which may arise as a result thereof and the cost of repair of any such damage shall be borne by the Contractor unless it is established by the Engineer that the Contractor exercised reasonable care and damage was unavoidable.

The owners and the Engineer shall be notified immediately of any damage done to existing works.

If so directed by the Engineer the positions of existing works shall be changed by the Contractor to meet the requirements of the proposed work. The cost of such work shall be paid for at the applicable rates set out in the Schedule of Quantities or, in the absence of such rates, at rates mutually agreed between the Engineer and the Contractor.

All communication by the contractor with the relevant authorities in connection with services must be directed through the Engineer.

A12 EXTENSION OF TIME DUE TO ABNORMAL RAINFALL

A12.1 Extension of time in respect of delays resulting from wet climatic conditions on the Site will only be considered in respect of abnormally wet climatic conditions and shall be determined for each calendar month or part thereof, in accordance with the formula given below:

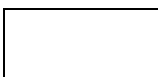
Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Rain (mm)	205	186	15	106	32	31	32	40	55	137	144	163
Rainy Days	14	11	9	6	3	2	2	2	4	9	10	12
Max °C	26	26	25	22	22	20	20	21	23	23	23	24
Min °C	15	15	14	10	3	7	7	8	10	11	12	14

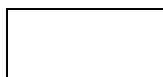
$$V = (Nw - Nn) + (Rw - Rn)/X$$

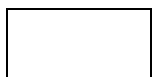
in which formula the symbols shall have the following meanings:

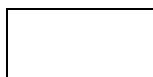
V = Potential extension of time in calendar days for the calendar month under consideration:
If V is negative and its absolute value exceeds Nn, then V shall be taken as equal to minus Nn.
When the value of V for any month exceeds the number of days in the particular month, V will be the number of days in the month.

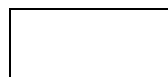
Nw = Actual number of days in the calendar month under consideration on which a rainfall of Y mm or more was recorded on the Site

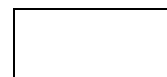

Contractor


Witness 1


Witness 2


Employer


Witness 1


Witness 2

Nn = Average number of days, derived from existing records of rainfall in the region of the Site, on which a rainfall of Y mm or more was recorded for the calendar month

Rw = Actual rainfall in mm recorded on the Site in an approved rain gauge for the calendar month under consideration

Rn = Average rainfall in mm for the calendar month, derived from existing records of rainfall in the region of the Site

The factor $(Nw - Nn)$ shall be deemed to be a fair allowance for variations from the average number of days during which the rainfall exceeds Y mm.

The factor $(Rw - Rn)/X$ shall be deemed to be a fair allowance for variations from the average number of days during which the rainfall did not exceed Y mm but wet conditions prevented or disrupted work.

A12.2 The rainfall records at the nearest rainfall station within Mqanduli shall be used and the monthly averages (Rn and Nn) for this period shall, for the purposes of this Contract be taken as normal and as the values to be substituted for Rn and Nn in the formula above. The values of X and Y shall be 20 and 10 respectively.

The potential extension of time V shall be calculated for each month and year of the period concerned. The values of V shall be obtained by applying the rainfall and using the actual rainfall figures and the calculated values of Rn and Nn.

A12.3 The Contractor shall, at his own cost, provide and erect on the Site at a location approved by the Engineer, an approved rain gauge, which shall be fenced off in a manner which will prevent any undue interference by workmen and others. The Contractor shall, at his own cost, arrange for the reading of the rain gauge on a daily basis for the duration of the Contract. The gauge readings, as well as the date and time at which the reading was taken shall be recorded in a separate record book provided by the Contractor for this purpose. All entries in the rainfall record books shall be signed by the person taking the reading and the gauge shall be properly emptied immediately after each reading has been taken. If required by the Engineer, the Engineer shall be entitled to witness the reading of the gauge.

A12.4 The Contractor's claims in terms of Conditions of Contract. The Contractor's monthly claim shall be accompanied by a copy of the signed daily rainfall readings for the applicable month.

A12.5 The extent of any extension of time which may be granted to the Contractor in respect of wet climatic conditions (whether normal or abnormal) shall be determined as the algebraic sum of the "V" values for each month between the Commencement Date and the Due Completion Date of the Contract, calculated in accordance with subclause A12.1 above; provided always that

- (a) rainfall occurring within the period of the Contractor's December shut-down period (referred to in Conditions of Contract) shall not be taken into account in the calculation of the monthly "V" values;
- (b) rainfall occurring during any period during which the Contractor was delayed due to reasons other than wet climatic conditions on the Site, and for which delay an extension of time is granted by the Engineer, shall not be taken into account in the calculation of the monthly "V" values;
- (c) if the algebraic sum of the "V" values for each month is negative, the time for completion will not be reduced on account of subnormal rainfall, and
- (d) where rainfall is recorded only for part of a month, the "V" value shall be calculated for that part of the month using pro rata values for Nn and Rn.

A12.6 The Engineer shall, simultaneous with granting any extension of time in terms of this clause, revise the Due Completion Date of the Contract to reflect an extension of time having been granted in respect of wet climatic conditions, to the extent of the algebraic sum of all the "V" values for all the preceding months of the Contract, less the aggregate of the "Nn" values for the remaining (unexpired) months of the Contract (viz less aggregate of the potential maximum negative "V" values for the remaining Contract Period). Thus, provided that where such period is negative, the Due Completion Date shall not be revised.

A12.7 Any extension of time in respect of wet climatic conditions granted in terms of this clause shall not be deemed to take into account delays experienced by the Contractor in repairing or reinstating damage to or physical loss of the Works arising from the occurrence of abnormal climatic conditions. Extension of time in respect of any such repairs



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

or reinstatement regarding damage shall be the subject of a separate application for extension of time in accordance with the provisions of Clause 30 of the Conditions of Contract.

A13 TRAINING

Technical skills, generic and management skills training shall be provided with the aim of providing locally employed labour with the technical skills required to undertake the work involved in the Contract, and of furthering small contractor development. Part D of the Project Specifications deals specifically with matters regarding training, and a payment item for that is included.

A14 USE OF LOCAL RESOURCES

A major objective of this Contract is the optimum use of local resources. One of the methods to be adopted to achieve this objective is through the implementation of labour-optimising construction methods.



Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

A15 LABOUR-OPTIMISING CONSTRUCTION ACTIVITIES

a) General

The portions of the Works listed in Sub clause (b) below shall, unless otherwise instructed by the Engineer, be constructed under this Contract using labour-optimising construction methods only. Payment for works identified in Sub clause (b) below shall be made in accordance with the pay items provided in the bill of quantities.

In respect of those portions of the Works which are not listed in Sub clause (b), the construction methods adopted and Plant used shall be at the discretion of the Contractor, provided always that the construction methods adopted and Plant used by the Contractor are appropriate in respect of the nature of the Works to be executed and the standards to be achieved in terms of the Contract.

b) Operations to be executed using labour-optimising construction methods

The following portions of the Works shall be executed using labour-optimising construction methods:

- i. Clearing and grubbing the site
- ii. Clearing and grubbing at inlets and outlets of hydraulic structures
- iii. Cleaning of hydraulic structures
- iv. Excavating for all open drains, culverts, inlet and outlet structures, concrete structures, fence posts and road sign posts
- v. Constructing culvert inlet and outlet structures as well as cast in situ slabs, including all masonry work and minor precast work. All concrete shall be mixed by hand or by hand-driven mixing machines
- vi. Backfilling and compacting all excavations
- vii. Removing oversize material
- viii. Finishing the road and road reserve
- ix. Removing existing concrete and masonry work, irrespective of class and type
- x. Spreading bedding sand and laying paving blocks
- xi. Carrying out maintenance activities
- xii. Excavation and backfill of trenches for street lighting
- xiii. Laying brickwork
- xiv. Painting, plastering and steel fixing
- xv. Carrying out maintenance activities

A16 RESTRICTIONS ON THE USE OF PERSONNEL IN THE PERMANENT EMPLOY OF THE CONTRACTOR

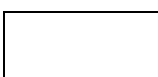
- (a) The Contractor shall limit the use on the Contract Works of his permanently employed personnel to that of key personnel only (as defined in Part C of the Project Specifications) and shall, subject to the further provisions of the following parts of the Project Specifications -

- (i) Part C - Provision of the temporary workforce,
- (ii) Part D - Provision of structured training,

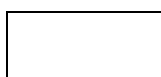
execute and complete the Works using a temporary workforce employed directly by the Contractor and/or by Subcontractors.

- (b) The Engineer may at his discretion, upon receipt of a written and fully motivated application from the Contractor and where he deems the circumstances to warrant, authorise in writing that the Contractor may use in the execution of the Works, workers not being his key personnel but who are in his permanent employ. Without limiting the generality of application of this sub clause, circumstances which may be considered by the Engineer to warrant the authorization of the use of the Contractor's permanent employees not being key personnel, include:

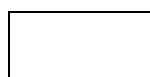
- (i) The unavailability of sufficient numbers of temporary workers and/or Subcontractors to execute the Works, provided always that the Contractor has proven that he has exercised his best endeavours and taken all reasonable actions to recruit sufficient numbers of temporary workers and Subcontractors and has exhausted all reasonable recruitment options



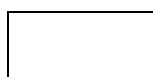
Contractor



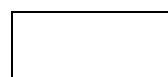
Witness 1



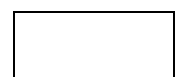
Witness 2



Employer



Witness 1



Witness 2

- (ii) The unavailability within the temporary worker pool and/or subcontractor sources available to the Contractor in terms of the Contract, of sufficient of the required knowledge and skills necessary for the execution of the Works or specific portions thereof, in cases where the time for completion allowed in the Contract is insufficient to facilitate the creation of the necessary skills through the provision of training as contemplated in this Contract
- (iii) Any other circumstances which the Engineer may deem as constituting a warrant.

A17 COMMUNITY LIAISON AND COMMUNITY RELATIONS

In all dealings with the various communities and workers employed from within the communities, the Contractor shall take due cognisance of the character, culture and circumstances of the communities involved and shall at all times use his best endeavours to avoid the development of disputes and to foster a spirit of co-operation and harmony towards the Contract.

The Contractor shall at all times keep the Engineer fully informed on all matters affecting the Contract and the communities, and shall attend all meetings of the Project Co-ordinating Committee as may be reasonably required by the Engineer. All matters concerning the communities shall be discussed and where possible, resolved at such meetings.

Where any resolution of the Project Co-ordinating Committee shall be contrary to the terms and provisions of the Contract, the Contractor shall not give effect to them without a prior written instruction from the Engineer. Where the Contractor is of the opinion that any instruction of the Engineer issued in terms of this clause will result in him incurring additional costs which were not provided for in his tendered rates and prices, and/or that a delay in the progress of the Works will result, he will be entitled to submit a claim in terms of Clause 10.1 of the Conditions of Contract, provided always that the period of twenty-eight (28) days referred to in Clause 10.1.1.3 shall be reduced to three (3) normal working days in respect of all claims submitted in terms of this clause.

A18 EXTENDED PUBLIC WORKS PROGRAMME SPECIFICATIONS

A18.1 Labour-Intensive Competencies of Supervisory and Management Staff

Contractors shall only engage supervisory and management staff in labour-intensive works that have completed the skills programme including Foremen/ Supervisors at NQF level 4 "National Certificate: Supervision of Civil Engineering Construction Processes" and Site Agent/ Manager at NQF level 5 "Manage Labour-Intensive Construction Processes" or equivalent QCTO qualifications at NQF outlined in the next Table.

Personnel	NQF	Unit standard Titles	Skills Programme Description
Foreman / Supervisor	4	Implement Labour-Intensive Construction Systems and Techniques or equivalent QCTO qualification	This unit standard or qualification must be completed, and
		Use Labour-Intensive Construction Methods to Construct and Maintain Roads and Stormwater Drainage or equivalent QCTO qualification	any one of the 3 unit standards or part qualifications must be completed
		Use Labour-Intensive Construction Methods to Construct and Maintain Water and Sanitation Services or equivalent QCTO qualification	
		Use Labour-Intensive Construction Methods to Construct, Repair and Maintain Structures or equivalent QCTO qualification	
Site Agent / Manager	5	Manage Labour-Intensive Construction Processes or equivalent QCTO qualification	Skills Programme against this single unit standard or part qualification

A18.2 Employment of Unskilled and Semi-Skilled Workers In Labour-Intensive Works

1. Requirements for the sourcing and engagement of labour

- 1.1.1 Unskilled and semi-skilled labour required for the execution of all labour-intensive works shall be engaged strictly in accordance with prevailing legislation and SANS 1914-5, Participation of Targeted Labour.
- 1.1.2 The rate of pay set for the SPWP per task or per day shall be in accordance with SAFCEC or relevant legislation.
- 1.1.3 Tasks established by the contractor must be such that:
- a) the average worker completes 5 tasks per week in 45 hours or less; and
 - b) the weakest worker completes 5 tasks per week in 55 hours or less.
- 1.1.4 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 1.1.3.
- 1.1.5 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:
- a) where the head of the household has less than a primary school education;
 - b) that has less than one full time person earning an income;
 - c) where subsistence agriculture is the source of income.
 - d) those who are not in receipt of any social security pension income
- 1.1.6 The Contractor shall endeavour to ensure that the expenditure on the employment of temporary workers is in the following proportions:
- a) 40 % women;
 - b) 20% youth who are between the ages of 18 and 35; and
 - c) 2% on persons with disabilities.

A19 PROGRAMME REQUIREMENTS FOR CONSTRUCTION ACTIVITIES

The contractor shall programme his activities to be suitable in terms of his resources to complete the contract inside the stipulated time period.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

PART B : MATTERS RELATING TO THE STANDARD SPECIFICATIONS

B1 PROJECT SPECIFICATIONS REFERRING TO THE STANDARD SPECIFICATIONS AND ADDITIONAL SPECIFICATIONS

In certain clauses the Standard Specifications allow a choice to be specified in the Project Specifications between alternative materials or construction methods, 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.

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 that does not form part of a clause or a payment item in the Standard Specifications and 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.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

B2 SECTION 1100: DEFINITIONS AND TERMS

B 1115 GENERAL CONDITIONS OF CONTRACT

REPLACE "for National and Provincial Road and Bridge Works", IN THE SECOND AND THIRD LINES WITH "for Road and Bridge Works for State Road Authority".

ADD THE FOLLOWING CLAUSE:

"B 1156 LABOUR-OPTIMISING CONSTRUCTION

a) Payment for the labour-intensive component of the works

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.

b) Linkage of payment for labour-intensive component of works to submission of project data

The Contractor's payment invoices shall be accompanied by labour information for the corresponding period in a format specified by the employer. If the contractor chooses to delay submitting payment invoices, labour returns shall still be submitted as per frequency and timeframe stipulated by the Employer. The contractor's invoices shall not be paid until all pending labour information has been submitted.

c) Applicable labour laws

The current Ministerial Determination (also downloadable at www.epwp.gov.za), Expanded Public Works Programmes, issued in terms of the Basic Conditions of Employment Act of 1997 by the Minister of Labour in Government Notice , shall apply to works described in the scope of work as being labour-intensive and which are undertaken by unskilled or semi-skilled workers.

d) Health and Safety

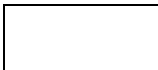
- Employers must ensure the working environment is healthy and safe.
- A worker must use an EPWP Branded Personal Protective Equipment or clothing issued by the employer and work in a way that does not endanger his/her health and safety or that of any other person.

e) Certificate of Service

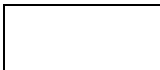
- The certificate will reflect any training received by the worker as part of the EPWP and the work performed by the worker

f) Requirements for the sourcing and engagement of labour

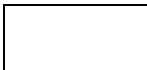
- Unskilled and semi-skilled labour required for the execution of all labour-intensive works shall be engaged strictly in accordance with prevailing legislation, in accordance with the Code of Good Practice for the Expanded Public Works Programme and the EPWP Standard Recruitment Directives.
- Tasks established by the contractor must be such that:
 - the average worker completes 5 tasks per week in 40 hours or less; and
 - the weakest worker completes 5 tasks per week in 55 hours or less.
 - 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 above.
- 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:



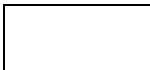
Contractor



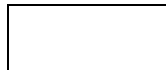
Witness 1



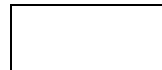
Witness 2



Employer



Witness 1



Witness 2

- where the head of the household has less than a primary school education;
 - that have less than one full time person earning an income;
 - where subsistence agriculture is the source of income.
 - those who are not in receipt of any social security pension income
- 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 25; and
 - (iii) 2% on persons with disabilities.

g) Training of targeted labour

- 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.
- Accredited training should ideally be provided before commencement or during implementation of a project.
- The cost of accredited training of targeted labour will be funded through various funding sources such as National Skills Fund from the Department of Higher Education and Training, funds from the Implementing KSD, funding from SETAS etc. This training should take place as close to the project site as practically possible. The KSD implementing the project must ensure that training applications for participants are made by its relevant project manager assisted by relevant training officials from the National Department of Public Works.
- The KSD must ensure that preference of the training of participants in technical skills over life skills is made. In addition, the KSD is required to maximize opportunities for training of participants carried out before the implementation of projects.
- The KSD must ensure that workers who have received training will be placed on the project to work after receiving the training.
- If a provisional sum for training is made in the contract the contractor shall pay an allowance equal to 100% of the daily wage rate to workers who attend accredited training.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

B3 SECTION 1200: GENERAL REQUIREMENTS AND PROVISIONS

B 1202 SERVICES

ADD THE FOLLOWING:

"Before work commences, the Contractor shall contact all private owners or public authorities controlling services to allow them to protect, move or relocate a service as required, or to confirm that all such work has been completed.

No payment will be made for inconvenience to the Contractor due to services crossing the Site or any authority working on such services, nor will delays caused by such workings be accepted as a basis for claiming an extension of time for completing the Works."

B 1204 PROGRAMME OF WORK

INSERT THE FOLLOWING BEFORE THE FIRST PARAGRAPH:

"A bar-chart programme shall be provided showing the various activities in such detail as may be required by the engineer. The programme shall be updated monthly in accordance with the progress made by the contractor. The critical path of the programme of work shall also be indicated.

In compiling the programme of work, the contractor shall incorporate the following important factors specified in these specifications:

- a) The specified contract period.
- b) Percentage of work to be done by SMME and labour-intensive work including a breakdown of the labour-intensive work.
- c) Work done by local manufacturers and suppliers
- d) Weather limitations regarding the application of bituminous products as specified in sections 4100, 4200, 4400 and 4500 of the standard specifications.
- e) The relocation and protection of services.
- f) Accommodation of traffic proposals.
- g) Phase construction detail relating to the relocation and protection of services, accommodation of traffic and weather limitations.

The contractor shall take note of various factors contained in these specifications which will have a significant influence on the compilation of the programme of work."

B 1205 WORKMANSHIP AND QUALITY CONTROL

REPLACE THE THIRD PARAGRAPH WITH THE FOLLOWING:

"The contractor shall determine his own frequencies at which quality or process control tests are to be undertaken. The engineer will, however, undertake all acceptance control tests for the judgement of workmanship and quality of products."

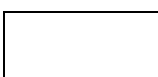
ADD THE FOLLOWING AT THE END OF THIS CLAUSE:

"The engineer shall, for the purpose of acceptance control on products and workmanship, assess test results and measurements in accordance with the provisions of section 8300 of the standard specifications (quality control scheme 2). Where small quantities of work are involved, a lot shall mean a full day's production for a specific item of work subject to acceptance control testing."

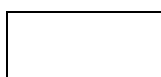
B 1206 THE SETTING-OUT OF WORK AND PROTECTION OF BEACONS

ADD THE FOLLOWING:

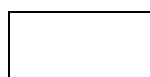
"Before commencing construction the contractor shall align the road horizontally according to the information given on the drawings and shall establish a stake line for controlling purposes. Subsequently he shall supply the Engineer's Representative with a full set of cross-sections taken at 20m intervals along the centreline of the road. These cross-sections shall cover the full width of the road reserve. Stake-line beacons shall be clearly marked and protected during construction."



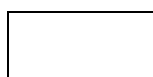
Contractor



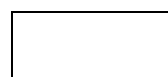
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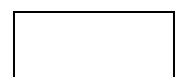
Witness 2



Employer



Witness 1



Witness 2

AMEND THE FIRST LINE OF THE LAST PARAGRAPH AS FOLLOWS:

"The setting-out of work including the survey and staking of the new road centreline will not be measured and paid for"

B1229 SABS CEMENT SPECIFICATIONS

REPLACE THE LAST PARAGRAPH OF THIS CLAUSE WITH THE FOLLOWING:

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

SABS ENV 197-1: Cement-composition, specifications and conformity criteria.

Part 1: Common cements.

Furthermore, where reference is made in this specification or the standard specifications to the different cement types, the following new names/types shall apply:

Old product nomenclature	Typical new product nomenclature	
	Cement type	Cement strength class
OPC	CEM I	32,5
	CEM I	32,5R
RHC	CEM I	42,5
	CEM I	42,5R
LASRC	No provision made	No provision made
PC15SL	CEM II/A-S	32,5
	CEM II/A-S	32,5R
	CEM II/A-S	42,5
PC15FA	CEM II/A-V	32,5
	CEM II/A-V	32,5R
	CEM II/A-W	32,5
	CEM II/A-W	32,5R
RH15FA	CEM II/A-V	42,5
	CEM II/A-V	42,5R
	CEM II/A-W	42,5
	CEM II/A-W	42,5R
PBFC	CEM III/A	32,5
	CEM III/A	32,5R
PFAC	CEM II/B-V	32,5
	CEM II/B-W	32,5
RH30SL	CEM II/B-S	32,5R
	CEM II/B-S	42,5
RH40SL	CEM III/A	32,5R
	CEM III/A	42,5

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

ADD THE FOLLOWING NEW CLAUSES:

B 1230 CONTRACTOR'S ACTIVITIES ON PRIVATE PROPERTY

(a) Action required prior to entering property

The contractor shall not enter onto private property or property not belonging to the employer for the purpose of carrying out any work in connection with the contract without having completed the following formalities well ahead of the intended date for entering such property:

- h) The contractor shall give notice, in writing, to the owner, lessee or occupier, on a form approved by the engineer, of his intention of entering upon the property, together with full details of the work he intends to carry out on the property and the intended dates and duration of occupation.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

- i) The contractor shall arrange a meeting with the owner, lessee or occupier, to:
- conform that the owner, lessee or occupier, has permitted the contractor to enter upon the property for the said purpose;
 - obtain details from the owner, lessee or occupier, regarding any special precautions that should be taken by the contractor during the execution of the works;
 - record details, with photographs if necessary, of the condition of the property at that stage, including any defects in buildings, swimming pools, outbuildings, fences, etc. that may be affected by his activities;
 - record in writing the details of the above; the form and substance of such records and agreements shall be subject to the engineer's approval and a copy of the details as recorded shall be sent to the engineer for his records and his approval.
- j) In the event of the contractor failing to reach agreement with the owner, lessee or occupier of the property on any of the matters referred to above, the matter shall be referred to the engineer for further action.

ADD THE FOLLOWING NEW CLAUSES:

B 1231 MEASUREMENT AND PAYMENT

- (e) Materials on the site

ADD THE FOLLOWING TO THE END OF THE CLAUSE:

"The engineer may at his sole discretion allow payments under "Materials on the site" in respect of any construction materials, if stored off-site, providing that:

- k) the site selected for this purpose is approved by the engineer;
- l) such land is physically separated from any production plant or operation;
- m) only materials for use under this contract are stockpiled on such land, and

the contractor has provided proof of an agreement with the owner of such land that the owner has no objection to using the land for these purposes and has no claim whatsoever on any materials stockpiled on such land."

ADD THE FOLLOWING SUBCLAUSE:

- "(g) Payment certificates

With reference to Clause 6.10.1 of the General Conditions of Contract, the Engineer's Certificate will only be issued after he has received a draft certificate prepared by the Contractor at his own expense in the form prescribed by the Engineer. The cost of duplicating and delivering copies of the certificate to the Contractor, the Engineer and the Employer shall be borne by the Contractor. The Engineer and the Employer require a total of four sets of A4-sized paper copies."

ADD THE FOLLOWING ITEM:

Item	Unit
B12.02 Excavation for Services	
(a) Excavation in search of existing services in soft material situated within the following depth ranges below the surface level	
(i) 0m to 2m	cubic metre (m ³)
B12.03 Relocation and protecting of existing services:	
(a) Relocation, including lowering or raising, protection and/or repair of existing services.....	Prov.Sum

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

- (b) Contractor's handling costs, profit and all other charges in respects of sub items B12.03(a).....percentage (%)

B12.09 Supply transport and erect contract signboards

- (a) Contract sing-board number(No)
(b) Mini-bus vehicle supplied twice per month.....Month

The rate covers the cost for dissembling, lifting and disposing of, if required, and the additional cost for taking special precautions while excavating in the vicinity of the services (valves, water mains, sewerage, valves, electrical cables and poles) as well as reinstating service in new position, including excavation to relocate service in new position. It shall also include compensation for excavation, installation, backfilling and testing of the services.

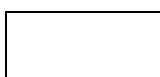
Material, which is regarded as unsuitable, must be indicated to the Engineer before removal. The Contractor can only claim compensation for material if the Engineer gave prior written approval.

The unit of measurement shall be the metre of relocated services laid or installed or authorised by the Engineer.

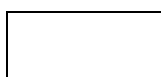
B12.10 Construction Monitoring for the Employer's Agent

- | | |
|--|----------------|
| (a) Assistant Resident Engineer - Full time | PC.Sum |
| (b) Contractor's handling costs, profit and all other charges in respects of sub items B12.10(a) | percentage (%) |
| (c) Environmental Control Officer | PC.Sum |
| (d) Contractor's handling costs, profit and all other charges in respects of subitems C12.10(c) | percentage (%) |
| (e) Institutional and Social Development | PC.Sum |
| (f) Contractor's handling costs, profit and all other charges in respects of subitems C12.10(e) | percentage (%) |
| (g) OHS Agent | PC.Sum |
| (h) Contractor's handling costs, profit and all other charges in respects of subitems C12.10(g) | percentage (%) |

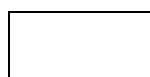
The prime cost items shall be paid for in accordance with the provisions of the general conditions of contract. The tendered percentage is a percentage of the amount actually spent under the relevant prime cost item, which shall include full compensation for the handling costs of the contractor, and the profit in connection with providing the specified service through consultation with the Engineer. “



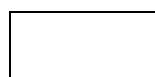
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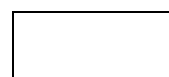
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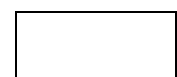
Witness 2



Employer



Witness 1



Witness 2

B4 SECTION 1300: CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS

B 1303 PAYMENT

B13.01 The Contractor's general obligations

ADD THE FOLLOWING AFTER THE FOURTH PARAGRAPH:

"The combined total bid for sub items (a), (b) and (c) shall not exceed 15% of the Bid Sum."

Should the combined total bid for subitems (a), (b) and (c) exceed 15% of the bid sum (excluding CPA, contingencies and VAT), the bidder shall state his reasons in writing for bidding in this manner.

ADD THE FOLLOWING AT THE END OF THIS PAY ITEM:

"The amount payable to the Contractor for time related costs arising from extensions of time granted by the employer, where the contractor is fairly entitled to such compensation in terms of Clause 5.1 of the General Conditions of Contract, shall be calculated as follows:

- (i) Account shall be taken of all time related items scheduled in Section 1300, 1400 and 1500.
- (ii) All pay items for which the unit of measurement is "month" shall be deemed to be based upon an average of 12 working days per month.
- (iii) Payment will be made only for items for which the unit of measurement is "month"

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

B5 SECTION1400: HOUSING, OFFICES AND LABORATORIES FOR THE ENGINEER'S SITE PERSONNEL

B1402 OFFICES AND LABORATORIES

(a) General

ADD THE FOLLOWING BEFORE THE FIRST PARAGRAPH OF THIS SUBCLAUSE:

"The Engineer shall require temporary offices and laboratory buildings for the duration of the contract. Preliminary details will be discussed with the contractor prior commencement of the works, but final details shall be to the approval of the Engineer in consultation with the Contractor."

ADD THE FOLLOWING AT THE START OF THE THIRD PARAGRAPH FROM THE END OF THIS SUBCLAUSE:

"The offices and laboratory shall be situated as close as possible to the site.
The offices and laboratory shall be provided with electricity 24 hours per day."

ADD THE FOLLOWING TO THE FOURTH PARAGRAPH (DELETE THE FULL STOP):

"and all windows shall be fitted with burglar bars, all to the approval of the Engineer."

(b) Offices

ADD THE FOLLOWING TO SUBCLAUSE (XII):

"The Contractor shall provide the Engineer with a contract cellular smart phone and 3G modem for the purpose of the contract. The service shall consist of data bundles and unlimited airtime for the Resident Engineer's for use for purpose of the contract administration. The cost of the service shall be paid under Item B14.03(b)(i)"

ADD THE FOLLOWING TO SUBCLAUSE (XV):

"Each office and the conference room shall be provided with:

(ix) A whiteboard, size 1.3 m² – This shall be fastened securely to the wall"

ADD THE FOLLOWING SUBCLAUSES:

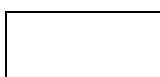
"(xvii) The Contractor shall supply an approved plastic type rain gauge that shall be securely mounted to a pole in a position selected by the Engineer."

(xviii) The following list is indicative of the number and sizes of offices and other accommodation that will be required:

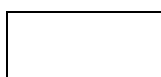
Description	Area
Office for the engineer's personnel	16m ²
Conference room	24m ²

(g) Ablution units

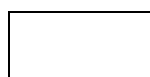
ADD THE FOLLOWING:



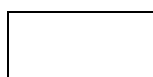
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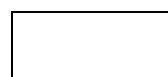
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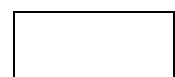
Witness 2



Employer



Witness 1



Witness 2

"Two waterborne ablution units are required on site. Each unit shall contain at least a wash-hand basin, urinal and the necessary accessories.

Both ablution units shall be provided with hot and cold water.

The towels shall be replaced with clean towels every second day and soap supplied as necessary.

The ablution units shall each have an interior floor area of at least 3m² and a 1,5m wide veranda on one side with a 100mm concrete floor.

The tendered rate under Item B14.01(e) shall include full compensation for the supply, erection and maintenance of the complete units as specified."

B1406 MEASUREMENT AND PAYMENT

REPLACE 14.01 (a) and (b) WITH THE FOLLOWING ITEMS:

Item	Unit
B14.01 Office and laboratory accommodation:	
(a) Office accommodation for resident engineer staff, including all services and carports	square metre (m ²)
(e) Waterborne ablution unit and kitchen area, including fittings, services and utensils	square metre (m ²)

ADD THE FOLLOWING ITEM:

B14.03 Office and laboratory fittings, installations and equipment
(a) Items measured by number

ADD THE FOLLOWING SUBITEMS:

(xix) Steel plan cabinets	number (No)
(b) Prime-cost items and items paid for in a lump sum	

REPLACE (iii) WITH THE FOLLOWING SUB-ITEMS:

"(iii) The provision of a cellular phone 3G modem in connection with cell phone contract covering the cost of all calls and data in connection with contract for all supervisory staff	prime cost (PC) sum"
--	----------------------

ADD THE FOLLOWING SUBITEMS:

"(ix) Provision of colour printing, copying and Scanning facility for the supervisor staff	number (No)
(x) Contractor's handling costs, profit and all other charges in respects of subitems 14.03(b)(ix)	percentage (%)

REPLACE 14.07 WITH THE FOLLOWING SUB-ITEMS:

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

“(i) The provision sum for provision rented housing, Hotel or other accommodation fully furnished and including services		provision Sum”
B14.11	Recoverable costs for professionals for all STR phases subject to Employer authorisation	PC. Sum
	(a) Contractor's handling costs, profit and all other charges in respects of Subitems B14.11	%

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

B6 SECTION 1500: ACCOMMODATION OF TRAFFIC

B1502 GENERAL REQUIREMENTS

(a) Safety

ADD THE FOLLOWING AFTER THE END OF THE LAST PARAGRAPH:

"The entire site will be handed over to the Contractor at the commencement of the contract. Traffic shall be accommodated on the existing road as well as temporary deviations. 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.

Further, the Engineer will have the right to stop any operation where the traffic accommodation measures are not to specification or as ordered and the Engineer considers that the risk to the travelling public is unacceptable.

The Contractor may not commence construction activities before adequate provision has been made to accommodate traffic in accordance with the requirements of this document and the latest edition of the South African Road Traffic Signs Manual Volume 2 Chapter 13: Roadworks Signage, (SARTSM), June 1999.

The Contractor shall submit proposals in connection with directional signs to the Engineer for approval."

(e) Access to properties

ADD THE FOLLOWING:

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

(i) Traffic safety officer

ADD THE FOLLOWING AFTER THE SECOND PARAGRAPH:

"The Contractor shall submit a CV of the candidate to the Engineer for approval before the Traffic Safety Officer is appointed. The Traffic Safety Officer shall be made available to discuss road safety and traffic accommodation matters whenever required by the Engineer."

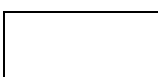
REPLACE SUBCLAUSES (II) AND (III) WITH THE FOLLOWING

"(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, amber flicker light, guardrail and permanent or temporary painted road marking feature. The position of each shall be adequately referenced to identifiable permanent features located along the site of the works.

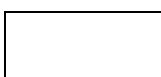
These records shall also show the date and time at which the recorded traffic accommodation features are certified correct by the Traffic Safety Officer and shall be signed by the Traffic Safety Officer before being submitted to the Engineer.

The records shall be amended whenever changes are made in the field and the revised detailed sketches shall be submitted to the Engineer. This shall include the recording of the position of flagmen and stop/go control men and their associated traffic accommodation equipment wherever they are used.

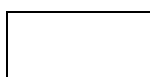
(iii) Personally inspect the position and condition of each traffic accommodation feature on the whole site of works twice each day by 9h30 and by 16h30, to record all irregularities discovered and the remedial action taken, and to sign off as correct and submit to the Engineer such record sheets by 10h00 and by 17h00 each day. The traffic Safety Officer shall keep a duplicate book for this specific purpose.



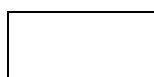
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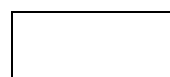
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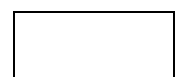
Witness 2



Employer



Witness 1



Witness 2

The Traffic Safety Officer shall also submit to the Engineer by 10h00 each morning, a record of all matter pertinent to site safety and traffic accommodation throughout the site of works the previous day. He shall also record the daily labour returns of flagmen and stop/go signs controllers."

ADD THE FOLLOWING AFTER SUBSUBCLAUSE (viii):

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

1. Arrange for the removal of broken-down vehicles that obstruct the normal traffic flow. The Contractor shall provide the traffic safety officer with all the necessary resources to carry out his duties as specified, inter alia a light delivery van (LDV), personnel, warning signs and revolving amber flashing lights. A warning sign with the words "CONTRACTOR TRAFFIC CONTROL" in clearly legible letters shall be mounted on the vehicle at least 1,5 m above ground level to be clearly visible. The vehicle shall be equipped with two revolving amber-coloured flashing lights with a minimum intensity of 55 W. The flashing lights shall be switched on and the warning sign be displayed at all times when the vehicle is used on the Site.

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

ADD THE FOLLOWING SUBCLAUSES:

"(j) Ensure that all obstructions related to the Contractors activities be removed before nightfall where applicable and instructed by the Engineer and that the roads are safe for night traffic."

(k) The Traffic Safety Officer shall, in addition to the duties listed in paragraph 1502 (l), also be responsible for 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.

(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 public traffic, 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 deduct penalties as follows:

- A fixed penalty of R500,00 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 R100,00 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 an instruction to this effect has been given by the Engineer. 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."

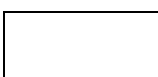
ADD THE FOLLOWING SUBCLAUSES:

"(m) Cleaning of road signs

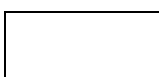
When so ordered by the Engineer, the Contractor shall clean the faces of the road signs, so as to remove deposits obscuring or reducing the reflectivity of the sign faces.

(n) Sequence of construction

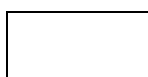
It will be required that the Contractor submits to the Engineer a method statement setting out the details of the manner in which he intends to accommodate the traffic within 14 days after the commencement of the Contract. The Contractor may only proceed with the road works after approval of the method statement by the Engineer and the traffic authorities."



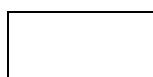
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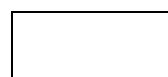
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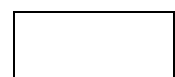
Witness 2



Employer



Witness 1



Witness 2

B 1503 TEMPORARY TRAFFIC-CONTROL FACILITIES

ADD THE FOLLOWING AFTER THE FIRST PARAGRAPH:

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

ADD THE FOLLOWING:

b) Road signs and barricades

ADD TO SUBCLAUSE 1503 (B) 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, or lost, or stolen.

All temporary road signs 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 for in the bid rates for the various types of temporary road signs.

The traffic-control devices, temporary signs and devices required in the contract are those designated in SA Road Traffic signs Manual, Volume 2, Chapter 13: Roadwork's Signage.

The covering of permanent road signs, if applicable, shall be by utilizing a hessian bag, which shall be pulled over the sign in the form of a hood and fastened to the signposts. Plastic bags or other materials and fastened by means of adhesive tape shall not be permitted.

The Contractor shall indemnify the Employer against all proceedings, claims, actions, damages and costs which may arise from or be related to the absence or improper functioning or placement of road-traffic signs, barricades, traffic-control facilities, channelization devices and warning devices.

Should the Contractor park any of his vehicles within the road reserve at night, it shall be done in such a way that the vehicle is not less than 4 m away from the edge of the road and it shall be properly illuminated and signposted to ensure safe passing by motorists."

ADD THE FOLLOWING:

"(i) Covering of signs

Should the Engineer so direct, any sign shall be covered so that it cannot be read at any time under any weather condition. Covers may be of any opaque material that will not damage the sign."

(b) Canalization devices and barricades

ADD THE FOLLOWING:

Drums shall not be used as channelization devices.

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

It shall be manufactured from a flexible material and shall comply with SABS 1555. The blade portion of the delineator shall be positively affixed to a base unit, which in turn shall be stable on its own or be stabilized by means of sandbags when used on the road.

(ii) The blade shall be retro-reflectorised, with class I yellow sheeting on the side facing oncoming traffic.



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

- (iii) It shall be nominally 1 000 mm high x 250 mm wide and the bottom edge of the delineator shall not be more than 200 mm above the road surface.
- (iv) It shall be subject to the approval of the Engineer.

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

e) Warning devices

ADD THE FOLLOWING:

"The following items shall be provided to the Resident Engineer and his staff:

Rotating amber flashing lights

ii) Highly visible safety jackets

The safety jackets shall be of an approved type, as per Chapter 13: Roadworks Signage. The Contractor shall obtain the approval of the Engineer before the proceeding with the purchase of such jackets.

Where flicker lights are used on the contract, they shall be bi-directional, amber warning lights of the Zenon type with a lens diameter not less than 170 mm and a flashing frequency of 75 to 95 flashes per minute.

All construction vehicles and machinery shall be fitted with working amber flashing lights. The Contractor shall provide the Engineer with the specified number of amber flashing lights, in a working condition, with a magnetic base and a cable and connection to fit a standard 12V cigarette lighter.

All flashing lights shall be at least 200 mm high and of the rotating parabolic type. The flashing lights fitted to the construction vehicles and machinery shall be of the mountable type.

All warning devices shall be maintained in perfect working order at all times.

All flagmen shall be equipped with reflective clothing while operating on the road."

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.

Rotating lights shall have an amber lens of minimum height of 200 mm and shall be mounted in order to be clearly 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 clearly visible and operated continuously while the vehicles is maneuvering in or out of traffic or is 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.

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 should be removed from the site until such time as he is in possession of and wearing a reflective jacket.



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

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.

(g) Other signs or facilities

The Engineer may instruct the Contractor to provide any other road sign, reflective tape, etc not measured in standard pay items. The road signs shall conform to the requirements of the South African Traffic Signs Manual, Chapter 13, Roadwork's Signage or specification provided by the Engineer.

The Contractor shall inform the general public of the intended road works, construction period and accommodation of traffic proposal through press releases in local and provincial newspapers.

B1504 WIDTH AND LENGTH OF TEMPORARY DEVIATIONS

ADD THE FOLLOWING AFTER THE SECOND PARAGRAPH:

"The effective carriageway width for any two-lane traffic, accommodated either fully or partially on an existing bituminous surfaced road, shall not be less than 3.9m. No single lane traffic shall accommodate traffic on carriageways less than 3,0m wide."

B1513 ACCOMMODATION OF TRAFFIC WHERE THE ROAD IS CONSTRUCTED IN HALF WIDTHS

DELETE THE FIFTH PARAGRAPH.

ADD THE FOLLOWING AFTER THE SECOND PARAGRAPH:

"Some of the work on the existing road shall be carried out in half or lesser widths. Single direction traffic will be allowed to use that surfaced half of the road that is not under construction. The length of the half width shall not exceed 1500m.

The traffic flow shall be controlled by delineators/cones. However, the Engineer may under special circumstances allow the Contractor during daytime to use flagmen with STOP and GO-RY signs.

ADD THE FOLLOWING CLAUSE:

B1518 RETRO-REFLECTIVE MATERIAL

Retro-reflective material for temporary signs shall comply with the requirements of SABS 1519-1 for weathered material. Tests shall be carried out with a field retro-reflectometer and the testing procedure and classification are described in Clause B 8118. The values of the Coefficient of Retro-Reflection shall be at least 60% of the values indicated in Table B8118/1."

B1517 MEASUREMENT AND PAYMENT

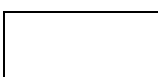
B15.01 Accommodation of traffic and maintaining temporary deviations:

REPLACE THE FIRST PARAGRAPH WITH THE FOLLOWING:

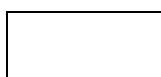
The unit of measurement shall be the kilometre, measured along the centre lines of the Provincial Road, the ramps from the noses and the crossroads where work is carried out. Accommodation of traffic shall be measured once only, that is no separate payments shall be made for lane and shoulder rehabilitation, slurry, reseal, asphalt overlay, side drains, etc. The bypass for abnormal vehicles and gravel service roads shall not be measured. Only the nett distance of the road shall be measured and overlapping distance during staged rehabilitation shall not be measured. When the road is rehabilitated in half-widths, payment shall be made in item B15.10 and not in item B15.01. A distinction shall also be made between accommodation of traffic on the Provincial Road and accommodation of traffic on the ramps and crossroads of interchanges.

IN THE SECOND PARAGRAPH, OMIT THE SECOND SENTENCE REFERRING TO COMPENSATION FOR THE TRAFFIC SAFETY OFFICER.

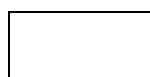
IN THE THIRD PARAGRAPH SECOND SENTENCE, OMIT THE LAST PART" OR WHEN TRAFFIC IS



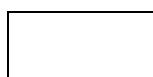
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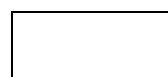
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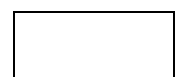
Witness 2



Employer



Witness 1



Witness 2

TAKEN OVER HALF-WIDTH CONSTRUCTION".

B15.03 Temporary traffic-control facilities

AMEND SUBITEM (H) TO READ AS FOLLOWS:

"(h) Delineators: (2) Double sided blade number (No) "

ADD THE FOLLOWING NEW SUBITEM:

"(n) Covering of signs number (No)

ADD THE FOLLOWING NEW SUBITEM:

"(o) Cleaning of signs number (No)

In the measurement and payment paragraphs add the following:

(n) Measurement for covering signs shall be the number of signs covered. The bid rate shall include full compensation for the cost of the supply on site of a suitable cover, the covering of the sign, the maintaining of the cover at all times during all weather conditions, its replacement should the cover be irreparably damaged, stolen, blown away or otherwise removed and the subsequent removal of the cover when no longer required."

B15.10 Accommodation of traffic where the road is constructed in half-widths

DELETE THE LAST PARAGRAPH AND ADD THE FOLLOWING:

"The bid rate shall include full compensation for providing all plant, equipment, tools, transport, labour, supervision, cleaning of the trafficked lane, and other incidentals for the proper and safe handling of traffic and shall include full compensation for all additional costs and work resulting from constructing the road in half-widths.

Payment for the provision of flagmen, road signs, delineators, communication devices and traffic signals shall be made elsewhere.

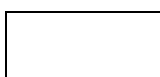
Half-width construction is defined as rehabilitation of the layers on the shoulder and one lane and only where 2-way traffic cannot be accommodated. Also, no slurry, seal and asphalt overlay works shall in any circumstances be measured in this item and shall be included in item B15.01 for the payment thereof.

Where payment is made for a section of road in item B15.10, payment shall not be made in item B15.01"

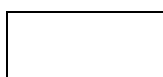
ADD THE FOLLOWING NEW ITEMS:

Item	Unit
B15.14: The provision and maintenance of rotating lights, etc. for the use of the Engineer and his staff	
(a) Rotating lights	number (No)
(b) Safety boots	number (No)"
(c) Safety vests	number (No)"

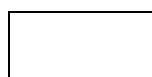
The unit of measurement shall be the number of items supplied on written instruction by the Engineer. The Rotating lights shall be Action Lite 2-Beam Revolving Beacon, Safety vests shall be zip off sleeve reflective jacket - orange/lime and Safety Boots shall be similar to Rebel Chelsea Crazy Horse Brown supplied as per specific sizes on instruction by the Engineer.



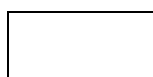
Contractor



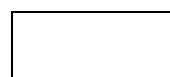
Witness 1



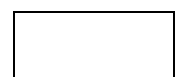
Witness 2



Employer



Witness 1



Witness 2

B7 SECTION 1600: OVERHAUL

B1602 DEFINITIONS

(a) Overhaul material

ADD THE FOLLOWING AFTER SUBCLAUSE 1602(A)(VI):

“Where gravel material is obtained from commercial sources overhaul will not be paid for separately and shall be included in the rate for procuring, furnishing and placing of the material.”



Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

B8 SECTION 1700: CLEARING AND GRUBBING

B1702 DESCRIPTION OF WORK

(a) Clearing

ADD THE FOLLOWING:

"Clearing shall include the removal of material to a thickness of up to 150mm in-situ material as ordered by the engineer. No payment shall be made for temporary stockpiling of topsoil material in the case where this material is applied as topsoil after completion of roadside slopes.

Should the required depth exceed 150mm, the total volume of material removed shall either be classified as "temporary stockpiling of topsoil" or "unsuitable roadbed material" or "cut to spoil" whichever is applicable as allowed for in the standard specifications. In these cases no payment shall be made for clearing and grubbing.

Clearing as described shall in all cases be undertaken in such a manner that the topsoil is preserved and not contaminated with other debris or rubbish. Cross-sections for the determination of earthworks quantities shall be taken after clearing (topsoil or unsuitable roadbed material) and roadbed preparation if applicable.

The payment for the clearing of concrete structures which cannot be cleared by means of a bulldozer as described under clause 1702(a), shall be made according to item B17.08."

ADD THE FOLLOWING SUBCLAUSES:

(e) Existing roads

Where new construction work extends over existing roads, the existing road surface shall be ripped and removed if so, directed by the engineer. The work as described above will be paid for under item B17.01.

(f) Removal of trees

Only trees identified and marked by the engineer shall be removed."

B 1703 EXECUTION OF THE WORK

(a) Areas to be cleared and grubbed

ADD THE FOLLOWING:

"Apart from normal clearing and grubbing, the fill embankments of the existing roads are also to be cleared and grubbed over the areas where the new horizontal alignment coincides with the alignment of the existing road, or where repairs are required to the fill embankments of the approaches of bridges. Provision is made for separate payment for clearing and grubbing of the existing fill embankments where conventional machinery might be suitable to undertake the work due to the steep side slopes of the embankments. An additional pay-item is allowed for in the bill of quantities for this type of clearing and grubbing which may have to be undertaken by hand or similar manner.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

B10 SECTION 1800: DAYWORKS

This part of the Project Specifications deals with the provision for Dayworks in the Schedule of Quantities. Rates for Dayworks shall be entered in Section 1800 of the Schedule of Quantities in accordance with the following specifications.

B1801 SCOPE

According to clause 6.5.1 of the general conditions of contract for construction works (GCC) 2015 3rd Edition, certain work may be carried out using rates tendered in the daywork schedule. A schedule of personnel, plant and equipment which may be necessary to perform work on a daywork basis is included in the schedule of quantities. The quantities used in the schedule are for tender evaluation purposes only and the use or not of these items shall not constitute a variation in terms of Clause 6.4 of the General Conditions of Contract 2015 edition.

No work will be paid for as Dayworks without the written instruction or approval of the Engineer.

B1802 TYPE OR WORK

The Engineer may order daywork in certain cases where it is necessary to vary or to extend the works due to new or unforeseen circumstances to such an extent that the tendered rates for specific items of work are no longer applicable, or where no suitable combination of tendered rates can be used to pay for such work.

As a general rule, applicable rates for additional work items will be agreed between the Contractor and the Engineer. Dayworks will only be used in exceptional circumstances.

B1803 MATERIALS

Materials for use in works carried out under Daywork shall be purchased by the Contractor who shall also arrange for delivery to site and shall be responsible for any other requirements associated with specific materials. A Provisional Sum has been allowed in Section 1800 for Daywork materials. The Contractor shall enter a tendered percentage in the schedule to cover his handling costs and profit, as per other provisional and prime cost sums in this Contract.

Materials shall be paid for using the method described in the Pricing Data. No contract price adjustment will be applicable to materials.

The Contractor shall submit proof of ownership for any materials used in Dayworks with his dayworks claim to the Engineer. Further, if specific materials are required for Dayworks, quotations will be called for as per Clause 6.5.2 of the General Conditions of Contract 2015, 3rd Edition.

B1804 CONSTRUCTION PLANT HIRE

Where daywork is ordered, the tendered rates for plant hire in Section 1800 shall be used in calculating the payment due for any plant required to execute the daywork. If no rate is included in the schedule for a particular piece of equipment, and where no other rate or combination of rates would provide suitable compensation, then the daywork method of payment described in Clause 6.5.1.2.3 of the General Conditions of Contract 2015, 3rd Edition will be used.

The tendered rates for each item of constructional plant shall include for all operating costs associated with the said item of plant. Such costs are deemed to include fuel, re-fuelling costs, lubrication and routine servicing / maintenance, breakdowns and spares, all overhead costs and profit, site management costs and administration costs. The tendered rates shall also include the plant operator and the general supervision of the plant while it is engaged in the dayworks.

B1805 SALARIES AND WAGES OF WORKMEN

The salaries and wages of workmen executing daywork shall be paid for using the tendered rates in Section 1800. The tendered rates shall include for all costs associated with the employment of personnel, including salaries, wages, allowances, workmen's compensation, medical aid and pension contributions, government levies and taxes, training costs and any costs associated with living on the site. The tendered rates shall also include for the transportation of the workmen to the site of the dayworks.

All overhead costs, administration costs, site management costs and the Contractor's profit are deemed to be covered by the Dayworks rates and no additions or mark ups will be made to the tendered rates.

The tendered rates shall also include any hand tools normally associated with the workmen's job



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

description e.g. picks, shovels, hammers, saws, spirit levels, etc. The tendered rate for labourers shall also include for the casual supervision by a gang boss or foreman. Only when specifically called for by the Engineer, will payment be made for the use of a gang boss or foreman supervising on a continuous basis.

B1805 MEASUREMENT AND PAYMENT

The following principles shall also apply to the measurement and payment of Dayworks.
The unit of measurement for plant shall be the number of vibroclock hours worked and each item of plant shall be fitted with a vibroclock, the cost of which shall be included in the rates. Excessive non-productive time when the engine is idling will not be paid for. Where there is ambiguity between the flywheel horsepower and mass of the machine, the flywheel horsepower shall govern the measurement category. Where width and mass are specified, mass shall govern the measurement category.

The Contractor's attention is drawn to the requirements of Sub-clauses 6.5.3 and 6.5.4 of the General Condition of Contract 2015, 3rd edition with regard to the submission of Dayworks claims.



B11 SECTION 2100: DRAINS

B2101: SCOPE

Amend the first paragraph to read:

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

B2104: SUBSOIL DRAINAGE

(a) Materials

(ii) Natural permeable material

ADD THE FOLLOWING TO THE 2ND PARAGRAPH:

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

Percentage passing through a 26,5mm sieve: 100 %.

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

(iii) Synthetic-fibre filter fabric

UNDER ITEM (4) SELECTION, OF THIS SUB-CLAUSE, REPLACE THE 1ST PARAGRAPH WITH THE FOLLOWING:

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

(b) Construction of subsoil drainage systems

ADD THE FOLLOWING SUB-CLAUSE:

“(v) Proving of pipes in subsoil drainage systems

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

B2107: MEASUREMENT AND PAYMENT

Item

Unit

B21.01 Excavation for open drains

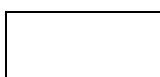
ADD THE FOLLOWING TO THE PENULTIMATE PARAGRAPH:

“The tendered rate shall also include full compensation for trimming the open drains”

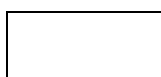
B21.20 Subsoil outlet marker boards

No

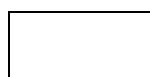
The unit of measurement shall be the number of marker boards supplied, and the tendered rate shall include full compensation for supplying and installing the marker boards.



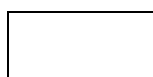
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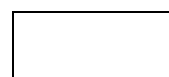
Witness 1



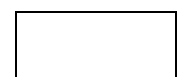
Witness 2



Employer



Witness 1



Witness 2

B12 SECTION 2200: PREFABRICATED CULVERTS

B2201 SCOPE

ADD THE FOLLOWING:

"All rectangular culverts with spans from 0,9m up to and including 2,4m shall be constructed with precast units.

The attention of the contractor is drawn to the fact that information given on the plans, longitudinal sections or drainage schedules may have to be altered to suit actual site conditions and, therefore, the contractor shall only construct these culverts after the engineer has verified the information on the drawings from detail surveys taken on site by the contractor as directed by the engineer.

Precast units shall be ordered by the contractor from actual measurements of length acquired on the site and not from lengths stated in the drainage schedule or from the bill of quantities.

No precast units shall be ordered until the engineer has satisfied himself that the proposed units have been manufactured to the required tolerances and loading standards. The engineer must be given the opportunity to load test units if he considers this necessary".

B2203 MATERIALS

(f) Skewed Ends

DELETE THE SECOND AND THIRD PARAGRAPHS AND SUBSTITUTE WITH THE FOLLOWING:

"Precast portal and rectangular culverts placed on a skew shall be supplied with cast in situ skewed ends as shown on the drawings. In situ skew ends are to be constructed simultaneously with the wingwalls and headwalls".

B2204 CONSTRUCTION METHODS

ADD THE FOLLOWING:

"In all cases where soft founding materials is classified as suitable for culvert bedding construction, the in-situ material shall be ripped, moistened and compacted to 90% or 93% modified AASHTO density. The depth of preparation and compaction of founding material shall be as indicated on the drawings or as specified by the engineer. Allowance for measurement and payment for this work is made in the bill of quantities under this section."

(c) Excavation by hand

Where circumstances prevent the use of mechanical excavators and material can be removed only by hand tools, the engineer shall authorise the supplementary payment to the contractor for such work at the tendered rates for excavation by hand should he be satisfied that the contractor had been unable to prevent the necessity for excavation by hand by proper planning and precautionary measures. The supplementary rate for excavation by hand shall not apply to minor finishing or clearing jobs in excavations which are otherwise being done by mass excavation plant.

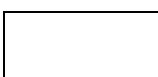
Payment for hand excavation shall be an "extra over" payment to normal excavation as allowed for in item 22.01."

B2205 EXCAVATION FOR CONSTRUCTION BY TRENCH METHOD

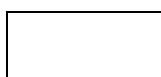
ADD THE FOLLOWING SUBCLAUSES:

(c) Excavation by hand

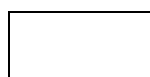
Where circumstances prevent the use of mechanical excavators and material can be removed only by hand tools, the engineer shall authorise the supplementary payment to the contractor for such work at the tendered rates for excavation by hand should he be satisfied that the contractor had been unable to



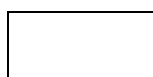
Contractor



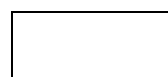
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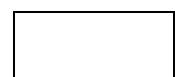
Witness 2



Employer



Witness 1



Witness 2

prevent the necessity for excavation by hand by proper planning and precautionary measures. The supplementary rate for excavation by hand shall not apply to minor finishing or clearing jobs in excavations which are otherwise being done by mass excavation plant. Payment for hand excavation shall be an "extra over" payment to normal excavation as allowed for in item 22.01.

(d) Drainage of excavations

The contractor shall apply suitable, effective drainage and dewatering methods for preventing the ingress of water into the excavation and to keep them dry.

Drainage measures, except for pumping, shall be maintained until the backfilling has been completed. Between various construction stages, pumping may be interrupted in consultation with the engineer.

Any draining or pumping of water shall be done in a manner as will preclude the concrete or materials or any part thereof from being carried away.

Allowance for measurement and payment for dewatering and keeping dry of culvert excavations is made in the schedule in this section".

B2210 LAYING AND BEDDING OF PREFABRICATED CULVERTS

B.2210(b)(i) Cast in situ invert slabs

REPLACE WITH THE FOLLOWING:

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

B2211 BACKFILLING OF PREFABRICATED CULVERTS

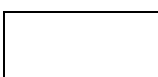
Change the last sentence in the fourth paragraph to read "90% or 93% as shown on the drawings or as directed by the engineer."

B2212 INLET AND OUTLET STRUCTURES, CATCHPITS AND MANHOLES

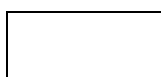
(b) Concrete work

ADD THE FOLLOWING:

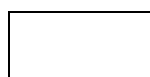
"The type of surface finish for in situ concrete in the culverts shall be as indicated on the drawings. Generally, all exposed faces shall be of Class F2 formwork and faces covered by backfill shall be Class F1. The top of parapet walls and wingwalls shall be finished to a Class U2 surface finish."



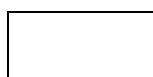
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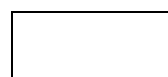
Witness 1



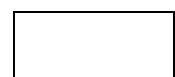
Witness 2



Employer



Witness 1



Witness 2

B13 SECTION 3100: BORROW MATERIALS

B3102 NEGOTIATIONS WITH OWNERS AND AUTHORITIES

ADD THE FOLLOWING TO PARAGRAPH (A):

“Arrangements regarding access to borrow pits and the re/gravelling or re-alignment of haul roads shall be made between the contractor and the owners of the land where borrow pits are situated. The engineer’s representative on site shall be present at all such negotiations, which shall be confirmed in writing by the contractor. All costs involved with such negotiations as well as the requirements contained in clause 3102 and clause 1225 of the specifications shall be borne entirely by the contractor.” Delays due to bad faith negotiation and noncompliance with commitments will not trigger Clause 5.12 and 10 of the General Conditions of Contract 2015.

B3103: OBTAINING BORROW MATERIALS

(a) General

ADD TO SUB-CLAUSE 3103(A) THE FOLLOWING:

Careful selection of materials will be required in the borrow pits. The Contractor shall refer to Section 3200 of the standard specifications with regard to his liabilities in respect of the contamination of good quality materials.

B14 SECTION 3300: MASS EARTHWORKS

B3305 TREATING THE ROADBED

(a) Removing unsuitable material

ADD THE FOLLOWING TO THE THIRD PARAGRAPH:

"For the purpose of this contract, excavation and removal of in-situ clayey material over areas where the road is in a fill condition, shall be classified as removal of unsuitable material, irrespective of the stability or moisture condition of the in-situ material".

(b) Preparing and compacting the roadbed

DELETE THE LAST SENTENCE OF THE FIRST PARAGRAPH:

"If necessary, roadbed..... depth of compaction" and

REPLACE AS FOLLOWS:

"Where demarcated by the engineer, prior to the roadbed being scarified, the excess in situ material forming part of the present roadway, and within the limits of the roadbed, and in close proximity of the layer works, but falling within the limits of the layerworks, shall be bladed to controlled level in order to achieve the required level and necessary depth of compaction."

B3312 MEASUREMENTS AND PAYMENTS

REPLACE THE FOLLOWING UNDER ITEM 33.01:

"The tendered rate shall include full compensation for procuring, furnishing and placing the material, including excavating as if in soft excavation, the cutting of benches, for transporting the material for free-haul distance of 0.5km; for preparing, processing, shaping, watering, mixing, and compacting the materials to the densities or in manner specified herein and for removing and disposing of up to 5% oversize material from the road after processing, including transport for a free-haul distance of 1.0km".

WITH:

"The tendered rate shall include full compensation for locating the source, procuring the material, basic selection, transporting from the source to point of where placed, spreading, watering, mixing, shaping, compacting, final grading, complying with the tolerances, testing and removing and disposing of up to 5% oversize material from the road after processing, including transport for free-haul distance of 1.0km".

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

B15 SECTION 3500: STABILIZATION

B3502 MATERIALS

The actual application rate of the stabilization agent used in any specific material or layer shall be determined by the engineer.

All references to “Ordinary Portland Cement” shall be replaced with “Portland composite cement (CEM II 32,5)”.

(a) Application rate

The nominal application rate of chemical stabilizing agents for tender purposes shall be 80 kg/m³

B3503 CHEMICAL STABILIZATION

(b) Construction limitations

In table 3503/1, delete “8 hours” for ordinary Portland cement and cement blends and replace with “6 hours”.

B3506 TOLERANCES

(c) Uniformity of mix (chemical stabilization)

ADD THE FOLLOWING:

“The method described under 3506(b)(ii) shall be applicable to this contract.”

B3507 ROUTINE INSPECTION AND TESTS

Statistical control as per Section 8300 (Scheme 2) will apply.

ADD THE FOLLOWING SUB-CLAUSE:

(d) Rejection of stabilized layers

Where newly constructed layers have been stabilized and have been rejected, the following shall apply:

- (i) if rejected within seven (7) days of construction – 50% stabilizing agent shall be added and the layer reworked.
- (ii) if rejected more than seven (7) days of construction – the material shall be removed and replaced and the layer reworked with 100% stabilizing agent.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

B17 SECTION B4200: ASPHALT BASE AND SURFACING

B4202: MATERIALS

- (a) Bituminous binders
- (i) Conventional binders

ADD THE FOLLOWING:

"The binders to be used shall be as follows:

- (a) Continuously graded surfacing course: 60/70-penetration grade bitumen".
- (iii) Homogeneous modified binders

REPLACE THE LAST SENTENCE WITH:

"The modified binder to be used on this project shall be A-E2

The homogeneous modified binder shall be manufactured according to the guidelines contained in "Technical Guideline: The use of Modified Bituminous Binders in Road Construction (TG 1-Second Edition November 2007): Asphalt Academy". The base bitumen shall conform to SABS 307, or a blend of SABS 307 grades. The type as well as percentage of modifier is not prescribed, however the contractor shall indicate in the Pricing Schedule what polymer he shall be using. The properties of the homogeneous modified binder shall comply with the relevant requirements for binder class A-E2 * as listed in table B4202/12. "

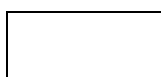
TABLE B4202/12: properties of polymer-modified binder for hot-mix asphalt

Property	Unit	Min/Max	Test Method	Binder Class
				A-E2
Softening Point	°C	Min	MB-17	65-85
Dynamic Viscosity@165°C	Pa.s	Max	MB-18	0.6
Dynamic Viscosity @ 165°C	Pa.s	-	MB-18	≤ 0.6
Ductility @ 15°C	cm	Min	MB-19	50
Force Ductility @ 5°C	N		EN 13703	Report ³
Elastic Recovery @ 15°C	%	Min	MB-4	>60
Torsional Recovery @ 25°C	%	-	MB-5	Report
Storage Stab @ 160°C)	°C	Max	MB-6	≤5
Flash Point	°C	Min	ASTM: D93	>230
Complex shear modulus: G*Sin δ @10 rad/s	°C	-	AASHTO:TP5	Report
Creep Stiffness	MPa	-	AASHTO:TP1	Report
Properties after ageing (RTFOT)			MB-3	
Diff in Softening Point	°C	-	MB-17	-2 to +8
Elastic Recovery @ 15°C	%	Min	MB-4	>50
Mass change	%	Max	MB-3	1.0
Torsional Recovery @ 25°C	%	-	MB-5	Report
Dynamic Viscosity @ 165°C	Pa.s		MB-18	Report ²

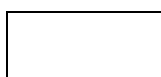
Notes:

The prescribed test method is based on not using stirrers although it has been reported that the use of stirrers has shown no difference in test results. For referencing purposes no stirrers should be used.

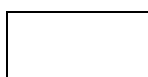
No limits are given and the values should be recorded for reporting purposes only as they may be used in future specifications.



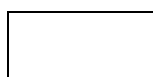
Contractor



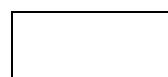
Witness 1



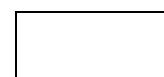
Witness 2



Employer



Witness 1



Witness 2

No values given but the test can be used to rank various binders according to their low temperature cohesion properties

(b) Aggregates

ADD THE FOLLOWING PARAGRAPH TO THE INTRODUCTORY DESCRIPTION:

“Asphalt mixes shall be manufactured using different individual single size coarse aggregates fractions and crushed fine aggregates blended to conform to the specified grading requirements. The use of natural sands shall only be permitted if approved by the Engineer and shall be limited to a maximum of 5% for continuously graded mixes. All aggregate in excess of 4,75 mm shall consist of individual nominal single sized aggregate. The use of run of crusher type materials shall not be permitted.”

(v) Absorption

ADD THE FOLLOWING SENTENCE:

“In addition, the total binder absorption of the combined coarse and fine aggregate blend shall not exceed 0,5%.”

(viii) Grading

DELETE THE SECOND PARAGRAPH COMMENCING WITH "THE TARGET GRADING..." AND ADD THE FOLLOWING PARAGRAPHS

The grading limits for the combined aggregate grading for the asphalt surfacing shall be according to the TRH 8 table 3 coarse grade.

Fillers

ADD THE FOLLOWING AFTER THE LAST PARAGRAPH:

“For tender purposes the active filler shall be hydrated lime”

(h) General

ADD THE FOLLOWING AFTER THE SECOND PARAGRAPH:

“Sufficient aggregate for a minimum of 3 days production shall be separately stockpiled and tested for conformance and uniformity prior to use. The test results shall be presented to the Engineer”

B4203: COMPOSITION OF ASPHALT BASE AND SURFACING MIXTURES

IN THE FIRST PARAGRAPH, THIRD LAST LINE, AFTER “OR ACTIVE FILLER CONTENT” ADD:

“or aggregate content”

REPLACE THE FIFTH PARAGRAPH WITH THE FOLLOWING:

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

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

TABLE B4203/2: Asphalt mix requirements: base and surfacing

Property	Continuously graded surfacing mixes
Marshall Stability (kN)	8 – 18
Marshall Flow (mm)	2 – 6
Stability /Flow (kN/mm)	> 2,5
VMA (%)	> 15
VFB (%)	65 – 75
Air voids (%)	4 – 6
Indirect tensile strength @ 25°C (kPa)	> 1000
Dynamic Creep Modules @ 40°C (MPa)	> 20



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

Modified Lottmann* (TSR)	> 0, 8
Air permeability @ 7% voids (cm ²)	< 1 x 10 ⁻⁸
Binder film thickness (microns)	5,5 – 8,0
Filler bitumen ratio	1 – 1,5
Immersion index (%)	-
Superpave Gyratory test % Voids 2 N Final Gyration (300) **	Min 2
Wheel tracking test using Model Mobile Load Simulator (MMLS)* (100,000 repetitions)	Max 2,5mm

* At 7% voids according to interim SA testing protocols

** Test to be done according to SHRP testing protocol and shall be done at 3 binder contents as for the wheel tracking test."

B4205: GENERAL LIMITATIONS AND REQUIREMENTS AND THE STORAGE OF MIXED MATERIAL

(b) Moisture

ADD THE FOLLOWING AT THE END OF THE SECOND LAST PARAGRAPH AFTER "ENGINEER" "EVEN IF THE UNDERLYING LAYER HAS BEEN PREVIOUSLY PRIMED."

(c) Surface Requirements

(iii) Tack Coat

ADD THE FOLLOWING PARAGRAPH:

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

B4206: PRODUCING AND TRANSPORTING THE MIXTURE

Mixing and storage temperatures of binder

ADD THE FOLLOWING AT THE END OF THE PARAGRAPH:

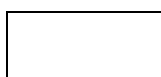
"The Temperature-Time Limits for Hot Polymer Modified Binders as provided in Table 4203/1a are for tender purposes only. The selected supplier of the homogeneous modified binder shall provide information with respect the type of modifier used and storage and handling characteristics of the product, to the Contractor prior to commencement of the works. The selected supplier shall also advise on the applicability of Table B4203/1a to his product.

TABLE B4203/1a: Typical temperature / time limits for hot polymer modified binders

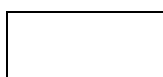
Binder class	Short term handling		Storage		Spraying / Asphalt mixing		
	Max. Temp. (°C)	Max. Holding Time (h)	Max. Temp. (°C)	Max. Holding Time (h)	Max. Temp.(°C)	Min. Temp. (°C)	Max. Holding time (h)
A-E1, A-E 2, A-P1	180	24	140	240	170	160	36

To prevent the development of any "hot spots" within the product, or possible separation, a circulation/stirring system shall be in place, even for periods of short-term storage. Many long chain polymers have low shear stability and can be degraded by the action of a high shear rate pump such as a close tolerance gear pump. Due to the cost of these premium products, storage tanks shall be fitted with slow stirrers or augers, which, while assisting in keeping modified blend homogeneous, also ensures no localized build-up of heat in the vicinity of the flue pipes. The A-E2 binder shall be handled according to the TG1 guidelines and shall also include the following:

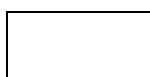
Storage tanks on site must be able to maintain a constant temperature between 160 °C and 170 °C. A constant recording device must be installed to monitor the storage temperatures.



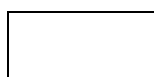
Contractor



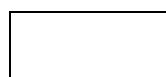
Witness 1



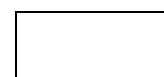
Witness 2



Employer



Witness 1



Witness 2

The testing frequency on modified binders will be according to TG1 Guidelines Second Edition November 2007 Table 19 as published by the Asphalt Academy."

(b) Production of the mixture

(ii) Using drum-type mixer plants

ADD THE FOLLOWING:

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

(c) Transporting the mixture

ADD THE FOLLOWING PARAGRAPH:

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

The contractor shall ensure that trucks used to haul asphalt are not overloaded and the legal axle loads are not exceeded. Before any asphalt can be transported, the contractor must provide the Engineer with the certified carrying capacity of each truck intended for the purpose of transporting the mix. The contractor shall provide the Engineer with a weighbridge ticket before discharging into the paver hopper.

ANY truck that is overloaded shall not be allowed to discharge its load and shall return to the depot/batching plant for adjustment of the load. In addition, a penalty shall be applied for the overload."

ADD THE FOLLOWING SUB-CLAUSE:

"(f) Approval of asphalt mixture

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

The contractor shall prepare and submit a laboratory design mix with test results at four different bitumen contents. The design mix shall be submitted on the prescribed form D3 of TMH 10: "Instruction for the Completion of As-Built Materials Data Sheets" with all the necessary test results completed. In addition, the proposed asphalt mixture shall be subjected to gyratory testing. All the expenses in preparing and submitting the laboratory design mix shall be to the contractor's cost. Samples of all aggregate and bitumen shall be submitted with the laboratory design mix to enable the Engineer to carry out check design testing as necessary. The above design and aggregate shall be submitted to the Engineer at least six weeks before it is intended to commence with any asphalt production.

After approval is obtained for the laboratory design mix, a plant mix at varying binder contents of approximately 5 to 10 tons each shall be produced. The purpose of the plant mix is for the contractor to prove that the laboratory design mix can be produced successfully. The Engineer shall conduct the necessary testing on the plant mix. The plant mix shall not be placed on the road. During the production of the plant mix, the Engineer shall be afforded the opportunity to inspect the asphalt plant.

After the plant mix is approved, permission shall be given for laying a trial section at varying binder contents in accordance with the requirements of section 4211 of the specifications. The Engineer may require that the mix be further assessed by means of CSIR Wheel Tracking or MMLS testing, the cost of which will be borne by the Employer. Mass production of asphalt shall only commence after approval of the trial section, which should be given within a maximum of ten days. The Engineer may instruct the contractor at any time to halt his paving process and to review the whole or part of the above process should a change of aggregate properties occur, the specified asphalt requirements not being met and/or a consistent asphalt mixture not be produced."

B4207: SPREADING THE MIXTURE

ADD THE FOLLOWING AFTER THE FIRST PARAGRAPH:

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Project Specifications

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

"The maximum paving thickness of the asphalt surfacing and inlays shall be 50 mm."

DELETE THE LAST SENTENCE OF THE SEVENTH PARAGRAPH AND ADD THE FOLLOWING:

"On all asphalt overlays and levelling courses, the Contractor must allow for the use of automatic sensing devices on both sides of the paver to match either the top edge of an adjacently paved width or to follow a levelling beam."

(e) Surfacing of bridge decks

ADD

"Coring shall be done to determine the thickness of the asphalt layer to be milled and shall be paid for under pay item B42.08."

B4208: JOINTS

ADD THE FOLLOWING TO THIS CLAUSE:

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

Transverse steps at the end of a day's work shall be tapered off at a slope of 1 vertical to 20 horizontal (1:20) to tie in with the existing surface. The tapered section shall be removed before surfacing is recommenced and a joint formed in accordance with clause 4208 of the specification. Longitudinal joints exposed to traffic shall be provided with a taper of compacted asphalt material over the full length of the exposed joint. The width of the taper shall be at least 5 times the difference in level between the old and new work.

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

ADD THE FOLLOWING:

"Rolling must continue until all roller marks have been eliminated and the specified minimum density has been obtained. The Contractor shall ensure that there is no pick-up on any roller wheels.

Notwithstanding the requirements of the sixth paragraph, the density requirements shall be as per Table B4209/1:

TABLE B4209/1: Density requirements

Mix Type	Density (Theoretical Maximum Density, RICE)	
	Minimum	Maximum
All Continuously graded mixes	93%	97%

Vehicular traffic shall not be allowed on the newly compacted surface before the mat has cooled to 40°C or lower.

At least 25 % of the cores drilled on the completed asphalt layers to determine the density, must be drilled at areas near the joints, and should not be less than 1% below the target density."

B4209: PRECOATED CHIPPINGS FOR ASPHALT SURFACING

IN THE FIRST SENTENCE OF THE FIFTH PARAGRAPH, DELETE "6 to 8 kg/m²" and "7 to 9kg/m²" RESPECTIVELY AND REPLACE WITH:

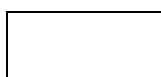
"3 to 4kg/m² " and "5 to 6g/m²"

IN THE LAST SENTENCE OF THE FIFTH PARAGRAPH, DELETE "BETWEEN 0,6 AND 1,0mm" AND REPLACE WITH:

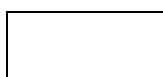
"between 0,8 and 1,2 mm".

B4211: LAYING TRIAL SECTIONS

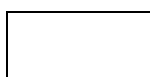
ADD THE FOLLOWING:



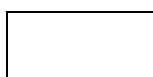
Contractor



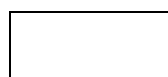
Witness 1



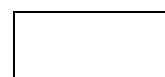
Witness 2



Employer



Witness 1



Witness 2

"The trial section shall be about 150 m long and 3 m wide and shall be laid in accordance with the results of the plant design mix. The binder content of the first 50 m section shall be 0,5 % less than the design binder content, the binder content of the next 50 m at the design binder content and for the last 50 m section the binder content shall be 0,5 % over the design binder content. Volumetric properties, indirect tensile strength on briquettes shall all be checked against the criteria set in Table B4203/1 for all three sections. Gyratory compaction tests should be carried out on the samples obtained from the trial sections at the different binder contents."

B4213: CONSTRUCTION TOLERANCES AND FINISH REQUIREMENTS

(e) Voids

ADD THE FOLLOWING:

"The void content shall not deviate from the approved production mix void content by more than 1%."

B4214: QUALITY OF MATERIALS AND WORKMANSHIP

(b) Coring of asphalt layers

ADD THE FOLLOWING:

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

(c) Routine inspection and tests

ADD THE FOLLOWING PARAGRAPHS:

"The contractor shall keep accurate records of:

(i) The position where every truckload of asphalt is paved (chainage, lane, time and date).

(ii) The temperatures of the asphalt in the trucks both at the mixing plant and at the paving equipment immediately prior to discharging the load.

(iii) The truck and load number from which control samples are taken. All samples taken shall be appropriately numbered.

Test results and measurements will be assessed in accordance with the provisions of section 8200."

ADD THE FOLLOWING SUB-CLAUSE:

(d) Special tests

n-Heptane-Xylene Equivalent (Spot test) (AASHTO-T102)

If the Engineer suspects that bitumen or asphalt has been overheated, he may order that the bitumen, or the bitumen recovered from the asphalt, be subjected to the Spot Test. Recovery of binder for use in the Spot Test shall be carried out according to an approved method.

Any bitumen having an n-Heptane-Xylene equivalent in excess of 36, or in excess of the manufacturers test result on the dispatched stock, shall be considered to have been overheated and shall be deemed to be rejected unless proven otherwise."

B4215: MEASUREMENT AND PAYMENT

AMEND THE FOLLOWING PAYMENT ITEM:

Item

Unit

B42.08:

100mm cores in asphalt paving

number (No)

AMEND THE 1ST SENTENCE BY ADDING THE FOLLOWING AFTER THE WORD

"DRILLED....":

"irrespective of depth of core."

ADD THE FOLLOWING PAYMENT ITEM:

Item

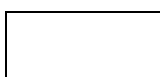
Unit

B42.21: Aggregate variations

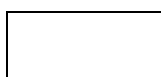
ton (t)

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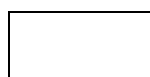
Project Specifications



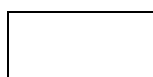
Contractor



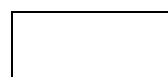
Witness 1



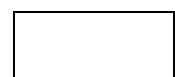
Witness 2



Employer



Witness 1



Witness 2

The unit of measurement in respect of increases or decreases in the aggregate content from that specified in the nominal mix shall be the ton.
Payment for variations shall be made as specified for clause 1213

B42.22 Traffic Calming Humps

- | | | |
|-----|--|----|
| (a) | Speed humps as shown on the drawings | No |
| (b) | Pedestrian stable as shown on drawings | No |

The unit of measurement shall be a ton of asphalt paced in accordance with the specified requirements. The tendered rate shall include full compensation for the procuring and providing all materials, irrespective of its origin, for mixing, placing, compacting and finishing as specified for all transport, work in restricted areas and for all machinery, equipment, labour, supervision and other incidents of executing work, complete as specified.



B18 SECTION 5500: FENCING

ADD THE FOLLOWING:

**“B55.10 Demolish existing all types of fences
and reinstating to same standard using
new material** PC. Sum

(a) Handling costs and profit in respect of %
Sub-subitem 55.10 above

The unit of measurement for moving or demolishing existing fences shall be the metre of fence moved or demolished and the quantity shall be the metre of fence moved and the quantity shall be taken as the length of fence which is permanently re-erected. The unit of measurement shall be the metre of each type of fencing wire and security barriers measured between end posts.

The tendered rate for each metre of existing fence moved, or for each existing gate moved, shall include full compensation for dismantling the old fence, coiling and stacking the material not suitable for re-use, moving all material, including posts and wire, re-erecting the fence or gate in the new position, and providing new binding, tying and straining wire. Additional new material used during the re-erection shall be paid based on approved quotation. For payment a distinction shall be made between the moving of ordinary and security fences.

The tendered rate for each gate moved shall include full compensation for taking down the gate and re-erecting it where required, including all new bolts, nuts and other accessories required, but excluding new gate post.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

B19 SECTION 5600: ROAD SIGNS

B5601 SCOPE

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

B 5602 MATERIALS

(g) Retro-reflective material

IN THE FIRST SENTENCE, REPLACE "SABS 1519" WITH "SABS 1519-1" AND DELETE "and the adhesion requirements of CKS 191."

ADD THE FOLLOWING:

"When measured with a field retro-reflectometer in accordance with section B8118, the coefficient of retro-reflection of a retro-reflective material shall not be less than the appropriate value given in Table B8118/1

(k) Black vinyl

IN THE SECOND SENTENCE REPLACE "SABS 1519" WITH "SABS 1519-1" AND DELETE THE REST OF THE SENTENCE.

ADD THE FOLLOWING SUBCLAUSE:

(m) Temporary covers for road signs

When required, existing road signs shall be fully or partially covered with burlap or other approved material to obscure destinations that are temporarily inapplicable or irrelevant.

The covers shall be neatly applied and firmly fixed in position on the rear side of the sign so that they will be able to withstand strong gusts of wind or eddies caused by passing traffic."

B 5603 MANUFACTURING OF ROAD SIGN BOARDS AND SUPPORTS

(a) Road sign boards

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."

(i) Steel plate road sign boards

ADD THE FOLLOWING AS THE FOURTH PARAGRAPH:

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

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

B5604 ROAD SIGN FACES AND PAINTING

ADD THE FOLLOWING NEW SUBCLAUSE:

(e) Application of retro-reflective material



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

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

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

B5605 STORAGE AND HANDLING

ADD THE FOLLOWING:

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

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

B5606 ERECTING ROAD SIGNS

(c) Erection

ADD THE FOLLOWING:

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

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

B5608 DISMANTLING, STORING AND RE-ERECTING EXISTING ROAD SIGNS

ADD THE FOLLOWING:

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

Dismantling shall include sign panels and ground mounted sign supports.

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

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

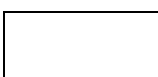
B56.09 MEASUREMENT AND PAYMENT

ADD THE FOLLOWING NEW PAY ITEM:

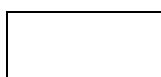
Item

B56.01: Road sign boards with retro-reflective background

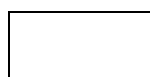
REPLACE “CLASS I RETRO-REFLECTIVE MATERIAL” WITH “CLASS III RETRO-REFLECTIVE MATERIAL”.



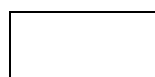
Contractor



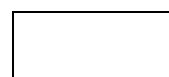
Witness 1



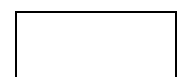
Witness 2



Employer



Witness 1



Witness 2

ADD THE FOLLOWING:

Item	Unit
B56.10	Description of road sign (descriptive code, dimensions)..... (No)

The unit of measurement shall be the number of danger plates provided and erected in accordance with the drawings.

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



Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

B20 SECTION 5700: ROAD MARKINGS

B5701 SCOPE

Road marking plans shall be issued during construction

B 5707 APPLYING THE PAINT

(c) *REPLACE THE LAST PARAGRAPH WITH THE FOLLOWING:*

"Permanent road marking work as specified by the engineer shall be carried out within 14 days of opening the road full width to traffic after the completion of the double seal surfacing."

ADD THE FOLLOWING:

B5715 ESTABLISHMENT OF PAINTING UNIT

Allowance is made in the schedule of quantities for the re-establishment of the painting unit at designated intervals during the contract period. The engineer will instruct the re-establishing of the painting unit as required."

B5714 MEASUREMENT AND PAYMENT

ADD THE FOLLOWING NEW ITEMS

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

B57.10 Re-establishing the painting unit at intervals during the contract period..... (No)

The unit of measurement shall be the number of times the painting unit is re-established on site during the contract period. The tendered rate shall include full compensation for all items as specified.

The tendered rate shall include full compensation for the re-establishment on the site and for later removing all special equipment, personnel, etc. as may be required for painting the road-traffic markings. The contractor will be paid at tendered rates for painting the road-traffic markings."

B21 SECTION 5800: LANDSCAPING AND PLANTING PLANTS

B5802 MATERIALS

(a) Fertiliser/soil improvement material

- (i) Only superphosphate shall be used.
- (ii) Only 2.3.2 (22) + Zn shall be used.

B5804 PREPARING THE AREAS FOR GRASSING

(d) Fertilising

DELETE THE FIRST FOUR SENTENCES AND REPLACE THEM WITH THE FOLLOWING:

Only superphosphate and 2:3:2 (22) + Zn shall be used. The superphosphate shall be worked into the topsoil to a depth of at least 100mm prior to hydroseeding. The rate of application shall be 450 kg per hectare.

The 2:3:2 (22) + Zn shall be applied just before hydroseeding at a rate of 400 kg per hectare and again after establishment of the grass cover at a rate of 300 kg per hectare.

B5808 GENERAL

(a) Time for planting

Hydroseeding/planting trees shall be undertaken by February at the latest. If this is not possible, it shall be deferred to September.

B58.09 MEASUREMENT AND PAYMENT

ADD THE FOLLOWING:

Item	Unit
B58.12 Perforated swing bins (390mm dia, 1200m height, 900mm above ground) paint to be approved by engineer	number (No)

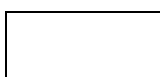
The unit of measurement shall be the number of swing bins provided and erected in accordance with the drawings.

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

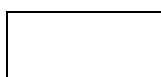
B58.13 Precast bus shelter as shown on drawing number (No)

The unit of measurement shall be the number of structures, supplied, transported, installed as per manufacturers specification and commissioned to the Employer after approval by the Engineer.

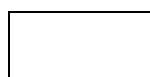
The tendered rate shall include full compensation for all costs involved in erection for the structures, supply, transportation and installation.



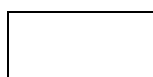
Contractor



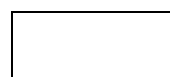
Witness 1



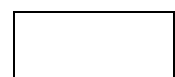
Witness 2



Employer



Witness 1



Witness 2

B22 SECTION 5900: FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS

B5902 FINISHING THE ROAD AND ROAD RESERVE

ADD THE FOLLOWING:

“The contractor shall pay special attention to the collection and removal of all waste materials originating from surfacing and other roadworks activities. Excess aggregate or asphalt broomed from the road surface shall not be discarded onto the side-slopes of the road formation. These aggregates, together with all other materials trimmed or excavated from the road shall be collected and removed from the road reserve to the satisfaction of the engineer.

This requirement shall be incorporated in the tendered rates for item 59.01 of the Schedule of Quantities.”



B23 SECTION 8100: TESTING MATERIALS AND WORKMANSHIP

B8117 MEASUREMENT AND PAYMENT

REPLACE ITEM 81.02 WITH THE FOLLOWING:

Item **Unit**

B81.02 Testing materials and workmanship

a) Testing as required by the Engineer.....Prov. Sum

b) Handling costs and profit in respect of sub-item B81.04(a).....Percentage (%)

The provisional sum provided to cover the cost of tests as requested by the engineer in terms of clause 8115 shall be expended in accordance with the provisions of the general conditions of contract. Payment will not be made for any test, should the test indicate that the specifications have not been complied with.

The tendered percentage is a percentage of the amount actually spent under subitem B81.02 (a), which shall include full compensation for the handling costs and the profit of the contractor."

ADD THE FOLLOWING CLAUSE:

B8118 TESTS ON RETRO-REFLECTIVE MATERIAL FOR USE ON ROAD SIGNS

On site testing of the retro-reflective properties of road signs shall be done with a field retro-reflectometer measuring at an entrance angle of 5,0° and an observation angle of 0,33°. The coefficient of retro-reflection so determined shall not be less than the relevant values given in Table B8118/1 below. The coefficients of retro-reflection are expressed in candellas per lux per square metre (cd/(lux/m²)).

TABLE B 8118/1 COEFFICIENTS OF RETRO-REFLECTION

1	2	3	4	5	6	7	8	9	10	11
Class	Observation angle (degrees)	Entrance angle (degrees)	Coefficient of retro-reflection for different colours of material when measured with Standard Illuminant A* (cd/(lux/m²)) minimum							
			Red	Orange	Yellow	Green	Blue	Purple	White	Brown
I	0,33	5	10	20	35	7	3	2	50	3
II	0,33	5	20	40	70	14	6	4	100	6
III	0,33	5	30	60	105	21	9	6	150	9

*See CIE Publication 15 (E-1.3.1)' "

B8119 TESTING OF APPLIED ROAD MARKINGS

Road markings will be checked for compliance with the specifications utilising appropriate equipment and in accordance with the following standard:

Night-time retro-reflectivity: SABS 1261: Determination of retro-reflected luminance by means of a portable retro-reflectometer. (Measurement to SABS 1261 shall be made in accordance with the 30 m measurement geometry).

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

(a) Sampling procedure for testing of road markings

Acceptance testing shall be done per uniform section of road and will be based on a sample not exceeding 5% of the works for retro-reflective measurements.

The procedure shall be as follows:

- (i) Per uniform section, test locations shall be identified randomly. Each randomly selected position shall be 200m in length. At each test location the 200m section shall be marked out into four 50m long sections. One 5m length shall be selected within each 50m section and measurements shall be made on such a length. (One 200m section length shall therefore be considered as a 5% sample for a road section of 4km in length)
- (ii) The following number of tests for retro-reflectivity will be done per 200m section.

(Depending on roadway cross-section).

Line location	No of tests	Sample %
Left edge line (yellow)	2	2,5%
Lane lines (white)	2	2,5%
No overtaking line (white)	4	5%
Dividing line (white)	4	5%

The following line types will be tested individually, subject to the indicated sampling rate:

Sample %	
Stop lines or yield lines	20% in total
Painted islands	2,5% of square metre

Each reported retro-reflection test will comprise the average of three (3) readings.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C3.3 PARTICULAR SPECIFICATIONS

In addition to the Standardised and Project Specifications the following Particular Specifications shall apply to this contract and are bound in hereafter.

- PART C: PROVISION OF THE TEMPORARY WORKFORCE
- PART D: PROVISION OF CONTRACTOR DEVELOPMENT AND STRUCTURED TRAINING
- PART E: OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION
- PART F: ENVIRONMENTAL MANAGEMENT PLAN SPECIFICATION



Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

PART C: PROVISION OF THE TEMPORARY WORKFORCE

C1 SCOPE

This Specification covers the provisions and requirements relating to the provision of the temporary workforce.

C2 INTERPRETATIONS

C2.1 Supporting documents

The Conditions of Contract, Standard and Project Specifications, Drawings and statutory minimum requirements relating to the employment and remuneration of labour shall inter alia be read in conjunction with this Specification.

C2.2 Definitions and abbreviations

For the purposes of this specification, the definitions given in the Conditions of Contract, the Standard Specifications and the Project Specifications, together with the following additional definitions shall, unless the context dictates otherwise, apply:

- (b) "Key Personnel" means all contracts managers, site agents, materials and survey technicians, trainers, supervisors, foremen, skilled plant operators, artisans 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
- (c) "Project Committee" means a committee consisting of the Employer, the Engineer, the Contractor, (or their nominated representatives) as well as representatives of the temporary workforce, which is convened from time to time at the discretion of the Engineer, for the purposes of acting as an avenue for effective communication and liaison between all the parties referred to, in all matters pertaining to the Contract
- (d) "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
- (e) "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 to participate in the execution of any part of the Contract Works and shall include unskilled labour, semi-skilled and skilled labour, clerical workers and the like
- (f) "Workforce" means the aggregate body comprising all workers and shall, unless the context dictates otherwise, include the workforces of the Contractor and all Subcontractors
- (g) "Liaison Officer" means a representative from the temporary workforce, duly elected by them, to act on their behalf and through whom all matters pertaining to the temporary workforce can be channelized.

C2.3 Status

Where any provisions or requirements of this Specification are in conflict with anything elsewhere set out in the Contract, the provisions and requirements of this Specification shall take precedence and prevail.

C3 PERMITTED SOURCES OF TEMPORARY WORKERS

The Contractor shall as far as possible make optimum use of the human resources outside his own workforce and the workforces of all subcontractors. The temporary workforce that is to be used in the execution of the Works in terms of Part A may consist of the workers of various communities, and shall not be bound to one particular community.

C4 EMPLOYMENT RECORDS TO BE PROVIDED



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

The Contractor shall maintain accurate and comprehensive records of all workers engaged on the Contract and shall provide the Engineer at monthly intervals from the commencement of the Contract, with interim records substantiating the actual numbers of employment opportunities that shall have been generated to date and the amounts actually paid in respect thereof. Such interim records shall be in a format approved by the Engineer.

C5 VARIATIONS IN WORKER PRODUCTION RATES

Notwithstanding anything to the contrary as may be stated in or inferred from any other provision of this Contract, the Contractor shall not be entitled to any additional payment or compensation whatever, in respect of any differences as may result between the production rates actually achieved by workers in the course of the execution of the Contract Works and those production rates on which he has based his tender.

C6 TRAINING OF THE TEMPORARY WORKFORCE

- a) Selected members of the workforce are to be provided with structured training in accordance with the provisions of Part D.
- b) The Contractor shall make all necessary allowances in his programme of work to accommodate and facilitate the delivery of such structured training and shall comply fully with the requirements of Part D.
- c) The provision of structured training as described in Part D shall not relieve the Contractor of any of his obligations in terms of the Conditions of Contract and the Contractor shall remain fully liable for the provision, at his own cost, of all training of the workforce, additional to that as provided for in Part D, as may be necessary to achieve the execution and completion of the works strictly in accordance with the provisions of the Contract.

C7 RECRUITMENT AND SELECTION PROCEDURES

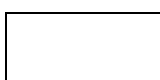
The recruitment and selection procedure of the local workers is the joint responsibility of local councillors, CLO, contractor and KSD. The procedure will be clarified to the contractor at the beginning of the project.

C8 TERMS AND CONDITIONS PERTAINING TO THE EMPLOYMENT OF THE TEMPORARY WORKFORCE

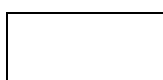
- C8.1 All temporary workers engaged in accordance with the provisions of Part A of the Project Specifications, shall be employed on the terms and conditions of employment as are consistent with SAFCEC or relevant legislation. The Contractor shall implement and adhere strictly to such terms and conditions relating to the employment of the temporary workforce, and subject only to the provisions of this Contract, shall not employ any temporary worker on terms and conditions which are less favourable to the worker or inconsistent with the standards and norms generally applicable to temporary workers in the Civil Engineering Industry and applicable to the particular area.
- C8.2 The Contractor shall pay to all temporary workers engaged in terms of Part A of the Project Specifications, not less than the minimum rate of remuneration as specified in SAFCEC or relevant legislation.

C9 LABOUR RELATIONS AND WORKER GRIEVANCE PROCEDURES

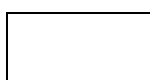
- C9.1 The Contractor, as the Employer of the workforce, shall be fully responsible for the establishment and maintenance at his own cost, of satisfactory labour relations on site and the resolution of all grievances of temporary workers as may occur.
- C9.2 The Contractor shall at all times adhere to the accepted norms and standards of labour relations prevailing generally in the Civil Engineering Construction Industry and shall conduct himself in a fair and reasonable manner, within the constraints as may be imposed upon him by the terms of the Contract.
- C9.3 In the event of any temporary worker engaged by the Contractor in terms of the Contract, being aggrieved with regard to his Terms of Employment, working conditions and training, he shall have the right, at his discretion, to be supported in any inquiry or disciplinary hearing or investigation instituted by the Contractor in terms of Subclause C09.02 above.
- C9.4 In the event of any grievance not being satisfactorily resolved through the application of normal dispute resolution procedures in accordance with Sub clauses C09.02 and C 09.03, then either the Contractor or the worker concerned may require that the matter be referred to the CCMA for further consideration, with a view



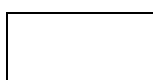
Contractor



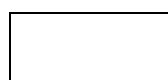
Witness 1



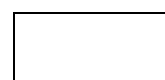
Witness 2



Employer



Witness 1



Witness 2

to facilitate the resolution thereof.

C10 THE SUBCONTRACTORS' WORKFORCES

- C10.1 The provisions of this Part C shall apply mutatis mutandis to the workforces employed by all subcontractors engaged by the Contractor and the Contractor shall be fully responsible for ensuring, at his own cost, that the terms of every subcontract agreement entered into are such as to facilitate the application of these provisions in respect of the workforces of all subcontractors.
- C10.2 The Contractor shall at his own cost and to the extent necessary, assist and monitor all subcontractors in the application of the provisions of this Specification, and shall, in terms of the Conditions of Contract, remain fully liable in respect of the acts, omissions and neglects of all subcontractors, in respect of the application of the provisions of this Specification.

C11 COMMUNITY LIAISON OFFICER (CLO)

The employer shall appoint a Community Liaison Officer (CLO) thereof allocate the CLO to the contractor. The contractor shall direct all his liaison efforts with the local communities through the appointed officer. The contractor shall, however, accept the appointed as part of his management personnel.

C11.1 Duties of the Community Liaison Officer

The Community Liaison Officer's duties will be:

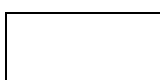
- To be available on site daily between the hours of 8h00 and 17h00 and at other times as the need arises. His normal working day will extend from 8h00 to 13h00 in the morning until 14h00 to 17h00 in the afternoon.
- To determine, in consultation with the contractor, the needs of the temporary labour for relevant skills training. He will be responsible for the identification of suitable trainees and will attend one of each of the training sessions.
- To communicate daily with the contractor and the engineer to determine the labour requirements with regard to numbers and skill, to facilitate in labour disputes and to assist in their resolution.
- To assist in and facilitate in the recruitment of suitable temporary labour and the establishment of a "labour desk".
- To attend all meetings in which the community and/or labour are present or are required to be represented.
- To assist in the identification, and screening of labourers from the community in accordance with the contractor's requirements.
- To inform temporary labour of their conditions of temporary employment and to inform temporary labourers as early as possible when their period of employment will be terminated.
- To attend disciplinary proceedings to ensure that hearings are fair and reasonable.
- To keep a daily written record of his interviews and community liaison.
- To attend monthly site meetings to report on labour and RDP matters.
- All such other duties as agreed upon between all parties concerned.
- To submit monthly returns regarding community liaison in a format prescribed by the Engineer.

C11.2 Payment for the community liaison officer

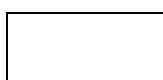
A provisional sum is made available in the section 1200 of the bill of quantities for remuneration of the CLO. This payment shall only be made for the period for which the duties of the liaison officer are required and not necessarily for the full duration of the contract. The remuneration of the CLO shall be determined jointly by the contractor, engineer and employer and as guided by relevant legislation.

C11.3 Period of employment of the community liaison officer

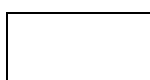
The period of employment of the community liaison officer shall be decided upon jointly by the contractor, engineer and employer.



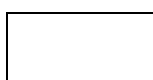
Contractor



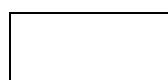
Witness 1



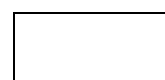
Witness 2



Employer



Witness 1



Witness 2

C12 MEASUREMENT AND PAYMENT

The Contractor will not be separately reimbursed or compensated in respect of the provision of the workforce and creation of temporary employment opportunities and all the Contractor's costs associated with compliance with the provisions of this part of the Project Specifications shall, except to the extent provided for as relevant, be deemed to be included in the rates tendered for in Section 1300 of the Bill of Quantities.

Item	Unit
C12.01 Remuneration of the Community Liaison Officer	
a) Community Liaison Officer.....	Prov. Sum
b) Contractor's handling costs, profit and all other charges in respects of sub-items C12.01(a).....	Percentage (%)
C12.02 Community Participation	
a) Cost of community participation and PSC support.....	Prov. Sum
b) Contractor's handling costs, profit and all other charges in respects of sub-items C12.02(a).....	Percentage (%)

Payment provided in sub item C12.01 and 12.02 to cover the employment and remuneration of the Project Liaison Officer(s) and the attendant members of the Project Liaison Committee established by the Contractor, shall be effected in accordance with the provisions of Clause 6.6 of the General Conditions of Contract.

The tendered percentage in sub item C12.01 and 12.02 (b) is the percentage of the amount actually spent under sub item C12.01 and 12.02 (a) and (b) that will be paid to the contractor in full compensation for the contractor's handling costs and profit in respect of the employment and remuneration of the Liaison Officer(s) and Liaison Committee.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

PART D: PROVISION OF CONTRACTOR DEVELOPMENT AND STRUCTURED TRAINING

D1 SCOPE

Contractor Development Programme (CDP) aims to create opportunity for emerging contractors to build capacity, capability and sustainability to play a meaningful role in infrastructure development. It also promotes empowerment to redress historical imbalances.

Contractor development aims to boost the delivery capacity and capability, as well as sustainability of emerging contractors, who constitute an estimated 80% of CIDB registered contractors. Sustainability includes improving access by these contractors to Government infrastructure projects.

Contractor development is therefore a deliberate Government policy to implement strategies aimed at empowerment of the emerging sector. The CIDB spearheads this process by providing the industry with guidelines and standards, forging strategic partnerships with critical stakeholders and by strengthening Government ability to develop and implement targeted contractor development interventions.

D2 OBJECTIVE

The project will further incorporate Training and on-Site Mentoring of pre-selected Local EME Contractors by CIDB for the full duration of the project as part of KSD Contractor Development Programme (CDP). This is in line with PPPFA Regulations of 2017 with specific emphasis on Regulation 9.

The recommendations from the CIDB analysis informed the planned activities for CDP which include:

- Step up guidance to KSD in implementing policies for contractor development that are aligned to National Contractor Development programme (NCDP) Framework and guidelines
- Support KSD to develop their capacity to effectively manage contractor development
- Monitoring the performance of KSD CDP and advises on their effectiveness

There are a number of reasons that Contractor Development Programmes are established, which in turn influences their objectives. The main reasons are:

- improving the overall performance of grade 1 to 3 contractors;
- improving the ability of local contractors to compete with international construction firms;
- growing small contracting enterprises and provide opportunities for them;
- provide opportunities for and growing contracting enterprises owned by as stipulated in Regulation 9 of PPPFA 2017.

D2.1 Subcontracting Conditions

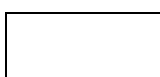
Preferential Procurement Regulations 2017 Pertaining to the Preferential Procurement Policy Framework Act No 5 of 2000

- As per Regulation 9 it is compulsory for the 30% of the value of this contract be subcontracted
- Therefore successful Tenderers will subcontract minimum of 30% of the value of the contract
- Employer has packaged the work as a Prime Cost Sum as Part D on BoQ

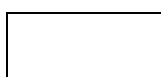
D3 INTERPRETATIONS

D3.1 Supporting Documents

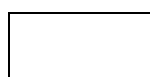
The conditions of contract, standard, supplementary and specific specifications and project specifications and drawings shall inter alia be read in conjunction with this specification.



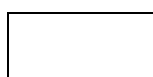
Contractor



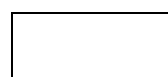
Witness 1



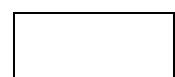
Witness 2



Employer



Witness 1



Witness 2

D3.2 Application

The provisions of this specification shall apply in respect of all workers and SMME enterprises other than the Contractor's key personnel, who are engaged on the execution of the works.

D3.3 Specification

This specification covers the requirements for the provision of the following training:

- (a) Specified structured training on identified work packages to selected members SMME's as accepted by the Employer
- (b) Additional training deemed necessary by the Contractor, to members of the workforce and SMME's

D4 CONTRACTOR DEVELOPMENT COMPONENTS

Specifically, contractor development comprises several components, including:

- New entrants (or start-ups);
- Enterprise's development; and
- Performance improvement

Contractor Learnerships - incorporate the development of emerging contractor start-ups, and will target CIDB grade 1 to 3 contractors. Key instruments which will be used within the CDP will be Learnerships predominantly incorporating mentorship in which the developing contractor learns the basic business and construction components of contracting. Within the CDPs, budget will be allocated to ensure sustainable work for the learner contractors.

Work opportunities are typically provided through direct contracts with the developing contractors within the CDP. Structured developmental support will be provided by the government institution that is providing the work opportunities, or could be outsourced to a training developmental institution to facilitate training and mentoring for the duration of the contract.

D5 REQUIREMENTS FOR SUCCESSFUL CPD

The main contractor should have in place number of factors for CDP both on the demand and supply side. The key success CDP factors through procurement-driven models are listed below:

Demand Side Measures

- Continuous and profitable work opportunities to contractors.
- Procurement strategies and development mechanism to target contractors with continuity of work.
- Appropriate contract conditions addressing supportive practices regarding establishment and contractual obligation and good practice elements like retention for allocated work packages.
- Prompt payment of contractors for work completed satisfactorily.
- Main Contractor reporting to CIDB or KSD on CDP initiatives and their various contributions.

Supply Side Measures

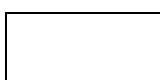
- Appropriate contract management and quality assurance oversight is provided by the departments running the CDPs.
- Main contractor has access to finances for working capital.
- Main contractor has appropriate business and technical capability and capacity.
- Main contractor has access to an appropriately skilled workforce.
- Main contractor has access to cost effective, quality plant and equipment.
- Main contractor has access to information and technology

This strategy will focus on the development of contractors within structured CDPs, enabling contractors to gain the necessary competence, experience, track record and financial capital. This strategy will include the alignment and, where necessary, development of CDPs incorporating:

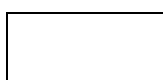
- Learnerships, targeting emerging contractor start-ups (typically CIDB grade 2 and 3 contractors); and
- Enterprise's development support (targeting, typically, the CIDB grade 2 to 6 contractors).

D6 COMMON ELEMENTS

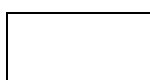
Good practice elements that are common to both direct targeting (CDPs) and to indirect targeting methods are summarized below:



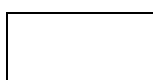
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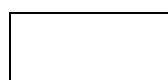
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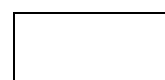
Witness 2



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- Government or stakeholders will use their procurement of infrastructure in order to achieve contractor development through available instruments.
- Contractors undergoing CDP to opening new bank accounts to be jointly managed by the mentor and the contractor for the duration of the contract
- Only CIDB registered contractors to participate within these initiatives.
- Contractors to receive development support must be assessed to determine their development potential and needs.
- Development support must be structured to achieve measurable improvements (e.g. NQF level or improvement in contractor grading).
- Appropriate skills transfer and/or training (theoretical and/or on-site, together with quality control of such training) must be provided.
- Clients and stakeholders must report on contractor development initiatives to the CIDB using prescribed reporting mechanisms.

D7 MONITORING AND REPORTING

A monitoring and reporting system will be established for the CDP by the CIDB in collaboration to be able to monitor achievement of the outputs and gauge these against the targets set. The main contractor will be required to record participating developing contractors. Records to prepared on time on weekly basis in order to support the monitoring system.

D8 ENGINEERING SKILLS TRAINING

D8.1

The main contractor shall take into account the practical training and execution of work packages into their programme of works.

The main contractor shall, from the commencement of the contract, implement a structured training programme comprising of the training and any additional training as provided for by the Contractor, in which the various skills required for the execution and completion of the works are imparted to the SMME in a programmed and progressive manner.

Selected SMME shall be trained progressively throughout the duration of the contract in the various stages of a particular type of work.

D8.2

The Contractor shall be responsible for the provision of the necessary items for the delivery of the specified and additional skills training programme, including the following:

- (a) Sufficient skilled, competent workforce to deliver the additional training deemed necessary to SMME in accordance with the training programme
- (b) A suitably furnished venue
- (c) Transport of the workers as required
- (d) Tools, equipment, and teaching aids
- (e) Stationery and all other necessary materials

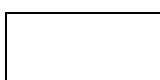
The above class training will commence prior establishment of the Contractor and costs will be recovered from contract.

D8.3 Selection of Candidates

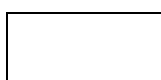
- (a) Members of the workforce will be selected by the Engineer, assisted by the Contractor and the Liaison Officer, to receive specific training as approved by the Engineer.
- (b) The following will be taken into account in the selection of the workers to receive the specified training:
 - i. Previous experience (if any)
 - ii. Previous courses completed (if any)
 - iii. Module specific requirements.

D8.4 Duration of Training

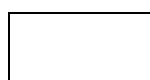
- (a) The Contractor shall allow in his programme for the selected members of the workforce to be engaged in the specified practical training modules.



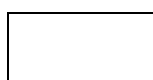
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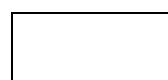
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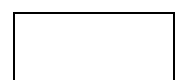
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- (b) Provision must also be made by the Contractor for members of the workforce to receive any additional training as provided for by the Contractor.

D8.5

All specified skills-related training shall take place only during normal working hours and the Contractor shall ensure that the selected workers are available at the appropriate times to undergo such training.

D8.6

Both the selected subcontractor's and the Contractor's additional training programme shall be subject to the approval of the Engineer, and if so, instructed by the Engineer shall alter or amend the programme and course content to suit changing conditions on site and all changes in the Contractor's programme of work.

D8.7

The Contractor shall keep comprehensive records of the training given to each worker involved in training as well as the nature and number of each task executed by the worker and whenever required shall provide copies of such records to the Engineer.

D8.08 Use of Workers

The Contractor shall, in so far as it is reasonably feasible take due cognisance of the nature of the works to be executed at any given time, and use trained workers on those aspects of the works for which they have been trained. Six (6) work packages were identified suitable for the development of sub-contractors which are grouped as shown in the table.

Section	Description of Packages
2300	Concrete Kerbing
2200	Prefabricated Culverts
3300	Mass Earthworks
3400	Pavement Layers of Gravel material
7300	Concrete Paving Blocks

D9 REMUNERATION

No remuneration in respect of time spent undergoing training in terms of this Clause will be made to any of the workers/SMME.

D10 ENTREPRENEURIAL SKILLS TRAINING

D10.1

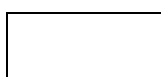
Training needs assessments of sub-contractors will be undertaken during or prior the course of the Contract by CIDB nominated service provider. The training needs assessments shall have as their focus contractor development, and shall identify needs for business development, business management and technical construction management skills. Such training needs may be identified in personnel of sub-contractors, as well as temporary employees thereof.

The sub-contractors will be trained to manage material and resources. This will be facilitated by direct payment to sub-contractors of quoted material amounts. This will permit them to be able to manage funds, follow up on procured material, enforce understanding of the specifications at the same increase their grading due to rotation of funds in the business accounts.

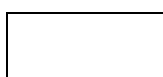
The funds for the material will have to be strictly managed by the mentor. Therefore, a memorandum of understanding needs to be in place with the financial institution, Employer and Contractor to facilitate the movements and managements of funds.

D10.2

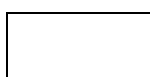
The sub-contractor will use rates as offered by the Contractor for material. For any unbalanced rates for an item the



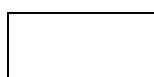
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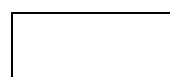
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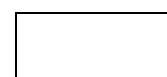
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contractor will have to compensate it so that the sub-contractor will be in a position to procure material. The onus is on the contractor to ascertain that their rates are fairly balanced.

The Contractor still takes responsibility for all quality and material delivered on the site as per the GCC. The Contractor must ascertain that the material to be built into the work is of correct specification and quantity.

The contractor will make the first payment establishment cost to the sub-contractor once all necessary training has been completed to permit the sub-contractor to resume works on site.

D10.3

Once the needs assessments have been completed, training to meet the needs identified in the assessment phase will be provided, again by a sub-contractor to be nominated by the Employer.

D10.4

The Contractor shall assist in facilitating in the delivery of the training, by instructing and motivating personnel and subcontractors regarding attendance and participation therein.

D10.5

The Contractor shall further make all reasonable efforts to co-ordinate the programming of the subcontractor's work with that of the delivery of the structured training.

D10.6

The Contractor shall be responsible for the provision of the necessary items for the delivery of the entrepreneurial training programme, including the following:

- A suitably furnished venue
- Transport of the subcontractors as required
- Tools, equipment, and teaching aids
- Stationery and all other necessary materials.

D10.7

All specified entrepreneurial training shall take place within normal working hours.

D10.8

The Contractor's training programme, if any, shall be subject to the approval of the Engineer, and if so instructed by the Engineer shall alter or amend the programme and course content.

D10.9

The Contractor shall keep comprehensive records of all training given to personnel and subcontractors involved in training and whenever required shall provide copies of such records to the Engineer. At the successful completion of each course each subcontractor shall be issued with a certificate indicating the course contents as proof of attendance and completion.

D10.10

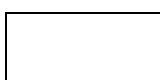
No remuneration in respect of time spent undergoing specified training in terms of this Clause will be made to any of the subcontractors.

D11 MEASUREMENT AND PAYMENT

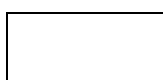
D11.01 Basic Principles

(a) General

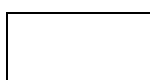
Measurement and payment for all work executed in terms of this contract shall be measured and paid for in accordance with the principles set out in the project specifications, irrespective of whether the work is executed as an integral part



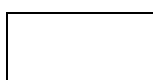
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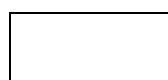
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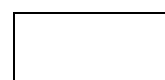
Witness 2



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of the provision of training in terms of this specification.

(b) Training

The Contractor shall only be reimbursed for the amounts actually paid by the Contractor to the selected subcontractors appointed as directed by the Employer, in execution of the Engineer's written instruction, plus a percentage as tendered to cover all his charges and profits.

D11.02 Scheduled Items

Payment items are included in the Schedule of Quantities for the provision of the specified training by selected subcontractors only. Any additional training as viewed by the Contractor to be necessary shall be viewed to be included in the Schedule of Quantities and shall not be paid for separately.

Item	Unit
D11.03 Training:	
a) Technical Skills determined by Client.....	Prov. Sum
b) Students to be trained Contractor.....	Prov. Sum
c) Contractor's handling costs, profit and all other charges in respect of Sub items D11.03(a) and (.....	Percentage (%)

Payment under sub item D11.03(a) and (b) shall be the amounts actually paid to the training institutions and shall be made in accordance with the provisions of the General Conditions of Contract.

The percentages tendered for sub item D11.03 (a) and (b) shall be the percentages of the amounts actually reimbursed to the Contractor under sub items D11.03 (a) and (b) shall be in full and final compensation in respect of the Contractor's handling costs, profit, mentoring, record keeping, reporting and all other charges in connection with providing the services."

Payment of the lump sum will be made in two instalments as follows:

- i. The first instalment, 45% of the lump sum, will be paid after the Contractor has met all his obligations regarding training and memorandum of agreements in place. When sub-contractor needs have been determined and approved.
- ii. The second instalment, 25% of the lump sum, will be paid after the sub-contractor has met all his obligations regarding progress of work on site which must be above 70%.
- iii. The final instalment, 30% of the lump sum, will be paid after the sub-contractor has reached Completion Stage and has met all his obligations.

D11.04 Establishment of SMME

- a) Prime Cost Sum for work packages extracted from the
scope of works designated strictly for the local SMMEPC Sum
- b) Contractor's handling costs, profit and all other
charges in respect of Sub items D11.04(a):percentage (%)

Payment under sub items D11.04(a) shall be the amounts actually paid to the contractor made in accordance with the provisions of the General Conditions of Contract and COLTO section 1303. The amount paid shall be for work done by the sub-contractor and certified by the main the contractor to be meeting specifications. The work packages forming the scope of the works with quantities, units of measures, rates and total amount will be provided to the Contractor to procure SMME. The packages will show the build-up of the PC Sum under item 11.04(a)



Contractor



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Witness 2



Employer



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Witness 2

PART E: HEALTH AND SAFETY SPECIFICATION

E1 SCOPE

This specification is applicable to all employees and contractors working on the project.

E2 OBJECTIVES

The objectives of this specification are:

- To uphold highest safety and health standards throughout the construction, operation and decommissioning phases of the project.
- To provide guidelines with regards to health and safety to contractor.
- To incorporate the requirements of the record of decision into contractual agreement.
- To provide guidelines to Contractors during the compilation of the Health and Safety Plan
- To comply with the Occupational Health and Safety Act and its associated regulations.

E3 RESPONSIBILITIES

POSITION TITLE	ROLE	DESCRIPTION OF TASK
CHS Manager	Document development and amendment	Ensure amendment and periodic review of the document
CHS Officer	Enforcement	Responsible for enforcement and audit the performance of contractors
Construction Manager	Compliance	Ensure that this document forms part of the Service Level Agreement
Supervisors	Communicate and adherence	Ensure that the specification is communicated and adhered to
All employees	Adherence	Adherence to the specification
All Contractors	Adherence	Adherence to the specification
All Contractors	Implementation	Responsible for health and safety control on site

E4 INTRODUCTION

This specification must be included in all tender and contract documents for building or construction work so as to ensure that all costs related to the compliance with OHSA, as well as this specification are taken into consideration at tender stage. It must be an integral part of the Contract and Contractors are required to make it an integral part of their Contracts and Sub Contractors and Suppliers.

The document is applicable to the Construction of Mqanduli Internal Streets. This document is a performance specification to ensure that the Client and any bodies that enter into formal agreements with the Client/Client Agent viz. Contractors, Sub-Contractors and Concessionaires achieve an acceptable level of OHS performance. The Contractor shall sign an acknowledgement form (Annexure D) confirming that he / she has familiarised him / herself with the content of this document and he / she shall comply with all his / her obligations in respect thereof.

The Contractor will be required to sign the Section 37(2) Mandatory agreement. The successful Contractor will be required to compile a Health & Safety Plan based on the requirements of the OHS Act and this document, which will need to be approved by the OHS Agent prior commencement with construction work.

E5 GENERAL HEALTH AND SAFETY PROVISIONS

This section provides a summarised requirement of the OHSA and the Contractors are expected to comply with the provisions of the Act.

The Contractor shall ensure that all Sub-contractors under his / her control are complying with this Specification, the OHSA requirements; and any relevant legislation which may relate to the activities directly or indirectly.

Health and Safety Policy (Section 7).

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

- The Contractor shall submit a Health and Safety Policy signed by the Chief Executive Officer. The Policy must outline management commitment to safety and also state safety objectives and how they will be achieved and implemented by the company / Contractor.
- Duties of the employer to their employees (Section 8)
- The Contractor shall assume the duties of the employer in terms of the OHSA.
- The Contractor shall provide and maintain, as far as is reasonably practicable, a working environment that is safe and without risk to the health of the employees.

Duty to inform (Section 13)

- The Contractor shall cause every employee to be made conversant with hazards to his health and safety attached to any article, substance and work to be performed, produced, handled, used, processed, stored or transported as well as with the precautionary measures which should be taken and observed with respect to those hazards.
- The Contractor shall inform the health and safety representatives of the occurrence of an incident in the workplace.

General duties of employees at work (Section 14)

- The Contractor shall inform the employees of the duties imposed on them by the OHSA including the duty not to interfere with or misuse anything provided in the interest of health or safety.
- This could be achieved through safety training, awareness and safety talks sessions.

Health and Safety representatives (Section 17&18)

- The Contractor shall ensure that a Health and Safety Representative(s) are / is elected and trained to carry out his / her functions.
- The Health and Safety Representative shall carry out regular inspection, keep records and report to the supervisor to take appropriate action.
- He / She shall attend Health and Safety Committee Meetings and shall be part of the team that will investigate incidents, accidents & non-conformances.

Safety, Health and Environment Committees (Section 19 &20)

- The Contractor shall ensure that the Safety, Health and Environment Committee is established and letters of appointment are available.
- The Contractor shall ensure that monthly safety, health and environment meetings are held and minutes are kept on record.
- Meetings must be organised and chaired by the Contractor's Responsible Person and the Contractor shall ensure that the SHE representative is invited to attend the meeting as an observer.

Health and Safety Organogram

- The Contractor shall submit an Organogram outlining the Health and Safety Site Team as required and as related to the relevant appointments by the OHSA
- The Contractor shall submit supervisory appointments as well as any relevant appointments in writing (as stipulated by the OHSA), prior to commencement
- In cases where appointments have not been made, the Organogram shall reflect the position. Contractor shall be informed of any changes and updates on the Organogram and appointments of the site team.

Health and Safety Training

- Competency -The Contractor shall identify relevant competency required by the OHSA and ensure that his/ her employees are appropriately trained. Training or competency certificates shall be kept on site.
- Awareness - The Contractor shall conduct, on site, periodic toolbox talks, preferably weekly or before any hazardous work takes place. The talks shall cover the relevant activity and an attendance register must be kept and signed by all attendees. A record of who attended and the content of the topic will be kept on the site health and safety file as evidence of training.
- Induction -The Contractor must develop a job or project specific induction programme. The content of the induction must be kept on site safety file.

General Record Keeping

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

- The Contractor shall keep and maintain Health and Safety records to demonstrate compliance with this specification and the OHS Act.
- The Contractor shall ensure that all records of incidents, spot fines, training, appointment letters etc. are kept on site.
- All documents shall be available for inspection by the OHS Inspectors/OHS Agent, or Inspectors from the Department of Labour.

General Inspection, Monitoring, Inspection and Reporting

- The Contractor shall carry out daily inspections and investigate all incidents and report to client as required of any accident, incident, non-conformance, corrective and preventive measures.
- The Contractor shall be required for keeping records of all inspections and investigations which were undertaken and any other inspections and investigations by person(s) authorised to do so.
- The Contractor shall in addition to the above, investigate, record and report all reportable incidents as per section 24 of the OHS Act. The Investigations shall be conducted by a qualified person or person who has sufficient knowledge to carry out an investigation.

General Audits

- The Employer's personnel shall conduct monthly health & safety audits to ensure compliance with the OHS Act and this specification.
- Records of audits must be kept and non-conformance reported, investigated and corrective action must be taken to prevent re-occurrence.

E6 CONSTRUCTION REGULATIONS

Notification of construction work (CR4)

A contractor who intends to carry out any construction work other than work contemplated in regulation 3(1), must at least 7 days before that work is to be carried out notify the provincial director in writing in a form similar to Annexure 2 if the intended construction work will-

- include excavation work;
- Include layer works;
- Traffic Accommodation; or
- Include storm water.

A copy of the notification letter to the provincial director shall be kept on site and also forwarded to OHS Agent.

Duties of Contractor (CR7)

- Provide and demonstrate to the principal contractor a suitable and sufficiently documented health and safety plan, based on the relevant sections of the client's health and safety specification contemplated in regulation 5(1)(b) and provided by the principal contractor in terms of sub-regulation (1)(a), which plan must be applied from the date of commencement of and for the duration of the construction work and which must be reviewed and updated by the contractor as work progresses;
- Open and keep on site a health and safety file, which must include all documentation required in terms of the Act and these Regulations, and which must be made available on request to an inspector, the client, the client's agent or the principal contractor;
- Before appointing another contractor to perform construction work be reasonably satisfied that the contractor that he or she intends to appoint has the necessary competencies and resources to perform the construction work safely;
- co-operate with the principal contractor as far as is necessary to enable each of them to comply with the provisions of the Act; and
- as far as is reasonably practicable, promptly provide the principal contractor with any information which might affect the health and safety of any person at work carrying out construction work on the site, any person who might be affected by the work of such a person at work, or which might justify a review of the health and safety plan
- Where a contractor appoints another contractor to perform construction work, the duties determined in sub-regulation (1)(b) to (g) that apply to the principal contractor apply to the contractor as if he or she were the principal contractor.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

- A principal contractor must take reasonable steps to ensure co-operation between all contractors appointed by the principal contractor to enable each of those contractors to comply with these Regulations.
- No contractor may allow or permit any employee or person to enter any site, unless that employee or person has undergone health and safety induction training pertaining to the hazards prevalent on the site at the time of entry.
- A contractor must ensure that all visitors to a construction site undergo health and safety induction pertaining to the hazards prevalent on the site and must ensure that such visitors have the necessary personal protective equipment.
- A contractor must at all times keep on his or her construction site records of the health and safety induction training contemplated in sub-regulation (6) and such records must be made available on request to an inspector, the client, the client's agent or the principal contractor;
- A contractor must ensure that all his or her employees have a valid medical certificate of fitness specific to the construction work to be performed and issued by an occupational health practitioner in the form of Annexure 3.
- The Contractor shall submit a letter of good standing with its Compensation Insurer as proof of registration. Contractors shall submit proof of registration to the Client Agent before they commence work on site.
- Contractor to provide public liability insurance, SARS TAX clearance certificate.
- OHS Agent will ensure that the periodic site audits and document verification are conducted at intervals mutually agreed upon between the principal agent and contractor, but at least once every 30 days;

Management and supervision of construction work (CR8)

- The Contractor shall submit supervisory appointments as well as any relevant appointments in writing (as stipulated by the OHSA and Construction Regulations 2014, including Safety Officer appointment), prior to commencement of work.
- Proof of competency must be included.

Risk Assessment (CR9)

The Contractor shall cause a hazard identification to be performed by a competent person before commencement of construction work, and the assessed risks shall form part of the construction phase health and safety plan submitted for approval to the Client.

- The risk assessment must include;
- A list of hazards identified as well as potentially hazardous tasks;
- A documented risk assessment based on the list of hazards and tasks;
- A set of safe working procedures (method statements) to eliminate, reduce and/or control the risks assessed and
- A monitoring and review plan of the relevant site.

A Contractor must review the relevant risk assessment-

Where changes are effected to the design and or construction that result in a change to the risk profile; or when an incident has occurred.

When an incident has occurred.

- The Principal Contractor shall ensure that all Contractors are informed, instructed and trained by a competent person regarding any hazards, risks and related safe work procedures before any work commences and thereafter at times that may be determined in the risk assessment monitoring and review plan of the relevant site.
- The Principal Contractor shall be responsible for ensuring that all persons who could be negatively affected by its operations are informed and trained according to the hazards and risks and are conversant with the safe work procedures, control measures and other related rules (tool box talk strategy to be implemented).
- A contractor must ensure that as far as is reasonably practicable, ergonomic related hazards are analysed, evaluated and addressed in a risk assessment.

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- A Contractor must consult with the health and safety committee or, if no health and safety committee exist, with a representative trade union or representative group of employees, on the monitoring and review of the risk assessments of the relevant site.
- The risk assessment can cover, where applicable, but not limited to these activities; Excavating of trenches (hand and mechanical)
 - Backfilling of trenches;
 - Pipe laying;
 - All other work carried out with-in trenches;
 - Provision of traffic signs;
 - Identification of existing services;
 - Clearing of vegetation;
 - Bulk earth works;
 - Movement of Construction Vehicles;
 - Work with Construction Vehicles;
 - Kerb Channelling;
 - Temporary stockpiling of material;
 - Accommodation of traffic;
 - Side Walks;
 - Provision of parking facilities;
 - Control of access of public/pedestrians to excavations;
 - All work near overhead power lines and underground cables;
 - Fencing
 - Fuel storage;
 - Asphaltting;
 - Cutting into existing sewer;
 - Finishing road reserve;
 - Connection of electricity to municipal supply;
 - Crossing of haul roads;
 - Provision of stormwater drainage system

Alterations to existing power supply, sewer, water, boundary fence and other services.

All health hazards that can be present during any of the above activities and should include dusts, gases, fumes, vapours, noise, extreme temperatures, illumination, vibration and ergonomic hazards.

The Contractor shall conduct issue based risk assessment whenever;

- A new machine is introduced on site;
- A system for work is changed or operations altered;
- After an accident or a near miss has occurred and
- New knowledge comes to light and information is received which may influence the level of risk to employees on site.

The Contractor shall conduct continuous risk assessment as an integral part of day to day safety management and can include audits, pre work assessments, checklists and general hazard awareness talks.

Appointment of competent persons

Before commencing with the following works, the Contractor shall ensure that the competent person is appointed in writing, approved Safe Work Procedures (SWP) are in place to carry out the work;

Use of explosives and blasting;

- Use of hazardous chemical substances eg. Asbestos, lead etc.;
- Piling;
- Work for which a fall prevention plan is required;
- Excavation work;

Stacking of materials

The Safe Work Procedures for the above works shall take into account all the risks and control measures associated with performing the work.

The Safe work Procedures shall be communicated to all the affected parties.

Contractor

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Employer

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Fall Protection (CR 10)

A contractor must-

- Designate a competent person to be responsible for the preparation of a fall protection plan;
- Ensure that the fall protection plan contemplated in paragraph (a) is implemented, amended where and when necessary and maintained as required; and
- Take steps to ensure continues adherence to the fall protection plan.
- A fall protection plan contemplated in subregulation must include-
- a risk assessment of all work carried out from a fall risk position and the procedures and methods used to address all the risks identified per location;
- the processes for the evaluation of the employee's medical fitness necessary to work at a fall risk position and the records thereof;
- a programme for the training of employees working from a fall risk position and the records thereof;
- the procedure addressing the inspection, testing and maintenance of all fall protection equipment; and
- a rescue plan detailing the necessary procedure, personnel and suitable equipment required to affect a rescue of a person in the event of a fall incident to ensure that the rescue procedure is implemented immediately following the incident

A contractor must ensure that a construction manager appointed under regulation 8(1) is in possession of the most recently updated version of the fall protection plan.

A contractor must ensure that-

- All unprotected openings in floors, edges, slabs, hatchways and stairways are adequately guarded, fenced or barricaded or that similar means are used to safeguard any person from falling through such openings;
- No person is required to work in a fall risk position, unless such work is performed safely as contemplated in subregulation (2)

Fall prevention and fall arrest equipment are-

- Approved as suitable and of sufficient strength for the purpose for which they are being used, having regard to the work being carried out and the load, including any person, they are intended to bear; and
- securely attached to a structure or plant, and the structure or plant and the means of attachment thereto are suitable and of sufficient strength and stability for the purpose of safely supporting the equipment and any person who could fall; and
- Fall arrest equipment is used only where it is not reasonably practicable to use fall prevention equipment
- Where roof work is being performed on a construction site, the contractor must ensure that, in addition to the requirements set out in subregulations (2) and (4), it is indicated in the fall protection plan that –
- The roof work has been properly planned;
- the roof erectors are competent to carry out the work;
- no employee is permitted to work on roofs during inclement weather conditions or if any conditions are hazardous to the health and safety of the employee;
- all covers to openings and fragile material are of sufficient strength to withstand any imposed loads;
- suitable and sufficient platforms, coverings or other similar means of support have been provided to be used in such a way that the weight of any person passing across or working on or from fragile material is supported; and
- suitable and sufficient guard-rails, barriers and toe-boards or other similar means of protection prevent, as far as is reasonably practicable, the fall of any person, material or equipment.

Structures (CR 11)

A contractor must ensure that-

- All reasonably practicable steps are taken to prevent the uncontrolled collapse of any new or existing structure or any part thereof, which may become unstable or is in a temporary state of weakness or instability due to the carrying out of construction work;
- No structure or part of a structure is loaded in a manner which would render it unsafe; and
- All drawings pertaining to the design of the relevant structure are kept on site and are available on request to an inspector, other contractors, the client and the client's agent or employee.

Contractor

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- An owner of a structure must ensure that-
- Inspections of that structure are carried out periodically by competent persons in order to render the structure safe for continued use;
- That the inspections contemplated in paragraph (a) are carried out at least once every six months for the first two years and thereafter yearly;
- The structure is maintained in such a manner that it remains safe for continued use;
- The records of inspections and maintenance are kept and made available on request to an inspector.

Temporary works (CR 12)

- A contractor must appoint a temporary works designer in writing to design, inspect and approve the erected temporary works on site before use.
- A contractor must ensure that all temporary works operations are carried out under the supervision of a competent person who has been appointed in writing for that purpose.

A contractor must ensure that-

- All temporary works structures are adequately erected, supported, braced and maintained by a competent person so that they are capable of supporting all anticipated vertical and lateral loads that may be applied to them, and that no loads are imposed onto the structure that the structure is not designed to withstand;
- all temporary works structures are done with close reference to the structural design drawings, and where any uncertainty exists the structural designer should be consulted
- detailed activity specific drawings pertaining to the design of temporary works structures are kept on the site and are available on request to an inspector, other contractors, the client, the client's agent or any employee;
- all persons required to erect, move or dismantle temporary works structures are provided with adequate training and instruction to perform those operations safely;
- all equipment used in temporary works structure are carefully examined and checked for suitability by a competent person, before being used;
- all temporary works structures are inspected by a competent person immediately before, during and after the placement of concrete, after inclement weather or any other impose load and at least on a daily basis until the temporary works structure has been removed and the results have been recorded in a register and made available on site;
- no person may cast concrete, until authorization in writing has been given by the competent person contemplated in paragraph (a);
- if, after erection, any temporary works structure is found to be damaged or weakened to such a degree that its integrity is affected, it is safely removed or reinforced immediately;
- adequate precautionary measures are taken in order to-
- secure any deck panels against displacement;
- prevent any person from slipping on temporary works due to the application of release agents;
- as far as is reasonably practicable, the health of any person is not affected through the use of solvent or oils or any other similar substances;
- upon casting concrete, the temporary works structure is left in place until the concrete has acquire sufficient strength to safely support its own weight and any imposes load, and is not removed until authorization in writing has been given by the competent person contemplated in paragraph (a)
- the foundation conditions are suitable to withstand the loads caused by the temporary works structure and any imposed load in accordance with the temporary works design.
- provision is made for safe access by means of secure ladders or staircases for all work to be carried out above the foundation bearing level;
- a temporary works drawing or any other relevant document includes construction sequences and methods statement;
- the temporary works designer has been issued with the latest revision of any relevant structural design drawing;
- a temporary works design and drawing is used only for its intended purpose and for a specific portion of a construction site; and
- the temporary works drawings are approved by the temporary works designer before the erection of any temporary works

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- No contractor may use a temporary works design and drawing for any work other than its intended purpose

Excavation (CR 13)

A contractor must-

- ensure that all excavation work is carried out under the supervision of a competent person who has been appointed in writing for that purpose; and
- evaluate, as far as is reasonably practicable, the stability of the ground before excavation work begins
- A contractor who performs excavation work-
- must take reasonable and sufficient steps in order to prevent, as far as is reasonably practicable, any person from being buried or trapped by a fall or dislodgement of material in an excavation
- may not require or permit any person to work in an excavation which has not been adequately shored or braced: Provided that shoring and bracing may not be necessary where-
- the sides of the excavation are sloped to at least the maximum angle of repose measured relative to be horizontal plane; or such an excavation is in stable material: Provided that-
 - permission has been given in writing by the appointed competent person contemplated in subregulation (1) upon evaluation by him or her of the site conditions; and
 - where any uncertainty pertaining to the stability of the soil still exists, the decision from a professional engineer or a professional technologist competent in excavations is decisive and such a decision must be noted in writing and signed by both the competent person contemplated in subregulation (1) and the professional engineer or technologist, as the case may be;
 - must take steps to ensure that the shoring or bracing contemplated in paragraph (b) is designed and constructed in a manner that renders it strong enough to support the sides of the excavation in question;
 - must ensure that no load, material, plant or equipment is placed or moved near the edge of any excavation where it may cause its collapse and consequently endangers the safety of any person, unless precautions such as the provision of sufficient and suitable shoring or bracing are taken to prevent the sides from collapsing;
 - must ensure that where the stability of an adjoining building, structure or road is likely to be affected by the making of an excavation, steps are taken to ensure the stability of such building, structure or road and the safety of persons;
 - must cause convenient and safe means of access to be provided to every excavation in which persons are required to work, and such access may not be further than six meters from the point where any worker within the excavation is working;
 - must ascertain, as far as is reasonably practicable, the location and nature of electricity, water, gas or other similar services which may in any way be affected by the work to be performed, and must before the commencement of excavation work that may affect any such service, take the steps that are necessary to render the circumstances safe for all persons involved;
 - must ensure that every excavation, including all bracing and shoring, is inspected-
 - daily, prior to the commencement of each shift;
 - after every blasting operation;
 - after an unexpected fall of ground;
 - after damage to supports; and
 - after rain,
 - by the competent person contemplated in subregulation (1), in order to ensure the safety of the excavation and of persons, and those results must be recorded in a register kept on site and made available on request to an inspector, the client, the client's agent, any other contractor or any employee;
 - must cause every excavation which is accessible to the public or which is adjacent to public roads or thoroughfares, or whereby the safety of persons may be endangered, to be-
 - adequately protected by a barrier or fence of at least one metre in height and as close to the excavation as is practicable; and
 - provided with warning illuminants or any other clearly visible boundary indicators at night or when visibility is poor, or have any other suitable and sufficient precautionary measure where subparagraphs (i) and (ii) are not practicable
 - (must ensure that all precautionary measures stipulated for confined spaces as determined in the General Safety Regulations, 2003, are complied with by any person entering any excavation;

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- must, where the excavation work involves the use of explosives, appoint a competent person in the use of explosives for excavation, and must ensure that a method statement is developed by that person in accordance with the applicable explosives legislation; and
- must cause warning signs to be positioned next to an excavation within which or where persons are working or carrying out inspections or tests

Demolition (CR 14)

A contractor must appoint a competent person in writing to supervise and control all demolition work on site. A contractor must ensure that before any demolition work is carried out, and in order to ascertain the method of demolition to be used, a detailed structural engineering survey of the structure to be demolished is carried out by a competent person and that a method statement on the procedure to be followed in demolishing the structure is developed by that person.

During a demolition, the competent person contemplated in subregulation (1) must check the structural integrity of the structure at intervals determined in the method statement contemplated in subregulation (2), in order to avoid any premature collapses.

A contractor who performs demolition work must-

- with regard to a structure being demolished, take steps to ensure that-
- no floor, roof or other part of the structure is overloaded with debris or material in a manner which would render it unsafe;
- all reasonably practicable precautions are taken to avoid the danger of the structure collapsing when any part of the framing of a framed or partly framed building is removed, or when reinforced concrete is cut; and
- precautions are taken in the form of adequate shoring or other means that may be necessary to prevent the accidental collapse of any part of the structure or adjoining structure;
- ensure that no person works under overhanging material or a structure which has not been adequately supported, shored or braced;
- ensure that any support, shoring or bracing contemplated in paragraph (b), is designed and constructed so that it is strong enough to support the overhanging material;
- where the stability of an adjoining building, structure or road is likely to be affected by demolition work on a structure, take steps to ensure the stability of such structure or road and the safety of persons;
- ascertain as far as is reasonably practicable the location and nature of electricity, water, gas or other similar services which may in any way be affected by the work to be performed, and must before the commencement of demolition work that may affect any such service, take the steps that are necessary to render circumstances safe for all persons involved;
- cause every stairwell used and every floor where work is being performed in a building being demolished, to be adequately illuminated by either natural or artificial means;
- cause convenient and safe means of access to be provided to every part of the demolition site in which persons are required to work; and
- erect a catch platform or net above an entrance or passageway or above a place where persons work or pass under, or fence off the danger area if work is being performed above such entrance, passageway, or place so as to ensure that all persons are kept safe where there is a danger or possibility of persons being struck by falling objects.

A contractor must ensure that no material is dropped to any point, which falls outside the exterior walls of the structure, unless the area is effectively protected. No person may dispose of waste and debris from a high place by a chute unless the chute-

is adequately constructed and rigidly fastened;

- if inclined at an angle of more than 45 degrees to the horizontal, is enclosed on its four sides;
- if of the open type, is inclined at an angle of less than 45 degrees to the horizontal;
- where necessary, is fitted with a gate at the bottom end to control the flow of material; and
- discharges into a container or an enclosed area surrounded by barriers.

A contractor must ensure that every chute used

- to dispose of rubble is designed in such a manner that rubble does not free-fall and that the chute is strong enough to withstand the force of the debris travelling along the chute.
- A contractor must ensure that no equipment is

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- used on floors or working surfaces, unless such floors or surfaces are of sufficient strength to support the imposed loads.
- Where a risk assessment indicates the presence of asbestos, a contractor must ensure that all asbestos related work is conducted in accordance with the Asbestos Regulations, 2001, promulgated by Government Notice No. R. 155 of 10 February 2002.
- Where a risk assessment indicates the presence of lead, a contractor must ensure that all lead related work is conducted in accordance with the Lead Regulations, 2001, promulgated by Government Notice No. R236 of 28 February 2002
- Where the demolition work involves the use of explosives, a method statement must be developed in accordance with the applicable explosives legislation, by an appointed person who is competent in the use of explosives for demolition work and all persons involved in the demolition works must adhere to demolition procedures issued by the appointed person.
- A contractor must ensure that all waste and debris are as soon as reasonably practicable removed and disposes of from the site in accordance with the applicable legislation.

Material Hoist (CR 19)

- A contractor must ensure that every material hoist and its tower have been constructed in accordance with the generally accepted technical standards and are strong enough and free from defects.
- A contractor must ensure that the tower of every material hoist is-
- erected on firm foundations and secured to the structure or braced by steel wire guy ropes, and extends to a distance above the highest landing to allow a clear and unobstructed space of at least 900 millimetres for over travel;
- enclosed on all sides at the bottom, and at all floors where persons are at risk of being struck by moving parts of the hoist, except on the side or sides giving access to the material hoist, with walls or other effective means to a height of at least 2100 millimetres from the ground or floor level; and
- provided with a door or gate at least 2100 millimetres in height at each landing, and that door or gate must be kept closed except when the platform is at rest at such a landing

A contractor must cause-

- the platform of every material hoist to be designed in a manner that it safely contains the loads being conveyed and that the combined mass of the platform and the load does not exceed the designed lifting capacity of the hoist;
- the hoisting rope of every material hoist which has a remote winch to be effectively protected from damage by any external cause to the portion of the hoisting rope between the winch and the tower of the hoist; and
- every material hoist to be provided with an efficient brake capable of holding the platform with its maximum load in any position when power is not being supplied to the hoisting machinery.
- No contractor may require or permit trucks, barrows or material to be conveyed on the platform of a material hoist and no person may so convey trucks, barrows, or material unless those articles are secured or contained in a manner that displacement thereof cannot take place during movement.
- A contractor must cause a notice, indicating the maximum mass load which may be carried at any one time and the prohibition of persons from riding on the platform of the material hoist, to be affixed around the base of the tower and at each landing.
- A contractor of a material hoist may not require or permit any person to operate a hoist, unless the person is competent in the operation of that hoist.
- No contractor may require or permit any person to ride on a material hoist.

A contractor must ensure that every material hoist-

- is inspected on daily basis by a competent person appointed in writing by the contractor and such competent person must have the experience pertaining to the erection or maintenance of material hoists or similar machinery;
- inspection contemplated in paragraph (a), includes the determination of the serviceability of the entire material hoist, including guides, ropes and their connections, drums, sheaves or pulleys and all safety devices;
- inspection result are entered and signed in a record book by a competent person, which book must be kept on the premises for that purpose;

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- is properly maintained and the maintenance records in this regard are kept on site.\

Construction Vehicles and mobile plant (CR23)

- A contractor must ensure that all construction vehicles and mobile plant-
- are of an acceptable design and construction;
- are maintained in a good working order;
- are used in accordance with their design and the intention for which they were designed, having due regard to safety and health;
- are operated by a person who-
 - (i) has received appropriate training, is certified competent and in possession of proof of competency and is authorized in writing to operate those construction vehicles and mobile plant;
 - (ii) has a medical certificate of fitness to operate those construction vehicles and mobile plant, issued by an occupational health practitioner in the form of Annexure 3;

have safe and suitable means of access and egress;

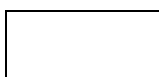
- are properly organized and controlled in any work situation by providing adequate signalling or other control arrangements to guard against the dangers relating to the movement of vehicles and plant, in order to ensure their continued safe operation;
- are prevented from falling into excavations, water or any other area lower than the working surface by installing adequate edge protection, which may include guardrails and crash barriers;
- are fitted with structures designed to protect the operator from falling material or from being crushed should the vehicle or mobile plant overturn;
- are equipped with an acoustic warning device which can be activated by the operator;
- are equipped with an automatic acoustic reversing alarm; and
- are inspected by the authorized operator or driver on a daily basis using a relevant checklist prior to use and that the findings of such inspection are recorded in a register kept in the construction vehicle or mobile plant.
- no person rides or is required or permitted to ride on a construction vehicle or mobile plant otherwise than in a safe place provided thereon for that purpose;
- every construction site is organized in such a way that, as far as is reasonably practicable, pedestrians and vehicles can move safely and without risks to health;
- the traffic routes are suitable for the person, construction vehicles or mobile plant using them, are sufficient in number, in suitable positions and of sufficient size;
- every traffic route is, where necessary, indicated by suitable signs;
- all construction vehicles and mobile plant left unattended at night, adjacent to a public road in normal use or adjacent to construction areas where work is in progress have appropriate lights or reflectors, or barricades equipped with appropriate lights or reflectors, in order to identify the location of the vehicles or plant;
- all construction vehicles or mobile plant when not in use, have buckets, booms or similar appendages, fully lowered or blocked, controls in a neutral position, motors stopped, wheels chocked, brakes set and ignition secured;
- whenever visibility conditions warrant additional lighting, all mobile plant are equipped with at least two headlights and two taillights when in operation;
- tools, material and equipment are secured and separated by means of a physical barrier in order to prevent movement when transported in the same compartment with employees;
- vehicles used to transport employees have seats firmly secured and adequate for the number of employees to be carried; and
- all construction vehicles or mobile plant traveling, working or operating on public roads comply with the requirements of the National Road Traffic Act, 1996.

The Contractor shall ensure that any hired plant and machinery brought to site is safe for use.

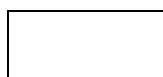
The Contractor shall ensure that all persons in their employ and all those that are visiting the site are aware and comply with the site speed restriction(s).

On site gravel or earth roads and within 500m of the Site, the vehicles of the Contractor and his/her suppliers shall be regulated to a maximum of 20km/h or 40km/h and notices and signs to this effect shall be installed.

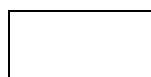
Electrical Installations and machinery on construction sites (CR24)



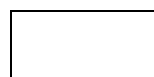
Contractor



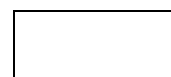
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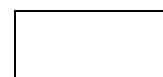
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- A Contractor must, in addition to compliance with the Electrical Installation Regulations, 2009, and the Electrical Machinery Regulations, 1988, promulgated by Government Notice No. R. 1593 of 12 August 1988, ensure that-
- before construction commences and during the progress thereof, adequate steps are taken to ascertain the presence of and guard against danger to workers from any electrical cable or apparatus which is under, over or on the site;
- all part of electrical installations and machinery are of adequate strength to withstand the working conditions on construction sites;
- the control of all temporary electrical installations on the construction site is designated to a competent person who has been appointed in writing for that purpose;
- all temporary electrical installations used by the contractor are inspected at least once a week by a competent person and the inspection findings are recorded in a register kept on the construction site; and
- all electrical machinery is inspected by the authorized operator or user on a daily basis using a relevant checklist prior to use and the inspection findings are recorded in a register kept on the construction site.

Use and temporary storage of flammable liquids on construction sites (CR25)

- A contractor must, in addition to compliance with the provisions for the use and storage of flammable liquids in the General Safety Regulations, 2003, ensure that-
- where flammable liquids are being used, applied or stored at the workplace concerned, it is done in a manner that does not cause a fire or explosion hazard, and that the workplace is effectively ventilated;
- no person smokes in any place in which flammable liquid is used or stored, and the contractor must affix a suitable and conspicuous notice at all entrances to any such areas prohibiting such smoking;
- an adequate amount of efficient fire-fighting equipment is installed in suitable locations around the flammable liquids store with the recognized symbolic signs;
- only the quantity of flammable liquid needed for work on one day is taken out of the store for use;
- all containers holding flammable liquids are kept tightly closes when not in actual use and, after their contents have been used up, are removed from the construction site and safely disposed of;
- (where flammable liquids are decanted, the metal containers are bonded and earthed; and
- no flammable material, including cotton waste, paper, cleaning rags or similar material is stored together with flammable liquids

Water environments (CR24)

- A contractor must ensure that where construction work is done over or in close proximity to water, provision is made for
- preventing persons from falling into water; and
- the rescuing of persons in danger of drowning.

A contractor must ensure that where a person is exposed to the risk of drowning by falling into the water, the person is provided with and wears a lifejacket

Housekeeping and general safeguarding on construction sites (CR27)

A Contractor must, in addition to compliance with the Environmental Regulations for Workplaces 1987, promulgated by Government Notice No. R. 2281 of 16 October 1987, ensure that suitable housekeeping is continuously implemented on each construction site; including-

- the proper storage of materials and equipment;
- the removal of scrap, waste and debris at appropriate intervals;
- ensuring that materials required for use, are not placed on the site so as to obstruct means of access to and egress from workplaces and passageways;
- ensuring that materials which are no longer required for use, do not accumulate on and are removed from the site at appropriate intervals;
- ensuring that waste and debris are not disposed of from a high place with a chute, unless the chute complies with the requirements set out in regulation 14(6);
- ensuring that construction sites in built-up areas adjacent to a public way are suitably and sufficiently fenced off and provided with controlled access points to prevent the entry of unauthorized persons; and
- ensuring that a catch platform or net is erected above an entrance or passageway or above a place where person work or pass under, or fencing off the danger area if work is being performed above

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such entrance, passageway, or place so as to ensure that all person are kept safe in the case of danger or possibility of persons being struck by falling objects.

Stacking and storage on construction sites (CR28)

A contractor must, in addition to compliance with the provisions for the stacking of articles in the General Safety Regulations, 2003, ensure that-

- a competent person is appointed in writing with the duty of supervising all stacking and storage on a construction site;
 - adequate storage areas are provided;
 - there are demarcated storage areas; and
 - storage areas are kept neat and under control.

Fire precautions on construction sites (CR29)

A Contractor must, in addition to compliance with the Environmental Regulations for Workplaces, 1987, ensure that-

- all appropriate measure are taken to avoid the risk of fire;
- sufficient and suitable storage is provided for flammable liquids, solids and gases;
- smoking is prohibited and notices in this regard are prominently displayed in all places containing readily combustible or flammable materials;
- in confined spaces and other places in which flammable gases, vapours or dust can cause danger-
- only suitably protected electrical installations and equipment, including portable lights, are used; there are no flames or similar means of ignition;
- here are conspicuous notices prohibiting smoking;

oily rags, waste and other substances liable to ignite are without delay removed to a safe place; and adequate ventilation is provided;

combustible materials do not accumulate on the construction site;

- welding, flame cutting and other hot work are done only after appropriate precautions have been taken to reduce the risk of fire;
- suitable and sufficient fire-extinguishing equipment is placed at strategic locations or as may be recommended by the Fire Chief or local authority concerned, and that such equipment is maintained in a good working order;
- the fire equipment contemplated in paragraph (g) is inspected by a competent person, who has been appointed in writing for that purpose, in the manner indicated by the manufacturer thereof;
- a sufficient number of workers are trained in the use of fire- extinguishing equipment;
- where appropriate, suitable visual signs are provided to clearly indicate the escape routes in the case of a fire;
- he means of escape is kept clear at all times;
- there is an effective evacuation plan providing for all-
 - persons to be evacuated speedily without panic;
 - persons to be accounted for; and
 - plant and processes to be shut down; and
 - a siren is installed and sounded in the event of a fire.

Emergency procedure shall include, but shall not be limited to, fire, spills, accidents to employees, use of hazardous substances, bomb threats, major incidents/accidents, etc.

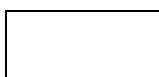
The Contractor shall advise the Client in writing forthwith, of any emergencies, together with a record of action taken.

A contact list of all service providers (Fire Department, Ambulance, Police, Medical and Hospital, etc) must be maintained and available to site personnel.

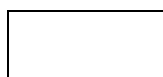
First Aid Boxes and First Aid Equipment

- The Contractor and all Contractors on site shall appoint in writing an accredited First Aider(s) and valid certificates shall be kept on site.
- The Contractor shall provide first aid box or boxes adequately stocked at all times.

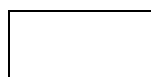
Construction employees facilities (CR30)



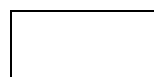
Contractor



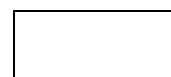
Witness 1



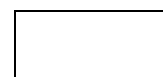
Witness 2



Employer



Witness 1



Witness 2

A contractor must, in addition to the construction site provisions in the Facilities Regulations, 2004, promulgated by Government Notice No. R. 924 of 3 August 2004, provide at or within reasonable access of every construction site, the following clean, hygienic and maintained facilities:

- Shower facilities after consultation with the employees or employees representatives, or at least one shower facility for every 15 persons;
- at least one sanitary facility for each sex and for every 30 workers;
- changing facilities for each sex; and sheltered eating areas.

A contractor must provide reasonable and suitable living accommodation for the workers at construction sites who are far removed from their homes and where adequate transportation between the site and their homes, or other suitable living accommodation, is not available. The Contractor shall not undertake any night work without prior arrangement and a written permit from Employer's Engineer. The Contractor shall ensure that adequate lighting is provided for all night work and failure to do so shall result in work being stopped.

Occupational Health and Safety signage

The Contractor shall provide adequate on-site OHS signage, including but not limited to: 'no unauthorized entry', 'site office', 'beware of overhead work', 'hard hat area', 'mask area', no smoking area, fire equipment area', 'earplugs', 'gloves' etc.

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.

Personal Protective Equipment and Clothing

- The Contractor shall carry out PPE or clothing needs analysis to determine the necessary PPE or clothing and as determined by the HIRA or clothing to be used during construction.
- The Contractor shall ensure that all workers are issued and wear Helmets, Steel Toe Safety Shoes and overall with clear identification of the Contractor name.
- The Contractor shall make provision and keep adequate quantities of SABS approved PPE or clothing on site at all times
- The Contractor shall clearly outline procedures to be taken when PPE or Clothing is lost or stolen, worn or damaged.
- The Contractor shall keep PPE or clothing issuance register on site.

Alcohol and other drugs

- No alcohol and other drugs will be allowed on site.
- No person may be under the influence of alcohol or any other drugs while on the construction site.
- Any person on prescription drugs must inform his/her superior, who shall in turn report this to the Contractor.
- Any person suffering from any illness/condition that may have a negative effect on his/her safety performance must report this to his/her superior, who shall in turn report this to the Contractor.
- Any person suspected of being under the influence of alcohol or other drugs must be sent home immediately, to report back the next day for a preliminary inquiry. A full disciplinary procedure must be followed by the Contractor concerned and a copy of the disciplinary action must be forwarded to the Client for records

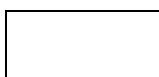
Transport of workers

The Contractor shall not;

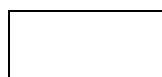
- Transport persons together with goods or tools unless there is an appropriate area or section to store them;
- Transport persons in a non-enclosed vehicle, e.g. truck; there must be a proper canopy (properly covering the back and top) with suitable sitting area;
- Workers shall not be permitted to stand or sit at the edge of the transporting vehicle;
- Transport workers in bakkies unless they are closed/covered and have the correct number of seats for the passengers.

Public and site visitors health and safety

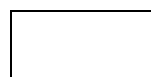
Both the Client and the Contractor have a duty in terms of the OHSA to do all that is reasonably practicable to prevent members of the public and site visitors from being affected by the construction activities.



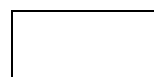
Contractor



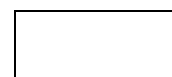
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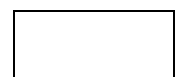
Witness 2



Employer



Witness 1



Witness 2

The Contractor shall ensure that every person working on or visiting the site, as well as the public in general, shall be made aware of the dangers likely to arise from site activities, including the precautions to be taken to avoid or minimise those dangers.

Appropriate health and safety notices and signs shall be posted up, but shall not be the only measure taken. Site visitors must be briefed on the hazards and risks they may be exposed to and what measures are in place or should be taken to control these hazards and risks.

A record of these 'inductions' must be kept on site in accordance with the Construction Regulations.

E7 OCCUPATIONAL HAZARD

Exposures of workers to occupational health hazards and risks are very common in any work environment, especially in construction.

Occupational health hazards and risks exposure is a major problem and all Contractors are to ensure that proper health and hygiene measures are put in place to prevent exposure to these hazards and risks.

The occupational hazards and risks may enter the body in three ways:

- Inhalation through breathing e.g. cement dust;
- Ingestion through swallowing maybe through food intake;
- Absorption through the skin (pores) e.g. painting or use of thinners.

All contractors are to ensure that where employees are exposed to airborne contaminants, pre-employment medicals should be conducted to ensure fitness to work under such conditions. Tests conducted should include full lung function.

All contractors will be responsible for the full cost of medical treatment that his staff may require; the contractor is therefore required to ensure that all his personnel are medically fit prior to being allowed onto the work site.

E8 COMPLIANCE WITH OTHER OHS REGULATIONS AND STANDARDS

Notwithstanding the above, the Contractor, sub-contractors and all suppliers shall comply with the following OHS regulations together with associated standards where applicable;

- Asbestos regulations;
- Certificate of Competency regulations;
- Construction regulations;
- Driven Machinery regulations;
- Electrical Installation regulations;
- Electrical Machinery regulations;
- Environmental Regulations for Workplaces;
- Facilities regulations;
- General Administrative regulations;
- General Machinery regulations;
- General Safety regulations;
- Hazardous Biological Agents regulations;
- Hazardous Chemical Substances regulations;
- Lead regulations and
- Noise Induced Hearing loss regulations

E9 SUBMISSION OF CONSOLIDATED OHS FILE

Upon completion of the project, the Principal Contractor shall submit a well-documented consolidated H&S file (to be in electronic form) to the appointed H&S Agent, confirming the H & S history of the project. The consolidated H&S file can only commence once all personnel has been demobilized and nil man-hours are recorded.

The following summary of information is required in the file, but not limited to:

- Monthly H&S Agents H&S audit reports
- Minutes of the monthly Health and Safety Committee meetings
- Incidents & IOD

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

- ▪ WCA Claims
- ▪ Total Man-hours and DIFR
- ▪ Monthly H&S audit report
- ▪ Environmental rehabilitation status
- ▪ Copies of Pre and Post Employment Medical Certificates of all employees that worked on the project
- ▪ H&S Non conformances (current/outstanding)
- ▪ Copies of all Hazardous Waste Disposal Certificates (where applicable)

The H&S Agent will evaluate the Principal Contractor's Consolidated HS File i.e. compliance, accuracy, performance, quality and compile a close-out report which will be added to the Principal Contractors consolidated file.

The SHE Agent shall handover Electronic submission shall be provided to the Client's Project Manager for record purposes.

E10 MEASUREMENT AND PAYMENT

E10.01 Payment for the contractor's obligations in respect of the Occupational Health and Safety act and Construction Regulations shall be made through three payment items described below. The three payment items together shall include full compensation for all personnel (including a dedicated full time Construction Safety Officer), cost and incidentals in respect of compliance with the enforcement of the Health and Safety Specifications, which shall include for the compilation, presentation, implementation and maintenance of the Health and Safety Plan as contemplated. In tendering rates for the three items the contractor shall ensure that the sum of the amounts for the three items shall not be less than one percent (1%) of the Tender Amount.

All of the Contractor's costs associated with compliance with the provisions of this part of the Project Specifications shall be deemed to be included in the rates tendered for the items of work listed below.

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

E10.02 Occupational Health and Safety Requirements

- | | |
|---|----------|
| <p>(a) Contractor's initial obligations in respect of the of the OH&S Act and Construction Regulations Plus Covid 19 as per the gazette by the minister Government Gazette volume 658 29 April 2020 and Workplace Preparedness: COVID-19</p> | Lump Sum |
|---|----------|

The lump sum tendered shall include full compensation for the provision and maintenance of a health and safety plan, risk assessment, permit applications and notifications as called for in the act and regulations. The tendered sum will include initial, periodic and exit medical examination of all site staff including the Employers Representatives who will be full time on site.

Eighty per cent (80%) of the amount will be paid when an approved health and safety plan has been received by the client. A further 10% will be paid when the value of all work done, excluding escalation, exceeds one-half of the Tender Price, and the remaining 10% will be payable when the completion certificate has been issued.

- | | |
|--|-------|
| <p>(b) Contractor's time related obligations in respect of OH&S Act and Construction Regulations Government Gazette volume 658 29 April 2020 and Workplace Preparedness: COVID-19</p> | Month |
|--|-------|

The tendered monthly amount shall represent full compensation for that part of the contractor's general obligations in terms of the Occupational Health and Safety Act and the Construction Regulations which are mainly a function of time. This includes inter alia payment of all costs for the appointment of all staff contemplated in the construction regulations and the transport of employees on site. Payment will be monthly only after payment for Item E 10.02 has been made.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

(c) Submission of the Health and Safety File

Lump Sum

The lump sum tendered shall include full compensation for the provision and maintenance of a health and safety file on site containing all the documentation required in terms of the act and applicable regulations.

This amount will be paid when the contractor has met all his obligations in respect of the Occupational Health and Safety Act and the Construction Regulations and has submitted his Health and Safety File complete as envisaged on this specification to the Client's satisfaction.

The payment will be made in four equal instalments when the value of all permanent work done, excluding escalation, reaches 25%, 50% and 75% of the Tender Price. The final payment will be made when a consolidated health and safety file is handed to the client on completion of the works.

E10.03 Provision for Construction Health and Safety Officer (Full-Time)

L.Sum

The lump sum tendered shall include full compensation for the provision of a competent and experienced full professionally registered safety officer for the duration of the construction work.

The payment will be made in four equal instalments when the value of all permanent work done, excluding escalation, reaches 25%, 50% and 75% of the Tender Price. The final payment will be payable when the completion certificate has been issued.

E10.04 Safety Induction & Training of Personnel, incl. COVID-19

L.Sum

The lump sum tendered shall include full compensation for the provision of training programs for the contractor's employees and also, where applicable, for sub-contractors.

Eighty per cent (80%) of the amount will be paid when the contractor's personnel and sub-contractors, where relevant, have received health and safety training. A further 10% will be paid when the value of all work done, excluding escalation, exceeds one-half of the Tender Price, and the remaining 10% will be payable when the completion certificate has been issued.

E10.05 Provision of personal protective clothing and Equipment

L.Sum

The lump sum tendered shall include full compensation for the provision, maintenance, repair and/or replacement of damaged or unsuitable protective clothing and equipment for use by the contractor's employees, subcontractors and visitors on site.

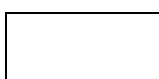
Sixty per cent (60%) of the amount will be paid when the contractor's personnel and sub-contractors, where relevant, have received personal protective clothing and equipment. The payment of the remaining amount will be made in four equal instalments when the value of all permanent work done, excluding escalation, reaches 25%, 50% and 75% of the Tender Price. The final payment will be payable when the completion certificate has been issued.

E10.06 Provision of safety fences, signs and barricades

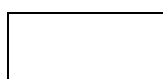
L.Sum

The lump sum tendered shall include full compensation for the provision of safety fences, signs and barricades as well as maintenance, repair and/or replacement of damaged safety fences, signs and barricades and for all labour and costs required for the placement, removal or moving to fresh positions as and when necessary. The cost of safeguarding the above items against theft and vandalism shall also be included in the tendered sum.

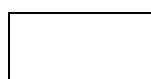
The payment will be made in four equal instalments when the value of all permanent work done, excluding escalation, reaches 25%, 50% and 75% of the Tender Price. The final payment will be payable when the completion certificate has been issued.



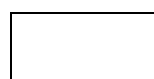
Contractor



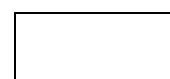
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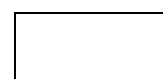
Witness 2



Employer



Witness 1



Witness 2

ANNEXURES

- Annexure A - Appointments to be made by the Contractor
- Annexure B - Reporting and recording keeping requirements
- Annexure C - Other requirements
- Annexure D - Acknowledgement Form
- Annexure E: - Synopsis of Project Site Specific Hazards Or Risks
- Annexure F - Risk Assessment Template

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

ANNEXURE A: APPOINTMENTS TO BE MADE BY THE CONTRACTOR

Appointment	OHSA Reference	When to submit
Section 16(2) Appointment	16(2)	Before commencement of work
Sub - Contractor	CR 7(3)	Before commencement of work
Risk Assessor	CR 9(1)	At tender stage – require copy of CV and qualifications
Construction Manager	CR 8(1)	At tender stage – require copy of CV and qualifications and registrations with professional body
Assistant Construction Manager(s)	CR 8(2)	Before commencement of work
Construction Supervisor(s)	CR 8(7)	Before commencement of work
Assistant Construction Supervisor	CR 8(8)	Before commencement of work
CHS Officer	CR 8(5)	At tender stage – require copy of CV and qualifications and registrations with professional body
Health & Safety Representatives	Sec 17 & 18	Submit as soon as there are more than 20 employees on site
Health and Safety Committee/s members	Sec 19 & 20	Where 2 or more H&S representatives exist
Temporary works designer	CR 12(1)	Before commencement of work
Temporary works operation	CR 12(2)	Before commencement of work
Temporary work inspector	CR 12(3)	Before commencement of work
Scaffold Operations Supervisor	CR 16(1)	Before commencement of work
Scaffolding: Erector / Team Leader/ Inspector	SANS 10085	Before commencement of work
Operations Supervisor for Suspended Platforms	CR 17(1)	Before commencement of work
Performance tester for Suspended Platforms	CR 17(2)	Before commencement of work
Rope Access Works Supervisor	CR 18(1)(a)	Before commencement of work
Material Hoist Inspector	CR 19(8)(a)	Before commencement of work
Bulk Mixing Plant Supervisor	CR 20(1)	Before commencement of work
Explosive Actuated Fastening Devices Controller	CR 21(2)(g)(i)	Before commencement of work
Fall Protection Plan Developer	CR 10(1)(a)	Before commencement of work
Excavation Work Supervisor	CR 13(1)(a)	Before commencement of work
Demolition Work Supervisor	CR 14(1)	Before commencement of work
Ladders Inspector	GSR 13A	Before commencement of work
Temporary Electrical Installation Inspector [CR 24(C)]	CR 24(C)	Before commencement of work
Portable Electrical Equipment inspector	EMR 9&10	Before commencement of work
Electrical Machinery operator authorisation	CR 24(e)	Before commencement of work
Electrical installation Inspector	EIR 2009	Before commencement of work
Lifting Tackle Inspector	DMR 18	Before commencement of work
Mobile Crane Operator Authorisation	DMR 18(11)	Before commencement of work
Concrete Mixer	GMR 4	Before commencement of work
Hand Tools Inspector		Before commencement of work
Stacking & Storage Supervisor	CR 28(a)	Before commencement of work
Welding/Flame Cutting equipment inspector	GSR 9	Before commencement of work
Emergency Planning Co-ordinator	ER 9	Before commencement of work
Emergency Team member	ER 9	Before commencement of work
Fire Equipment inspector	CR 29(h)	Before commencement of work
Incident / Accident Investigator	GAR 9	Before commencement of work
First Aider Appointment	GSR 3	Where more than 10 workers are employed
HCS Co-ordinator Appointment	HCSR	Before commencement of work

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Appointment	OHSA Reference	When to submit
Supervision of the use & Maintenance of Machinery	GMR 2(1)	Before commencement of work

ANNEXURE B: REPORTING AND RECORD KEEPING REQUIREMENTS

What	When	Output	Reference Information
Awareness Training and Inductions (Tool Box Talks)	Ongoing	Attendance Register	
Health & Safety Committee Meetings	Monthly	Minutes signed by the Contractor Covering: Health & Safety Representative checklist.	Health and Safety Representative checklist
Health & Safety Reports	Monthly	Report covering: Incidents / Accidents and Investigations Non conformances Health & Safety Training HIRA Updates Audits	Incident reporting and investigation form.
General Inspections	As per OHSS and OHSA	Report on OHSA compliance: Scaffolding Lifting Machinery Excavations Construction vehicles and mobile plants	Inspection checklist
General Inspections	Monthly	Fire Fighting Equipment Portable electric Equipment Ladders	Inspection checklist
Record keeping	Ongoing	General complaints Fines General Incidents MSDS Surveillance Medicals Inspection Registers Visitors register	

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

ANNEXURE C: OTHER REQUIREMENTS

OHS Reference	Requirement	When to submit
Notification of Intention to Commence Construction / Building work	CR 4 Complete Annexure 2	7 Days prior to commencement of work If Applicable
Assignment of Responsible Person to Supervise Building Work	All relevant appointments, as per OHSA.	Before commencement on site
Competency for Responsible Persons	requirement	Before commencement on site.
1.Letter of good standing - Compensation of Occupational Injuries and Diseases Act (COIDA) 130 OF 1993 2.Public Liability (Insurance Cover)	COIDA Requirement	Before commencement on site.
Occupational Health and Safety Policy	Section 7	At tender stage
Health and Safety Organogram.	requirement	At tender stage or not later than 5 days after commencement on site.
Hazard Identification and Risk Assessment and Safe Working Procedures	CR9 Requirement	Before commencement of the work

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

ANNEXURE D: ACKNOWLEDGMENT FORM

Acknowledgement of receipt:

I, _____ representing
_____ Principal Contractor /

Contractor / Employer have satisfied myself with the content of the Health and Safety Specification and shall ensure that the Principal Contractor / Contractor and its personnel comply with all obligations / requirements in respect thereof.

Signature of Principal Contractor / Contractor

Date

Signature of Client / Client's Agent

Date

Comments:

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

ANNEXURE E: SYNOPSIS OF PROJECT SITE SPECIFIC HAZARDS OR RISKS

SITE NAME / PROJECT DISCRIPTION:	
REVISION NUMBER:	

Task No.	TASK/ ACTIVITY / PROCESS	HAZARDS APPLICABLE TO THE TASK / ACTIVITY / PROCESS	RISK ASSOCIATED WITH HAZARDS	PRECAUNARY MEASURES Controls: Hierarchy of Controls (Control Type):- EL – Elimination; S – Substitution EN – Engineering controls; A – Administrative (signage, warnings, etc.); P – PPE	RISK LEVEL Extreme High High Medium Low

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

ANNEXURE F: RISK ASSESSMENT TEMPLATE

HAZARD AND RISK ASSESSMENT TEMPLATE

Project: _____

DATE: _____

NR	TASK/AREA	HAZARD/EXPOSURE TO DANGER	RISK/EFFECT	P	S	E	T	EXISTING CONTROLS	ACCEPT- ABLE	PROPOSED ADDITIONAL CONTROLS	RESPONSIBLE PERSON	DUE DATE

CLIENT _____

PRINCIPAL CONTRACTOR _____

SAFETY OFFICER _____

LEGEND: P: Probability; S: Severity; E: Exposure; T: Total (P+S+E)

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

PART F: ENVIRONMENTAL MANAGEMENT PLAN

F1 PREAMBLE

The Employer recognises environmental management as a key component of infrastructure development and as part of its environmental policy has developed this Environmental Management Plan (EMPI) as a tool for continual improvement in environmental performance.

This EMP prescribes the methods by which proper environmental controls are to be implemented by the contractor. The duration over which the contractor's controls shall be in place cover the construction period of the project as well as the limited time after contract completion defined by the Conditions of Contract for Construction for Building and Engineering Works Designed by the Employer (1999 edition) published as the Defects Notification Period (maintenance period).

The provisions of this EMP are binding on the contractor during the life of the contract. They are to be read in conjunction with all the documents that comprise the suite of documents for this contract, particularly the conditions of any environmental authorisation and associated Environmental Management Programme (EMPr). In the event that any conflict occurs between the terms of the EMP and the project specifications or environmental authorisation, the terms herein shall be subordinate.

The EMP is a document subject to similar influences and changes as are brought by variations to the provisions of the project specification. Any changes to the EMP and/or environmental authorisation cannot occur without being submitted to the Employer who will manage the process of seeking approval of the change from the relevant authority.

The EMP identifies the following:

- ☐ Relevant parties and their responsibilities;
- ☐ Construction activities that will impact on the environment;
- ☐ Specifications with which the contractor shall comply in order to protect the environment from the identified impacts; and
- ☐ Actions that shall be taken in the event of non-compliance.

F2 DEFINITIONS

Alien Vegetation: undesirable plant growth which includes, but is not limited to all declared category 1 and 2 listed invader species as set out in the Conservation of Agricultural Resources Act (CARA), 1983 regulations. Other vegetation deemed to be alien are those plant species that show the potential to occupy in number, any area within the defined construction area and which are declared to be undesirable.

Construction Activity: any action taken by the contractor, his sub-contractors, suppliers or personnel during the construction process as defined in the contract documents.

Environment: the surroundings within which the contract exists and comprises land, water, atmosphere, micro-organisms, plant and animal life (including humans) in any part or combination thereof as well as any physical, chemical, aesthetic or cultural inter-relationship among and between them.

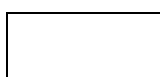
Environmental Aspect: any component of a contractor's construction activity that is likely to interact with the environment.

Environmental authorisation: a written statement from the National Department of Environmental Affairs, (DEA), with the general and specific conditions and the EMP recording its approval of an application for a planned undertaking that triggers listed activities in the Environmental Impact Assessment (EIA) regulations of the National Environmental Management Act (NEMA) as amended.

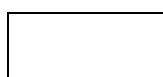
Environmental Impact: any change to the environment, whether desirable or undesirable, that will result from the effect of a construction activity. An impact may be the direct or indirect consequence of a construction activity.

Environmental Impact Assessment (EIA): a systematic process of identifying, assessing and reporting environmental impacts associated with an activity and includes basic assessment and scoping and environmental impact reporting and mitigation of identified negative impacts.

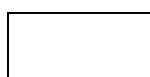
Environmental Management Programme (EMPr): the embodiment of this EMP to ensure that undue or reasonably avoidable adverse impacts of a development are prevented or reduced, and to ensure that positive impacts are enhanced.



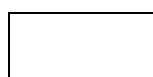
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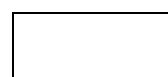
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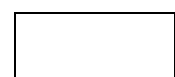
Witness 2



Employer



Witness 1



Witness 2

It thus addresses the how, when, who, where and what of integrating environmental mitigation and monitoring measures through identified projects.

Site: the site is defined in the FIDIC Conditions of Contract and in the scope of works. It is bound by the limits of construction as shown in the drawings or the title of the project and extends to also include the following:

- ☐ Areas outside the construction zones where accommodation of traffic is placed;
- ☐ All borrow pits and quarries defined in the applications approved by the relevant Department of Mineral Resources (DMR);
- ☐ All haul roads constructed by the contractor for purposes of access;
- ☐ Any non-adjacent sites specified in the contract documentation; and
- ☐ The contractor's and his subcontractors' camp sites;

For the purposes of this EMP includes areas outside of the road reserve that may be affected by construction activities;

Spoil material: is material unsuitable for construction of the road pavement and for which no other useful purpose can be found in appurtenant works on the project (e.g. for the provision of protection berms).

Such material is considered as waste material that requires spoiling at convenient areas to be identified by the engineer and/or contractor within the Site. Spoil material does not require removal to a designated landfill site unless it contains identifiable hazardous contaminants

F3 LEGAL REQUIREMENTS

A. General

Construction shall be according to the best industry practices, as identified in the project documents. This EMP, which forms an integral part of the contract documents, informs the contractor as to his duties in the fulfilment of the project objectives, with particular reference to the prevention and mitigation of environmental impacts caused by construction activities associated with the project. The contractor should note that obligations imposed by the EMP are legally binding in terms of this contract. In the event that any rights and obligations contained in this EMP contradict those specified in the standard or project specifications then the latter shall prevail.

B. Statutory and Other Applicable Legislation

The contractor is deemed to have made himself knowledgeable with all legislation pertaining to the environment, including provincial and local government ordinances, which may be applicable to the contract. Major environmental legislation, as amended from time to time, includes but is not limited to the following:

Conservation of Agricultural Resources Act (Act No. 43 of 1983)

This act provides for control over the utilisation of the natural agricultural resources of South Africa order to promote the conservation of soil, water sources and vegetation, as well as combating weeds and invader plants.

The Constitution (Act 6 of 1996)

The Constitution states that everyone has the right to an environment that is not harmful to their health or well-being, and to have the environment protected through reasonable legislative and other measures to prevent pollution and ecological degradation; promote conservation and ensure ecologically sustainable development and use of natural resources.

Mineral and Petroleum Resources Development Act (Act No. 28 of 2002)

This act makes provision for equitable access to, and sustainable development of, minerals and petroleum resources.

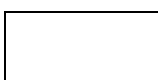
National Environmental Management Act (NEMA) (Act No. 107 of 1998)

This act supports the Bill of Rights within the Constitution and highlights principles of sustainable development including preservation of ecosystems and biological diversity and avoidance, minimisation and remediation of pollution and environmental degradation. It also sets the stage for the EIA Regulations.

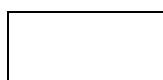
National Environmental Management: Air Quality Act (Act No. 39 of 2004)

This act provides reasonable measures for the prevention of pollution and ecological degradation; and provides for specific air quality measures; for national norms and standards regulating air quality monitoring, management and control by all spheres of government.

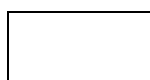
National Environmental Management: Biodiversity Act (Act No. 10 of 2004)



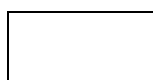
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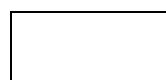
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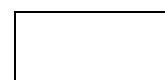
Witness 2



Employer



Witness 1



Witness 2

This act makes provisions to accomplish the objectives of the United Nations' Convention on Biological Diversity. The Employer may be required to apply for permits to conduct certain listed activities which, together with the listed threatened or protected species, may be identified by the Minister.

Section 73 (3) of this act empowers a competent authority to direct a person to take steps to remedy any harm to biodiversity resulting from the actions of that person or as a result of occurrence of listed invasive species occurring on land on which that person is the owner. Thus the Employer may be directed to remedy harm caused by listed invasive species.

National Environmental Management: Protected Areas Act (Act No. 57 of 2003)

This act provides for the protection and conservation of ecologically viable areas representative of South Africa's biological diversity, natural landscapes and seascapes.

National Environmental Management: Waste Act (Act No. 59 of 2008)

This act aims to regulate waste management practices through provision of national norms and standards, specific waste measures, licensing and control of waste activities, remediation of contaminated land as well as providing for compliance and law enforcement.

National Forests Act (Act No. 84 of 1998)

This act makes provision for promoting the sustainable management and development of forests, and for the protection of certain forests and trees for environmental, economic, educational, recreational, cultural, health and spiritual purposes.

National Heritage Resources Act (Act No. 25 of 1999)

This act provides for an integrated and interactive system for identification, assessment and management of South Africa's heritage resources, and empowers civil society to nurture and conserve their heritage resources.

National Water Act (Act No. 36 of 1998)

This act makes provision for the protection of surface water and groundwater and their sustainable management for the prevention and remediation of the effects of pollution, as well as for the management of emergency situations.

F4 ADMINISTRATION OF ENVIRONMENTAL OBLIGATIONS

Copies of this EMP shall be kept at the site office and must be distributed to all senior contract personnel who shall familiarise themselves with its contents.

Implementation of this EMP requires the involvement of several stakeholders, each fulfilling a different but vital role as outlined herein, to ensure sound environmental management during the construction phase of a project.

I. The Employer

The Employer is the holder of authorisations issued by the relevant environmental regulating authorities responsible for authorising and enforcing environmental compliance. The Employer and anyone acting on the Employer's behalf is accountable for the potential impacts of the activities that are undertaken and is responsible for managing these impacts.

II. The Engineer

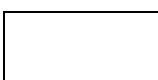
The engineer has been appointed by, and acts for, the Employer as its on-site implementing agent and carries the responsibility to ensure that the contractor undertakes its construction activities in such a way that the Employer's environmental responsibilities are not compromised.

The engineer will, within seven days of receiving a contractor's request for approval of a nominated Designated Environmental Officer (DEO), approve, reject or call for more information on the nomination. The engineer will be responsible for issuing instructions to the DEO where environmental considerations call for action to be taken.

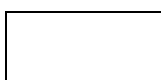
If in the opinion of the engineer the DEO is not fulfilling his/her duties in terms of this EMPI, the engineer may, after discussion and agreement with the Employer, exercise his powers under FIDIC general condition of contract and instruct replacement of the DEO in writing and with stated reasons.

III. The Contractor

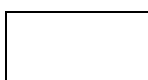
The contractor is responsible for project delivery in accordance with the prescribed specifications, among which this EMP shall be included.



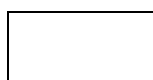
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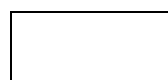
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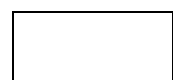
Witness 2



Employer



Witness 1



Witness 2

The contractor shall receive and implement any instruction issued by the engineer relating to compliance with the EMP including the removal of personnel or equipment.

Compliance with the provisions contained herein or any condition imposed by the environmental approvals shall become the responsibility of the contractor through an approved Designated Environmental Officer (DEO). The contractor shall nominate a person from among his site personnel to fulfil this function and submit to the engineer for his approval the curriculum vitae of the proposed DEO. This request for approval shall be given, in writing, at least fourteen days before the commencement of any construction activity clearly setting out reasons for the nomination, and with sufficient detail to enable the engineer to make a decision.

IV. The Designated / Dedicated Environmental Officer (DEO)

Once a nominated representative of the contractor has been approved he/she shall become the DEO and shall be the responsible person for ensuring that the provisions of this EMP are complied with during the life of the contract. The DEO shall submit regular written reports to the engineer, but not less frequently than once a month.

The DEO may undertake other construction duties unless the Appendix to Tender prescribes this position as 'dedicated' as opposed to the standard position being 'designated'. The DEO's environmental duties shall hold primacy over other contractual duties and the engineer has the authority to instruct the contractor to reduce the DEO's other duties or to replace the DEO if, in the engineer's opinion, he/she is not fulfilling his/her duties in terms of the requirements of this EMP. Such instruction will be in writing clearly setting out the reasons why a replacement is required.

As a minimum the DEO shall have an accredited diploma qualification in environmental or natural sciences or equivalent and have a minimum of 2 years' experience in the environmental regulatory field in construction.

In addition to the compliance duties relating to EMP the DEO shall also provide full cooperation whenever the contractor is subjected to regular environmental audits.

(Note to compiler: the environmental sensitivity of the project will dictate whether the approved DEO should be able to assume other construction duties, or should be a dedicated officer with no other encumbrances. Such decisions will need to be made in conjunction with the relevant project manager and the Appendix to Tender appropriately completed).

V. Environmental Control Officer (ECO)

The Environmental Control Officer (ECO) is an independent environmental specialist appointed by the engineer to on behalf of the Employer to objectively and regularly monitor the contractor's implementation of this EMP and the EMPr as may be determined by the sensitivity of the project or by conditions of authorisations. These are 'internal' audits and the regularity determined by the environmental approvals, usually once a month. Other ad hoc or 'external' audits ordered by the Employer may be conducted by other environmental specialists

F5 TRAINING

a) Qualifications

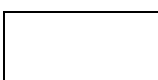
The DEO shall have the minimum qualifications as prescribed above, and must be conversant with all legislation pertaining to the environment applicable to the contract. He/she must be appropriately trained in environmental management and possess the skills necessary to impart environmental management skills to all personnel involved in the contract.

The contractor shall ensure that adequate environmental training takes place. All employees shall have been given an induction presentation on environmental awareness. Where possible, the presentation needs to be conducted in the language of the employees.

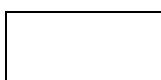
b) Content

Apart from induction environmental training should, as a minimum, include the course content below and no induction or course should be given until the engineer has been afforded the opportunity to appraise it and provide comment.

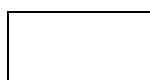
- ☐ The importance of conformance with all environmental policies and the consequences of departure from standard operating procedures;
- ☐ Environmental impacts, actual or potential, caused by work activities, prevention measures to avoid them and mitigation measures when they occur;



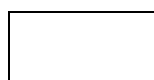
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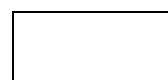
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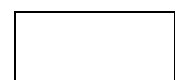
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Employer



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- ☐ Work force roles and responsibilities in achieving conformance with the environmental policy and procedures and with the requirement of the Employer's environmental management systems, including emergency preparedness and response requirements; and
- ☐ The environmental benefits of improved personal performance.
- ☐ Induction

In the case of permanent staff the contractor shall provide evidence that such induction courses have been presented. In the case of new staff (including contract labour) the contractor shall inform the engineer when and how he intends concluding his environmental training obligations

F6 ACTIVITIES / ASPECTS CAUSING IMPACTS

Typical environmental aspects and impacts associated with road construction are listed in Table 1: Aspects and Impacts Associated with Road Construction. Actual impacts will differ from project to project and, therefore, so may the mitigation measures employed. The commonest aspects and impacts are addressed separately and typical avoidance and/or mitigation measures described. The list and descriptions are not by any means exhaustive and they shall be used for guideline purposes only.

Table 1: Aspects and Impacts Associated with Road Construction

Activity	Possible Impact
Waste generation/storage	visual impact, health impacts; Water pollution; nuisance;
Water use and storm-water discharge	Change in flow regime and/or reduction in downstream availability; soil erosion: water pollution
Vehicle use and maintenance	Air pollution; noise
Chemical/fuel storage	health impacts; Water/air/soil pollution; accidents e.g. slips, fire
Site clearing; earthworks; layer works; seal works	Change in landform; impact on heritage resources; noise; soil erosion; air pollution
River bridges; installing drainage structures	Water pollution; impact on river flows; noise Land acquisition Loss of land &/or livelihood; change in land use
Acquisition of road building material from quarries and borrow pits	Change in landform and use, dust, noise Asphalt Plants Dust nuisance and air quality, health impacts

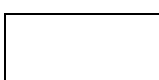
General Approach

The role of the DEO cannot be underestimated and once approved he/she shall be on the site at all times, and before the contractor begins each construction activity he/she shall give to the ECO and engineer a written statement setting out the following:

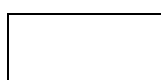
- ☐ The type of construction activity about to be started.
- ☐ Locality where the activity will take place.
- ☐ Identification of the environmental aspects and impacts that might result from the activity.
- ☐ The method of impact prevention for each activity or aspect.
- ☐ The method of impact containment for each activity or aspect
- ☐ Identification of the emergency/disaster potential for each activity (if any) and the reaction procedures necessary to mitigate impact severity.
- ☐ Treatment and continued maintenance of impacted environment.

The contractor shall programme his work in such a way that each cause and effect of a construction activity is also identified and the activity planned so as to prevent any impact from happening and shall demonstrate that he is capable of carrying out any repair and reinstatement of the damaged environment. These requirements shall be concurrent with the time constraints to produce method statements for each construction activity in compliance with the provisions of these project specifications.

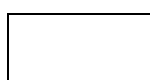
The contractor shall provide such information in advance of any or all construction activities provided that new submissions shall be given to the ECO & engineer whenever there is a change or variation to the original.



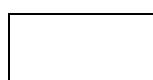
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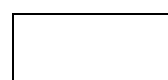
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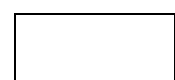
Witness 2



Employer



Witness 1



Witness 2

The ECO & engineer may provide comment on the methodology and procedures proposed by the DEO, but he shall not be responsible for the contractor's chosen measures of impact mitigation and emergency/disaster management systems. However, the contractor shall demonstrate at inception and at least once during the contract that the approved measures and procedures function properly.

a) Spillages and Incidents

i) Spillage

Streams, rivers and dams shall be protected from direct or indirect spillage of pollutants such as refuse, garbage, cement, concrete, sewage, chemicals, fuels, oils, aggregate, tailings, wash water, organic materials and bituminous products. In the event of a spillage, the contractor shall be liable to arrange for professional service providers to clear the affected area.

Responsibility for spill containment and treatment (whether hazardous or not) lies with the contractor. The individual causing a spill, or who discovers a spill, must report the incident to his/her DEO or to the engineer. The DEO will assess the situation in consultation with the engineer and act as required. In all cases, the immediate response shall be to contain the spill. The exact treatment of polluted soil / water shall be determined by the contractor in consultation with the DEO and the engineer. Areas cleared of hazardous waste shall be re-vegetated according to the engineer's instructions. All hazardous waste shall be removed to an approved hazardous waste site that has been accredited to receive the particular grade of waste being disposed of.

Should water downstream of the spill be polluted, which may result in the deterioration or death of fauna and flora, specialist hydrological or ecological advice will be sought by the ECO (who must be familiar with and use the procedures already in place in the existing Incident Management System for the

N6), for appropriate treatment and remedial procedures to be followed as soon as possible after the spill event. The requirement for such input shall be agreed with the engineer. The costs of containment and rehabilitation shall be for the contractor's account, including the costs of specialist input as well as the sampling and testing of the water quality upstream and downstream of the spill.

Water quality sampling and testing, and further treatment shall continue until upstream and downstream results correspond with each other.

ii) Incidents

These include spillages, accidents, external influences, natural disasters and others and their management will require a register of events, reporting requirements, clean up requirements, disposal, monitoring and close-out after successful rehabilitation and so on.

b) Water Use and Control

The contractor's use of water shall take into consideration that it is a scarce commodity, and accordingly the use shall be optimised. Where applicable, authorisation shall be obtained from the Department of Water Affairs (DWA) before water is drawn from streams or new boreholes developed.

The contractor shall submit to the engineer his proposals for prevention, containment and rehabilitation measures to guard against environmental damage of the identified water and drainage systems that occur on or near the site.

c) Vegetation Management

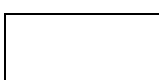
The contractor shall be responsible for the management of vegetation by protection of indigenous vegetation, and the prevention of alien vegetation that germinate in areas disturbed by road construction activities within and outside the road reserve. This includes, for example, service roads, stockpile areas, stop/go facilities, windrows and wherever material generated for or from road construction has been stored temporarily and other construction related sites. This responsibility shall continue for the duration of the defects notification period.

d) Dust Control

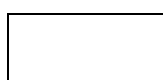
Dust caused by construction activities shall be controlled by means such as water spray vehicles and applied at sufficient frequency so as not to cause a nuisance to adjacent habitation or farming activities and vegetation. Vegetation/grass cover should also be kept for as long as possible to reduce the area of exposed surfaces and consequently dust.

e) Noise Control

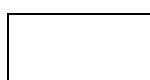
The contractor shall endeavour to keep noise generating activities and machinery to a minimum. Noise that could cause disturbance, for instance crushing activities, should only be carried out during the hours prescribed by the conditions of



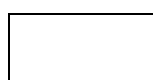
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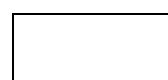
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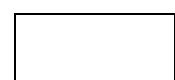
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contract (i.e. normal working hours). Should such noise generating activities need to occur at any time outside normal hours, people in the vicinity of the noise-generating activity shall be advised well in advance. The contractor shall endeavour to keep the activities to a minimum. Relevant legislation shall be taken into consideration, and practical mitigation measures adopted. Noise generating activity outside of normal hours, regardless of its proximity to residences, shall not take place without prior approval from the engineer and ECO. The engineer & ECO shall be informed of the proposed noise containment measures.

f) Energy Consumption

The contractor shall take into consideration the negative cost and emission (such as exhaust fumes from poorly maintained engines and other plant) consequences of high energy consumption. Energy use shall be minimised, and where possible, alternative energy such as solar radiation utilised (such as for heating water for ablution facilities).

F7 ENVIRONMENTAL MANAGEMENT OF CONSTRUCTION ACTIVITIES

The contractor shall undertake “good housekeeping” practices during construction as stated in the COLTO Standard Specifications for Roads and Bridges and the FIDIC conditions of contract. This will help avoid disputes on responsibility and promote smooth running of the contract and the protection and care of the natural environment within which the site is situated.

The construction activities below become part of the contractor’s obligations in the programme of work into which the required method statements for workmanship and quality control are incorporated.

a) Site establishment

i) Site Plan

The site refers to an area with defined limits on which the project is located. The contractor shall establish his construction camps, offices, workshops, staff accommodation and testing facilities on the site in a manner that does not adversely affect the environment. However, before any site establishment can begin, the contractor shall submit to the ECO for his/her comments and to the engineer for his approval, plans of the exact location, extent and construction details of these facilities and the impact mitigation measures the contractor proposes to put in place.

The plans shall detail the locality as well as the layout of the waste management facilities for litter, kitchen refuse, sewage and workshop-derived effluents. The site should not be in close proximity to steep areas, as this will increase soil erosion. Where the route traverses wetlands, streams and rivers, the offices, in particular the ablution facilities, aggregate stockpiles, spoil areas and hazardous material stockpiles are located as far away as possible from any water course. No camp establishment, including satellite camps, can be placed within 32 metres of an identified wetland. Regardless of the chosen site, the contractor’s intended

mitigation measures shall be indicated on the Site Establishment Plan which shall be approved by the engineer before establishment commences. Detailed, digital colour photographic record shall be taken of the proposed site before any clearing may commence. This record shall be kept by the ECO and the engineer for consultation during rehabilitation of the site in order that rehabilitation is, done to a standard that compares favourably to the pre-construction condition.

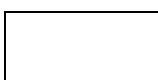
ii) Vegetation

The contractor has a responsibility to inform his staff of the need to be vigilant against any practice that will have a harmful effect on vegetation.

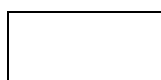
The natural vegetation encountered on the site is to be conserved and left as intact as possible. Vegetation planted at the site shall be indigenous and in accordance with instructions issued by the engineer. Only trees and shrubs directly affected by the works, and such others as may be indicated by the engineer in writing, may be cleared. In wooded areas where natural vegetation has been cleared out of necessity, the same species of indigenous trees as were occurring shall be re-established.

Contravention of a notice of listed protected tree species under the National Forests Act, No 84 of 1998 Government Gazette 29th April 2009 may result in a fine or imprisonment.

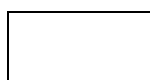
Rehabilitation shall be undertaken using only indigenous tree, shrub and grass species. Special attention shall be given to any search and rescue operation identified during the environmental application process, removal to an on-site nursery for continuous nurturing and protection and later replanting. The contractor should be alert to this procedure and apply to the engineer to approve it even though no allowance has been made in the contract documents.



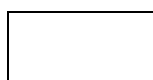
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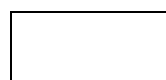
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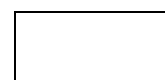
Witness 2



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Fires shall only be allowed in areas where and in facilities or equipment specially constructed for this purpose are available. The need for a firebreak shall be determined in consultation with the engineer and the relevant authorities, and if required an area shall be cleared and maintained around the perimeter of the camp office sites and other construction related areas e.g. Asphalt Plants. The contractor's staff shall at no time make fires for purposes of keeping out the cold unless they are contained in purpose-built containers capable of preventing runaway fires if knocked over. All the ash from fires shall be collected and disposed of daily in an environmentally acceptable manner.

iii) Water Management

Water for human consumption shall be available at the site offices and other convenient locations on site.

All water effluent including grey water from the camp / office sites shall be disposed of into a properly designed and constructed retention and filter system.

iv) Heating and Cooking Fuel

The contractor shall provide adequate facilities for his staff so that they are not encouraged to supplement their comforts on site by accessing what can be taken from the natural surroundings. The contractor shall ensure that energy sources are available at all times for construction and supervision personnel for heating and cooking purposes.

b) Sewage Management

Particular reference in the site establishment plan shall be given to the disposal of sewage generated at the site offices, staff accommodation and at all localities on the site where there will be a concentration of labour. Sanitary arrangements and disposal of waste shall be to the satisfaction of the engineer, the ECO, local authorities and legal requirements.

Safe and effective sewage disposal will require one of the following sewage handling methods: septic tanks and soak-aways, dry-composting toilets such as "enviro loos", or the use of chemical toilets which are supplied and maintained by a specialist service provider. The type of sewage management will depend on the geology of the area selected, the duration of the contract and proximity (availability) of providers of chemical toilets. Should a soak-away system be used, it shall not be closer than 800 metres from any natural water course or water retention system. The waste material generated from these facilities shall be removed on a regular basis by an approved contractor. The location of the chemical toilets shall be done in consultation with the ECO and engineer.

Toilets and latrines shall be easily accessible and shall be located within walking distance from the works area. Use of the veld for this purpose shall not, under any circumstances, be allowed.

Outside toilets shall be provided with locks and doors and shall be secured to prevent them from toppling over. The toilets shall also be placed outside areas susceptible to flooding. The contractor shall arrange for regular emptying of toilets and shall be entirely responsible for enforcing their use and for maintaining such latrines in a clean, orderly and sanitary condition to the satisfaction of the ECO and engineer.

c) Waste Management

The contractor's intended methods for waste management shall be outlined and implemented at the outset of the contract, and shall be to the satisfaction of the ECO and engineer. Opportunities for avoiding, reducing, reusing and recycling of materials should be identified and implemented where appropriate. All personnel shall be instructed to dispose of all waste in the proper manner.

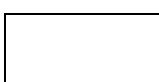
i) Solid Waste

Solid waste shall be stored in an appointed area in covered, tip-proof metal drums or similar container for collection and disposal. Disposal of solid waste shall be at a licensed landfill site or at a site approved by the relevant authority in the event that an existing operating landfill site is not within reasonable distance from the project area. No waste shall be burned or buried at or near the project area.

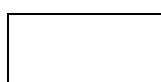
ii) Litter

No littering by construction workers shall be allowed. Any locality where motorists are encouraged or forced to stop shall be cleared of litter daily. During the construction period, the various contractor's facilities shall be maintained in a neat and tidy condition and the site shall be kept free of litter. Measures shall be put in place to reduce the litter and prevent its negligent disposal. At all places of work the contractor shall provide litter collection facilities for disposal at approved dump sites.

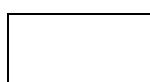
Particular emphasis on litter control measures shall apply at stop/go facilities.



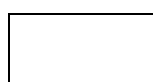
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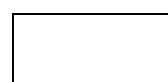
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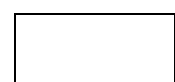
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iii) Hazardous Waste

Hazardous waste such as oils shall be disposed of at an approved landfill site. Special care shall be taken to avoid spillage of bitumen products such as binders or pre-coating fluid to avoid water-soluble phenols from entering the ground or contaminating surface water.

Under no circumstances shall the spoiling of bituminous products occur on the site, over embankments, in borrow pits or by burying, be allowed. Unused or rejected bituminous products shall be returned to the supplier's production plant. Any spillage of bituminous products shall be immediately removed and the affected areas promptly reinstated to the satisfaction of the ECO and engineer.

iv) Construction and Demolition Waste

The opportunity for recycling and re-use of construction and demolition waste as fill for road embankments, land reclamation and drainage control must be explored before the option of declaring these materials a 'waste'.

The contractor is encouraged to actively engage with authorities and landowners adjacent to the site and identify where such 'waste' materials can be usefully deployed to repair existing degraded areas such as erosion dongas.

d) Control at the Workshop

The contractor's management and maintenance of his plant and machinery will be strictly monitored according to the criteria given below, regardless of whether it is serviced on the site (i.e. at the place of construction activity or at a formalised workshop).

i) Hazardous Material Storage

Petrochemicals, oils and identified hazardous substances shall only be stored under controlled conditions. All hazardous materials such as bitumen binders shall be stored in a secured, appointed area that is suitably fenced, bunded and has restricted entry. Storage of bituminous products shall only be in suitable containers approved by the ECO and the engineer.

The contractor shall provide proof to the engineer that relevant authorisation to store such substances has been obtained from the relevant authority. In addition, hazard signs indicating the nature of the stored materials shall be displayed on the storage facility or containment structure. Before containment or storage facilities can be erected the contractor shall furnish the ECO and the engineer with details of the preventative measures he proposes to install in order to mitigate pollution of the surrounding environment from leaks or spillage. The preferred method shall be a concrete floor that is bunded. Any deviation from the method will require proof from the relevant authority that the alternative method proposed is acceptable to that authority. The proposals shall also indicate the emergency procedures to be followed in the event of misuse or spillage.

ii) Fuel and Gas Storage

The contractor shall take note of the limits set by legislation for the storage of fuels and acquire the necessary authorisation for storage capacity beyond these. All fuel shall be stored in a secure area in steel tanks supplied and maintained by the fuel suppliers. An adequate bund wall, 110% of volume, shall be provided for fuel and diesel areas to accommodate any leakage or spillage of these substances. The area inside the bund wall shall be lined with an impervious lining to prevent infiltration of the fuel into the soil. Any leakage, spillage or overflow of fuel shall be attended to without delay.

Gas welding cylinders and LPG cylinders shall be stored in a secure, well-ventilated area exterior to any building wall.

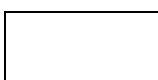
iii) Oil and Lubricant Waste

Used oil, lubricants and cleaning materials from the maintenance of vehicles and machinery shall be collected in a holding tank and sent back to the supplier or collected by a reputable recycling company.

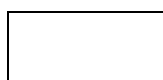
All used filter materials shall be stored in a secure bin for disposal off site. Any contaminated soil shall be removed and replaced with uncontaminated soil of the same type. Contaminated soils shall be collected and disposed of at a facility designated by the local municipality to accept contaminated materials.

d) Clearing the Site

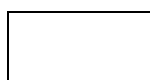
In all areas where the contractor intends to, or is required to clear the natural vegetation and soil, either within the road reserve, or at designated or instructed areas outside the road reserve, a Method Statement shall first be submitted to the engineer for his approval. Working areas shall be clearly defined and demarcated on site to minimise the construction footprint. 'No-go- areas' and other sensitive areas shall also be clearly demarcated on site, and staff must be made aware of them.



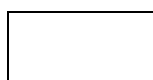
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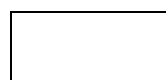
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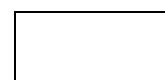
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The plan of action shall contain a photographic record and chainage / land reference of the areas to be disturbed. This shall be submitted to the engineer for his records before any disturbance/stockpiling may occur. The record shall be comprehensive and clear, allowing for easy identification during inspections.

e) Soil Management

i) Topsoil /Top Layer of Soil

Topsoil shall be removed from all areas where physical disturbance of the surface will occur and shall be stored and adequately protected. The contract will provide for the stripping and stockpiling of topsoil from the site for later re-use. Topsoil is considered to be the natural soil covering, including all the vegetation and organic matter. Depth may vary at each site and therefore this shall be as agreed by the ECO and checked before removal to stockpile the minimum depth shall be 150mm. The areas to be cleared of topsoil shall include all topsoil stockpile areas. The topsoil stockpiles shall be located and formed in such a way that they do not interfere with the flow of water.

ii) Subsoil

The subsoil is the layer of soil immediately beneath the topsoil or top layer of soil. It shall be removed, to a depth instructed by the engineer, and if not used for road building it shall be stored and maintained separately from the topsoil so that neither stockpile is contaminated by the other. This soil shall be used for rehabilitation purposes.

f) Earthworks and Layer Works

This section includes all construction activities that involve the mining of all materials, and their subsequent placement, stockpile, spoil, treatment or batching, for use in the permanent works, or temporary works in the case of deviations. Before any stripping prior to the commencement of construction, the contractor shall have complied with the requirements of this EMP. In addition, the contractor shall take cognisance of the requirements set out below.

i) Quarries and Borrow Pits

The contractor's attention is drawn to the requirement of the Department of Mineral Resources, that before entry into any quarry or borrow pit, an EMPr for the establishment, operation and closure of the quarry or borrow pit shall have been approved by the Department. It is the responsibility of the contractor to ensure that he is in possession of a copy of the approved EMPr, prior to commencement of work on the quarry or borrow pit. The conditions imposed by the relevant EMPr are legally binding on the contractor and may be more extensive and explicit than the requirements of this specification. In the event of any conflict occurring between the requirements of the specific EMPr and these specifications the former shall apply. The cost of complying with the requirements shall be deemed to be included in existing rates in the Pricing Schedule.

ii) Excavation, Hauling and Placement

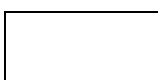
The contractor shall provide the ECO and the engineer with detailed plans of his intended construction processes prior to starting any cut or fill or layer. The plans shall detail the number of personnel and plant to be used and the measures by which the impacts of pollution (noise, dust, litter, fuel, oil and sewage), erosion, vegetation destruction and deformation of landscape will be prevented, contained and rehabilitated. Particular attention shall also be given to the impact that such activities will have on the adjacent built environment. The contractor shall demonstrate his "good housekeeping", particularly with

respect to closure at the end of every day so that the site is left in a safe condition from rainfall overnight or over periods when there is no construction activity.

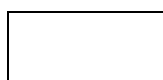
iii) Spoil Sites

The contractor shall be responsible for the safe siting, operation, maintenance and closure of any spoil site he uses during the contract period, including the defects notification period. This shall include existing spoil sites that are being re-entered. Before spoil sites may be used proposals for their locality, intended method of operation, maintenance and rehabilitation shall be given to the ECO for his/her comments and to the engineer for his approval. The location of these spoil sites shall have signed approval from the affected landowner before submission to the ECO and the engineer. No spoil site shall be located within 500m of any watercourse. A photographic record shall be kept of all spoil sites for monitoring purposes. This includes before the site is used and after re-vegetation.

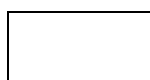
The use of approved spoil sites for the disposal of hazardous or toxic wastes shall be prohibited unless special measures are taken to prevent leaching of the toxins into the surrounding environment. Such special measures shall require the approval of the relevant provincial or national authority. The same shall apply for the disposal of solid waste generated from the various camp establishments. The engineer will assist the contractor in obtaining the necessary approval if requested by the contractor.



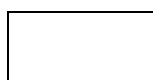
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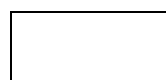
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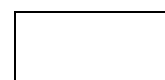
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Spoil sites will be shaped to fit the natural topography. Depending on availability, these sites shall receive a minimum of 75mm topsoil and be grassed with the recommended seed mixture. Appropriate grassing measures to minimise soil erosion shall be undertaken by the contractor. This may include both strip and full sodding. The contractor may motivate to the engineer for other acceptable stabilising methods. The engineer may only approve a completed spoil site at the end of the defects notification period upon receipt from the contractor of a landowner's clearance notice and an engineer's certificate certifying slope stability.

iv) Stockpiles

The contractor shall plan his activities so that materials excavated from borrow pits and cuttings, in so far as possible, can be transported directly to and placed at the point where it is to be used. However, should temporary stockpiling become necessary, the areas shall be indicated on the site plan submitted to the engineer for his approval, together with the proposed measures for prevention of environmental damage, containment and subsequent rehabilitation. This shall be known as the Stockpile Method Statement.

The areas chosen shall have no indigenous trees and shrubs present that may be damaged during operations. Care shall be taken to preserve all vegetation in the immediate area of these temporary stockpiles. During the life of the stockpiles the contractor shall always ensure that they are positioned and sloped to create the least visual impact, constructed and maintained to avoid erosion of the material alien vegetation.

After the stockpiled material has been removed, the site shall be re-instated to its original condition. No foreign material generated / deposited during construction shall remain on site. Areas affected by stockpiling shall be contoured, top soiled, seeded with grass and maintained at the contractor's cost until clearance from the engineer and landowner is received.

Material milled from the existing road surface that is temporarily stockpiled in areas approved by the engineer within the road reserve, shall be subject to the same conditions as other stockpiled materials. Excess materials from windrows, in situ milling or any detritus of material from road construction activities may not be swept off the road and left unless specifically instructed to do so in the contract documentation or under instruction from the engineer.

In all cases, the ECO shall comment on and the engineer shall approve the areas for stockpiling and disposal of construction rubble before any operation can commence and shall approve their closure only when they have been satisfactorily rehabilitated.

v) Blasting Activities

Wherever blasting activity is required on the site (including quarries and/or borrow pits) the contractor shall rigorously adhere to the relevant statutes and regulations that control the use of explosives. In addition, the contractor shall, prior to any drilling of holes in preparation for blasting, supply the engineer with a risk assessment and locality plan of the blast site on which shall be shown the zones of influence of the ground and air shock-waves and expected limits of fly-rock. The plan shall show each dwelling, structure and service within the zones of influence and record the existing positions and conditions of the dwellings/structures/services. This shall include the length and width of cracks, as well as the condition of doors, windows, roofing, wells, boreholes etc. The contractor, alone, shall be responsible for any costs that can be attributed to blasting activities, including the collection of fly-rock from adjacent lands and fields. The submission of such a plan shall not in any way absolve the contractor from his responsibilities in this regard. The contractor shall also indicate to the engineer the way he intends to notify the adjacent communities and/or road users of the times and delays expected for each individual blast.

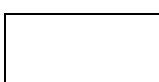
g) On Site Plant

i) Crusher, Screening Plants and Concrete Batching Plants

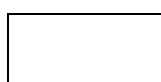
Crushing plants and concrete batching plants, whether sited inside or outside of defined quarry or borrow pit areas, shall be subject to the requirements of the applicable legislation that governs gas and dust emissions into the atmosphere. Such sites will be the subject of regular inspections by the relative authorities during the life of the project. .

The screening of the activities shall be undertaken so that dust and noise is minimised. This can be done by carefully choosing the site for the activity, and by using slightly damp material.

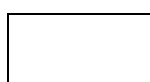
Effluent from concrete batch plants and crusher plants shall be reused where possible or treated in a suitable designated sedimentation dam to the legally required standards to prevent surface and groundwater pollution. The designs of such a facility should be submitted to the engineer for approval. The accumulated settled waste material shall be removed to an approved waste disposal site depending on the nature of the material that shall be analysed to determine whether there are



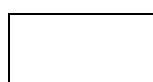
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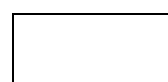
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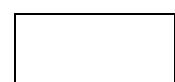
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toxic elements present and in what concentration. The contractor shall invite the relevant department to inspect the site within 2 months after any plant is commissioned and at regular intervals thereafter, not exceeding 12 months apart.

Asphalt Plant

In the event the use of an on-site asphalt plant is considered the contractor shall be responsible to obtain the necessary permit from the Department of Environmental Affairs, regardless of where the site is situated. Operation of the plant shall conform to the same requirements as for a crushing plant or concrete batching plant under C1007 (h) (i) above.

F8 AREAS OF SPECIFIC IMPORTANCE

Any area, as determined and identified within the project documents as sensitive or of special interest within the site shall be treated according to the express instructions contained in these specifications or the specific, approved EMPr. The contractor may offer alternative solutions to the engineer in writing should he consider that construction will be affected in any way by the hindrance of the designated sensitive area or feature.

a) Archaeological Sites

If an artefact on site is uncovered, work in the vicinity shall be stopped immediately. The contractor shall take reasonable precautions to prevent any person from removing or damaging any such article and shall immediately upon discovery thereof inform the engineer of such discovery. The South African Heritage Resource Agency (SAHRA) is to be contacted, and a SAHRA-registered archaeological consultant may undertake the necessary work involved to confirm the find and advise on the preservation and removal. Work may only resume once clearance is given in writing by the archaeologist. (Read with FIDIC condition of contract clause 4.24 as).

F9 REHABILITATION

The contractor shall be responsible for the re-establishment of grass within the road reserve boundaries for all areas disturbed during construction. This includes, for example, service roads, stockpile areas, stop/go facilities, windrows and wherever material generated for, or from, construction has to be stored temporarily, and designated or instructed areas outside the road reserve. It also includes the area where site offices were erected which may require rehabilitation at the end of the contract. All construction material, including concrete slabs and braai areas shall be removed from the site on completion of the contract unless written approval from the relevant landowner requests that it is to be left in place. Responsibility for re-establishment of vegetation shall extend until expiry of the defects notification period.

Rehabilitation of affected areas should be undertaken as early as possible when the relevant activities are done in order to reduce further environmental damage. All re-vegetation should be undertaken using indigenous vegetation. The standard of rehabilitation should be to the satisfaction of the engineer and the relevant authorities.

The Department of Minerals Resources will only issue Closure Certificates for borrow pits and quarries when they are satisfied with the rehabilitation undertaken. It should also be noted that in some cases there is a requirement for a final environmental audit covering the extent of the project. (if applicable)

F10 RECORD KEEPING

The Contractor shall maintain a filing system that meets the project's Quality Management Plan. This system should make provision for a) record keeping and b) non-compliance.

☐ Record Keeping and Document Control

This would include the latest versions of all documents such as method statements, site plans, authorisations in a central location. Copies of any authorisations or EMPrs (including those for specific borrow pits or quarries used on the project) shall be kept on site and made available for inspection by visiting officials from the employer, relevant environmental departments or auditors.

☐ Record of Non-compliance

All incidents of non-compliance which will include terms of root cause, nature of non-compliance, the magnitude, actions to be taken, time frames and results of actions.

The engineer and the DEO will continuously monitor the contractor's adherence to the approved impact prevention procedures and the DEO shall submit regular written reports to the ECO and to the engineer, at least once a month. The engineer shall issue to the contractor a notice of non-compliance whenever transgressions are observed. The DEO shall document the nature and magnitude of the non-compliance in a designated register, the action taken to discontinue the non-

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compliance, the action taken to mitigate its effects and the results of the actions. The non-compliance shall be documented and reported to the engineer in the monthly report.

F11 COMPLIANCE AND PENALTIES

The contractor shall act immediately when a notice of non-compliance is received and correct whatever is the cause for the issuing of the notice. Complaints received regarding activities on the construction site pertaining to the environment shall be recorded in a dedicated register and the response noted with the date and action taken. This record shall be submitted with the monthly reports and an oral report given at the monthly site meetings.

Any non-compliance with the agreed procedures of the EMP and this EMP is a transgression of the various statutes and laws that define how the environment is managed and, therefore, any avoidable non-compliance, dependant on severity, may be considered sufficient grounds for contact to be made with relevant provincial or national authorities to invite their sanction.

The engineer's decision regarding what is considered a violation, its seriousness and the action to be taken against the contractor shall be final. Failure to redress the cause shall be reported to the relevant authority. The responsible provincial or national authority may ensure compliance and impose penalties relevant to the transgression as allowed within statutory powers.

Any penalties from the authorities will be passed on to the Contractor should he be found to have been negligent.

F12 SPECIFIC EMP

Protection of Fauna

- ☐ Under no circumstances shall any animals be handled, removed, killed or be interfered with by the contractor, his employees, his subcontractors' employees.
- ☐ The contractor and his employees shall not bring any domesticated animals onto the site.
- ☐ The contractor shall ensure the work site be kept clean, tidy and free of rubbish that would attract animals.
- ☐ No poaching or fauna and flora shall be tolerated by the contractor or his personnel on Site. There is a severe fine for those found guilty of setting traps.

Soil Management

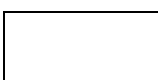
- ☐ The contractor is required to strip topsoil together with grass / groundcover from all areas where permanent or temporary structures are located, construction related activities occur, and access roads are to be constructed, etc. This must be read together with the contract specifications and conditions.
- ☐ Topsoil must be stockpiled for later rehabilitation of stripped areas.
- ☐ Topsoil is to be replaced by direct return where feasible (i.e. replaced immediately on the area where construction is complete), rather than stockpiling it for extended periods.

Erosion Control

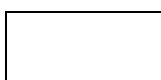
- ☐ The contractor shall protect all areas susceptible to erosion and shall take measures, to the approval of the ECO. The contractor shall not allow erosion to develop on a large scale before effecting repairs and all erosion damage shall be repaired as soon as possible.
- ☐ The specifics of erosion protection work will vary from situation to situation. These specifics shall be approved by the engineer and comply with contract specifications.
- ☐ Where required, cut-off trenches can be installed to divert substantial water run-off and prevent erosion of soil.
- ☐ During construction, areas that are susceptible to erosion shall be protected by the installation of temporary or permanent drainage works and energy dispersion mechanisms that shall be approved by the engineer with consideration to cost, and could include the following:
- ☐ Vegetation; Mitre drains; Earth berms; Berms consisting of sand bags; Earth leveller berms; Packing branches and rocks in small gullies and disturbed areas; Storm water drainage measures are required on site to control water runoff and prevent soil erosion.
- ☐

Excavation, Backfilling and Trenching

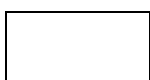
- ☐ Excavations shall not stand open for longer than 2 days, and should preferably be opened and closed the same day. Excavations shall be marked with tape.
- ☐ Removed soil shall be used to backfill areas where required (e.g. such as existing borrow pits).
- ☐ Excavated material is to be stockpiled along the trench within the working servitude, unless otherwise ordered.
- ☐ Deficiency of backfill material will not be made up by excavation within the protected/site area but shall be made up by importation from an approved borrow pit.



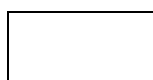
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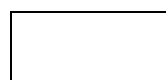
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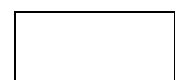
Witness 2



Employer



Witness 1



Witness 2

Access Roads

- ☐ Construction staff may only use authorised paths and roads.
- ☐ Construction roads must follow existing roads and tracks and should not be wider than necessary with a maximum width of 3m. Should a wider road be required approval of the ECO will be required.
- ☐ If two-way traffic movement is to take place, passing bays are to be used where specified by the ECO to prevent access/detours into surrounding areas. Drivers delivering construction materials to site are to be made aware that they may not drive off the road to allow another to pass.
- ☐ There will need to be continual monitoring of the state of the dirt and tar roads that are used by heavy vehicles related to the construction of the road because the roads are likely to deteriorate. There will need to be regular grading as soon as rutting and potholes occur. There may need to be a substantial repair done to tar roads that have been damaged due to the construction traffic. The condition of the access roads will be included in the monthly audit report by the ECO.

Service and Refuelling of Construction Equipment

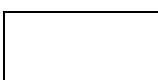
- ☐ All maintenance and repair work will be carried out within an area designated for this purpose and shall be equipped with the necessary pollution containment equipment, vessels and bunds.
- ☐ The ground under the servicing and refuelling areas must be protected against pollution caused by seepage of spills or overflow.
- ☐ The contractor may only change oil lubricant at agreed and designated locations, except if there is a breakdown or emergency repair, and then accidental spillages must be cleaned up and removed immediately.
- ☐ In such instances the contractor shall ensure that there is always a drip tray available to collect any spilled oil or vehicle fluid.
- ☐ All equipment that leaks must be repaired immediately or must be removed from site.
- ☐ Fuel required during construction must be stored in a central depot at the construction camp. This storage area should be located on a slab and be contained within a bund wall capable of containing 110% of the full volume of the containers.
- ☐ Temporary fuel storage tanks and transfer areas also need to be located on an impervious surface adequately bunded to contain accidental spills. Appropriate run-off containment measures must be in place.

Solid Waste Management

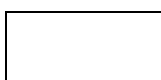
- ☐ An adequate number of 'scavenger proof' refuse bins shall be provided at construction sites and at the construction camps.
- ☐ These bins must be provided with lids and an external closing mechanism to prevent their contents from blowing out and from being opened by animals.
- ☐ The Contractor shall ensure that all personnel immediately deposit waste in the bins provided.
- ☐ The Contractor shall not dispose of waste and / or construction debris by burning or burying.
- ☐ All construction waste shall be discarded at a registered and approved waste site/landfill facility.
- ☐ The Contractor shall maintain 'good house-keeping' practices at all the work sites and that the construction camp and office sites are kept tidy and litter free.

Liquid Waste Management

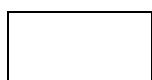
- ☐ The Contractor shall take all reasonable precautions to prevent the pollution of the ground and /or water resources on and adjacent to the site as a result of his activities.
- ☐ No natural water course spring or seep is to be used for the cleaning of machines, vehicles or any other apparatus. This includes bathing and the washing of clothes.
- ☐ The Contractor may discharge 'clean' silt laden water overland and allow this water to filter into the ground. The discharge of this water shall not be closer than 32 m from the edge of a water course or a wetland. Refer to map showing wetland extent.
- ☐ No spills may be hosed down into a storm water drain or sewer, or into the surrounding natural environment. These shall be removed in-situ from the area and deposited in an approved waste facility or bin. Soil that has been contaminated by the spill e.g. oil shall be removed to a depth below the contamination and clean soil of the same kind shall replace the soil removed.
- ☐ Adequate ablution facilities shall be provided at each camp site and together with the sewerage facility shall be located not closer than 32m from the edge of a wetland, stream or river.
- ☐ Adequate site toilets chemical or similar, shall be provided on site. These shall be emptied regularly by the supplier and shall be removed from site and their content deposited at an approved sewerage disposal works.



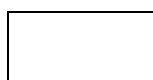
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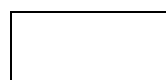
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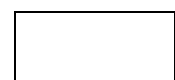
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Water Runoff from Construction Camps

- ☐ The Contractor must ensure that rainwater runoff that contains pollutants, does not directly enter natural and sensitive areas such as streams and rivers.
- ☐ Drainage / runoff diversion systems shall be installed to divert runoff from areas that have material that is considered a pollutant to the natural environment. These include batching plants, vehicle washing bays, workshops, chemical stores, asphalt plants and so on.
- ☐ This runoff shall be contained in a series of retention ponds/areas where the liquid will be treated, evaporated or pumped into containers and removed from site by an approved service provider.

Fire

- ☐ The Contractor shall take all the necessary precautions to ensure that fires are not started as a result of activities on site.
- ☐ The Contractor shall ensure that there is adequate firefighting equipment at the fuel store and he shall supply all site offices, workshop areas, material stores and any other areas identified with suitable, tested and approved firefighting equipment.

Dust

- ☐ The Contractor shall take all necessary precautions to the satisfaction of the ECO to limit the production of dust from construction activities. This is important as dust has negative effects on crops and livestock and nearby homesteads.

Noise

- ☐ Silencer units are to be maintained in good functioning order on all machinery and vehicles.
 - ☐ Vehicles and machinery that do not comply with the manufacturer's noise emission values will be banned from use on site until the levels of noise are met.
- ☐ The Contractor shall take note of the areas along the road reserve that have been demarcated on the attached plans as having a noise risk to nearby homesteads and therefore take additional precautions to limit construction related noise in those areas at all times during road construction.

Visual

- ☐ Security and area lighting shall be placed and angled such that they do not pose a nuisance due to light spill, to bird roosts, residents and tourists to the area. Light fittings that have their light source recessed will limit light spill or the light should have shields fitted to provide the same effect.
- ☐ The marking for surveying and other setting out purposes shall only be done with pegs and beacons.
- ☐ All packed rock and exposed rock cuttings shall be treated in order to blend their colour with the colour of the weathered rocks of the adjacent environment.

THE ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPR)

The Environmental Management Programme (EMPr) outlines the procedures that control the way KSD (the Employer), Leko Engineering Consultants (the Project managers) and contractors to be appointed shall conduct themselves whilst undertaking the proposed rehabilitation and related Storm water management.

This EMP must be read and implemented together with existing documentation relating to the Environmental Management and or operation of the facility.

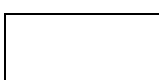
F13 PROJECT BACKGROUND AND SCOPE

Construction Scope of works

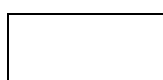
- ☐ Relocation of properties, fence boundaries and driveways;
- ☐ Closing of intersections, heavy duty trucks parking bay and turning cycle;
- ☐ Upgrading of internal roads;
- ☐ Installation of safety features (speed humps etc.);
- ☐ Relocation of services (Telkom, Eskom, water);
- ☐ Constructing storm water outlets and
- ☐ Traffic accommodation.

F14 ENVIRONMENTAL MANAGEMENT PROGRAMME PURPOSE- AND OBJECTIVE

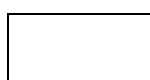
The purpose of this EMPr document is to clearly outline control measures and strategies in relation with established performance criteria for the potential environmental impact as identified.



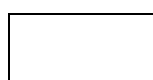
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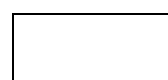
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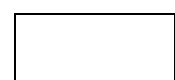
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The aim is to provide guidance to ensure that:

The commitment made by the ELM (Employer), Leko Engineering Consultants (the Project Managers), the Contractor and Sub-contractors are met and the environmental requirements specified are complied with; The terms and conditions of the Environmental Authorisation are being adhered to at all times; and that comprehensive monitoring adhering to environmental standards takes place through monthly environmental audits by an Environmental Control Officer (ECO).

The EMPr is designed to guide and manage the different activities that take place during construction and operational phases. It is regulatory; it identifies specific people or organization to undertake specific tasks and ensures that the Occupational health and Safety Act is implemented by enforcing adequate health & safety measures and also preventing and mitigating all possible Environmental Impacts.

The project management team will consist of the -

Employer: King Sabata Dalindyebo Local Municipality
Project/Site manager: Leko Engineering Consultants
Social Facilitator: Institutional and Social Development (ISD)
Environmental Control Officer
Designated Environmental Officer
Contractor and associated sub-contractors.

In the event that there are any archaeological finds within the construction area, all construction work within the area will be terminated immediately until the matter is resolved. An Archaeologist/palaeontologist will then be contracted to provide guidance on the importance of the find and if necessary the removal of these archaeological objects.

i) Roles and Responsibilities of the Employer

The projects applicant's responsibility includes the following:

- ☐ Attain all the necessary approvals;
- ☐ Fulfil public relations responsibilities;
- ☐ Inform the authorities of any site related problems that may occur during construction and operational phases;
- ☐ Plan, co-ordinated and conduct site meetings;
- ☐ Liaise with site manager and ECO regarding environmental management onsite; and
- ☐ Assist the project manager and Site Manager in making decision and find solutions to environmental problems that may arise during the construction phase.

ii) Roles and Responsibilities of the Project/Site Manager

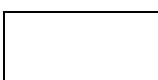
The site manager has the authority to stop work if in his/he opinion there is a serious threat to or impact on the natural and/or social environment as a result the construction and operation. This authority is to be limited to an emergency situation where consultation with the applicant, project manager and/or contractor is not immediately possible. In all such work stoppage situation, the Site Manger is to inform the applicant, project manager and contractor for the stoppage as soon as possible.

Upon failure by the contractor to show adequate consideration to the environmental aspect of this contract, the Site Manager may recommend to have the contractor's representative or any employee removed from site until the matter is resolved. No extension of time will be considered in the case of such suspension and all costs will be borne by the responsible contractor.

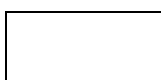
The site Manger's responsibilities include the following:

- ☐ Ensure that the requirements as set out in the EMPr are adhered to;
- ☐ Enforce compliance to the EMPr with the contractor;
- ☐ The Site manager must obtain, examine and approve contractor's methods statements where applicable;
- ☐ Advice the project team on Environmental issues within the EMPr;
- ☐ Recommend corrective action where there is non-compliance with the EMPr
- ☐ Keep an up to date diary of site activities; and
- ☐ Compile and environmental report on completion of construction phase.

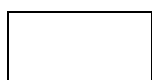
iii) Roles and Responsibilities of Social Facilitator (ISD)



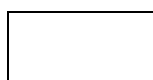
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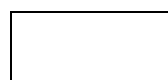
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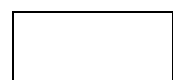
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Employer



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It is the responsibility of EML to facilitate interaction with the public including the communities through their Institutional and Social Development (ISD) division.

This responsibility includes:

- ☐ Informing the neighbouring residents, ward councillors, landowners of the intent to commence with construction activities and in doing so provide background information as to the duration of the project, the working hours as confirmed in the document and necessary contact details;
- ☐ Responding to all public complaints or enquires whether such complaints are received by the Project Manager, Site Manager, ECO and /or the Appointed contractor; and
- ☐ Respond to the media and prepare media reports should such requests be received.

iv) Roles and Responsibilities of the Contractor

The contractor is responsible for project delivery in accordance with the prescribed specifications, among which this EMPr shall be included. The contractor shall receive and implement any instruction issued by the engineer relating to compliance with the EMPr including the removal of personnel or equipment.

Before commencement of listed/sensitive activities, the contractor should submit a Method Statement to the ECO and Engineer. A method statement is a written submission by the contractor must be prepared prior to any activity occurring on site if required by the Applicant, Project Manager Site Manager and the ECO. The submission will include the plant or equipment to be used. It should follow the format below and include the following information:

- ☐ **What?** A brief description of the works;
 - ☐ **How?** A detailed description of the process of work, methodology, materials and where material will be stored;
 - ☐ **Where?** A locality map (if applicable) and a compliance/ non-compliance checklist with the specifications;
 - ☐ **When?** The sequence of action with estimate due commencement dates and completion dates;
 - ☐ **Who?** The name of the person(s) or companies who are going to undertake the work;
 - ☐ **Why?** A detailed explanation of the reasons why the work needs to be carried out

VI. Roles and Responsibilities of the Environmental Control Officer (ECO)

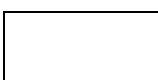
The Environmental Control Officer (ECO) is a suitable experienced and qualified person designated to oversee the protection of the environment that could be potentially affected by the Project. The ECO should be based onsite fulltime and his/her primary purpose is to keep the ECO updated with regards to environmental issues. It is not foreseen that the ECO would undertake an extensive monitoring function, hence can be employed on a part-time basis.

The duties of the ECO will include:

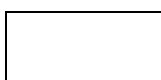
- ☐ Liaise with the Applicant, Project Manager; Site Manager and Environmental Authorities;
- ☐ Ensuring the necessary Environmental Authorization have been obtained;
- ☐ Monthly monitoring of all of the construction activities for compliance with the various environmental requirements contained in the specification;
- ☐ Attend monthly management meetings with Engineer, Applicant, Site Manager, Contractor and sub-contractor;
- ☐ Giving feedback on the environmental issues at the monthly site meetings and other meetings that may be called regarding environmental matters;
- ☐ Monitoring compliance with other relevant environmental legislation;
- ☐ Reviewing Environmental Management Statements;
- ☐ Instituting remedial action in the event of non-compliance;
- ☐ Implementation and management of environmental protection measures;
- ☐ Routine recording and reporting of environmental activities on a monthly basis;
- ☐ Investigate environmental incidents;
- ☐ Ordering via Engineers Representative, the removal of person(s) and/or equipment not complying with the specifications; and
- ☐ Manage the ECO and project related administration.

VI. Roles and Responsibilities of the Designated Environmental Officer (DEO)

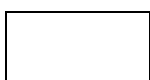
The Designated Environmental Officer (DEO) means an appropriately qualified person, permanently appointed to oversee the implementation of the EMPr on the project, until the completion of the constructions. The DEO would daily audit the implementation of the EMPr by any Contractor appointed by the Municipality and would report to the Engineer and ECO.



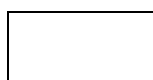
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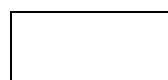
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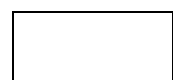
Witness 2



Employer



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The duties of DEO will include:

- ☐ Liaise with ECO, Engineers representative, Site Agents, Communities, contractors and official visiting site;
- ☐ Daily monitoring of the contractor's activities for compliance with the various environmental requirements contained in the specification;
- ☐ Monitoring of compliance with other relevant environmental legislation;
- ☐ Development of requisite environmental Method Statements;
- ☐ Assisting the contractor in finding environmentally responsible solutions to problems;
- ☐ Conduct and supervise remedial action in the event of non-compliance;
- ☐ Daily implementation and management of environmental protection measures including daily inspections;
- ☐ Attend monthly site meetings and briefings and inform contractors of infringements on a daily basis;
- ☐ Keeping records of all activities/incidents on Site concerning the environment;
- ☐ Keeping a register of public complaints and recording and addressing any public comments or issues;
- ☐ Routine and reporting of environmental incidents;
- ☐ Environmental training and presentation of the Environmental Awareness Training courses to the contractor's staff;
- ☐ Issuing of fines for contravening of the Environmental Specification; and
- ☐ Keeping a photographic record of progress on site from an Environmental perspective.

F15 GENERAL

Site Meetings

Compliance with this specification will be an item on the agenda of the monthly site meetings.

Method Statement

Any Method Statement required by the Principal Agent or this Specification shall be produced within such reasonable time as the Principal Agent shall specify or as required by this Specification. The contractor shall not commence the activity until the Method Statement has been approved and shall except in the case of emergency activities, allow a period of two (2) weeks for approval of the Method Statement by the Principal Agent. Such Approval shall not unreasonably be withheld.

The ECO has the authority to stop work if in his/her opinion there is a serious threat to or impact on the environment as a result of the construction activity. This authority is to be limited to emergency situations where consultation with site work stoppage situation involves the ECO informing the Site Safety Manager, Project Manager and Employer of the reason for the stoppage as soon as possible.

Upon failure by the contractor or his employees to show adequate consideration to the environmental aspect of this contract, the ECO may recommend to the Site Safety Manager to have the contractor's representative or any employee removed from site until the matter is resolved. No extension of time will be considered in the case of such suspension and all costs will be borne by the responsible contractor.

Environmental Education/ Environmental Awareness Plan

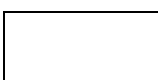
The project managers will be responsible for implementing a programme that will raise environmental awareness for all construction workers. The environmental awareness training will be presented to all workers in order to promote a successful implementation of the EMP.

An Environmental Control Officer shall be appointed to assist the manager with effective implementation of the programme and to also ensure compliance with all conditions of authorizations received. The Awareness training shall emphasize the importance of an EMP to promote compliance. All the environmental impacts that are associated with the proposed development should be outlined together with the proposed mitigation measures.

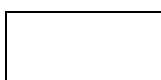
A register must be signed as part of the monitoring process; this will serve as proof that workers were made aware of the sensitivities on site. A method statement will be compiled by the contractor prior to commencement of construction activities. The method statement will comply with all the recommendations that have been outlined in the EMP of the project with aims to protect environmental resources, minimize pollution and to rehabilitate disturbed areas.

As part of the environmental awareness training, the contractor shall erect and maintain information posters for the information of his employees depicting actions to be taken to ensure compliance with aspects of the specifications. Such posters shall be supplied by the Main Contractor and shall be erected at a location specified by the Principal Agent.

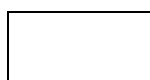
Site Instructions



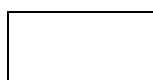
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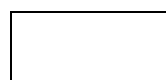
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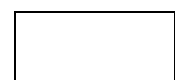
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The Site instruction book entries will be used for recording of general site instructions as they relate to the work on site. It will also be used for the issuing of stop work order for the purpose of immediately stopping the construction of any particular activities which may pose environmental or social risk.

F16 FINANCING OF THE ENVIRONMENTAL CONTROL

Financing of all control measures is the direct responsibility of each contractor appointed by the Employer. It is therefore accepted that the costs incurred for implementing the required environmental control to ensure compliance with Local Authority By-laws, Provincial and National Legislation and the objective or specified in the EMPr would be allocated for in the specific Tender documents. All responsibilities not defined in the EMPr or which fall outside the Tender Specification will be the responsibility of the Employer.

F17 RECORD KEEPING

All record related to the implementation of this EMPr (e.g. Method Statements, Complaints register, Site instruction book and Site Manager Diary) must be kept together at the Site officer where it is safe and can be retrieved easily. These records should be kept for submission to the relevant authorities if so requested.

F18 ENVIRONMENTAL MONITORING & REPORTING/ AUDITING

The Environmental Control Officer will be responsible for monitoring of construction activities on site and to also ensure that all the recommendations of the EMPr are adhere to during the construction phase. Monitoring of compliance with all the recommendations should be done regularly.

The construction area must be inspected and the Environmental Control Officer must compile a report after each inspection. Should non-compliance be recorded, the construction activities must be ceased until remedial actions are taken to ensure compliance.

The report must be submitted to the project manager who can then address any issues raised with the contractor. The reports will be kept as part of record keeping and will be sent to DEDEA should they be requested. Written records should entail the method statement, the approved EMPr that consists of monitoring reports, a site incident register, relevant authorizations that have been obtained and records of any meeting and training held with the construction workers. The project manager will also be responsible for post construction phase monitoring programme.

F19 PHOTOGRAPHS

It is recommended that photographs are taken of the site prior to, during and immediately after construction as a visual reference. These photos should be filed with other records related to EMPr.

F20 ENVIRONMENTAL REPORT

This report is prepared by the Environmental Control Officer monthly and submitted to the relevant authorities if so requested, stating completion of the various phases of the project and compliance with conditions of the EMPr and Environmental legislations.

F21 SITE CLEAN UP

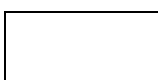
The contractor shall ensure that all temporary structures, equipment, material waste and facilities used for construction activities are removed upon completion of the project. The contractor should then clear and clean the construction site to the satisfaction of the ECO upon completion of the project.

F22 SITE REHABILITATION

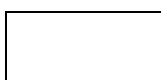
The Employer/Contractor/Project Manager will undertake all rehabilitation of area disturbed as a result of the construction activities onsite.

F23 MEASUREMENT AND PAYMENT

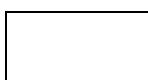
23.01 Payment for the contractor's obligations in respect of the Management of Environmental Requirements shall be made through payment items described below. All of the Contractor's costs associated with compliance with the provisions of this part of the Project Specifications shall be deemed to be included in the rates tendered for the items of work listed below.



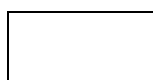
Contractor



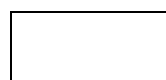
Witness 1



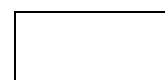
Witness 2



Employer



Witness 1



Witness 2

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

G23.01 Environmental Management Requirement

- | | |
|--|-------|
| a) Contractor’s time related obligations in respect of the Environmental Management Plan | month |
|--|-------|

The tendered monthly amount shall represent full compensation for that part of the contractor's general obligations in terms of the NEM Act which are mainly a function of time. This includes inter alia payment of all costs for the appointment of all staff contemplated in the Act.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

PART C4: SITE INFORMATION

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C4.1 Scope

This section of the contract document describes the site as well as giving information that the Service Provider can expect to encounter in delivery of the contract. It also provides general information on the Employer's intentions and reasons why the contract is needed.

C4.2 Disclaimer

Anything provided in this section of the document is given in good faith as representing conditions that exist at the time the tender and contract documents were put together in November 2022. This is given as information only and contains nothing that is prescriptive or that places any obligation or duty on the tenderer/contractor. However, it is in the tenderer's best interest to have visited the site from which to make his own evaluation as to the correctness of this information. Wherever any conflict arises from the content of this section and other prescriptive sections of the contract document, the latter take precedence.

In terms of the Standard Conditions of Tender and the Tender Data, the Contractor is to attend compulsory visit to the site and a clarification meeting prior completing the tender document and offering his rates to familiarise themselves with the extents of the works.

In this regard, the contractor shall be deemed to have inspected and examined the site and its surroundings, have gathered the information available in connection therewith and have satisfied himself before submitting his tender (as far as is practicable) as to:

- a) The form and nature of the site and its surrounding, including subsurface conditions,
- b) The hydrological and climatic conditions,
- c) The extent and nature of the work and materials necessary for the execution and completion of the Works, and
- d) The means of access to the site and the accommodation he may require.

No subsequent claims by the Contractor arising from lack of knowledge of perceptible conditions on the site or its surroundings or of available information shall be entertained.

C4.3 Mentoring and training

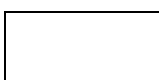
Traditionally, contractors were appointed to execute a project without any expectation that Employers would contribute anything towards training and mentoring as this was usually conducted internally, particularly by the larger construction companies. KSD and Eastern Cape Office of the Premier (OTP) meaningful intervention within the construction industry is to offer opportunities to graduate technicians, trainee students and local SMME. Technicians and students are to gain technical expertise in road building and SMME are to improve their CIDB grading to be in position to pursue bigger opportunities in the national construction scale.

C4.4 Involving the Community

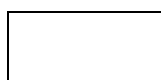
This project forms part of the Employer's community development programme aimed at providing economic and social development to the area immediately surrounding the site. At every opportunity the community's wellbeing will play a continuous theme in how the contract is delivered. Thus the Service Provider will espouse the principle of leaving within the community as much as possible in terms of economic spend and residual road-building and management skills. The contract prescripts place high emphasis on procuring resources (human and material) for construction from within the community and KSD municipal boundaries.

The Service Provider will involve the community continuously throughout the project. He will be assisted by his Community Liaison Officer to make contact with the community for introduction and guidance when getting established on the site. An early duty will be the process of assessing human and other resources abiding within the community.

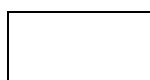
The Contractor will have to engage with the local community and local authorities in order to secure a land for site establishment.



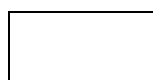
Contractor



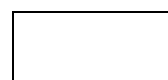
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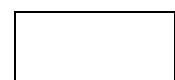
Witness 2



Employer



Witness 1



Witness 2

C4.4.1 Business Forum

In recent years, construction projects are brought to a halt by business forums seeking a 30% allocation of the project. Misunderstanding with the Contractor can bring the project to a deadlock, threat to life and probable arson. Business forum exposure to opportunities must be managed well by the ISD working together with the Project Steering Committee, Contractor and Client. Disruptions will not constitute claim with time related costs to mitigate bad faith negotiations from the Contractors with intention to claim for standing.

C4.5 Project Locality

The project is located in Mqanduli Town, Central Business District (CBD). The roads discussed in this report fall within the boundaries of KSD Local Municipality under the jurisdiction of O.R. Tambo District Municipality in the Eastern Cape Province, refer to Figure 1 – Locality Plan for the roads under considerations.

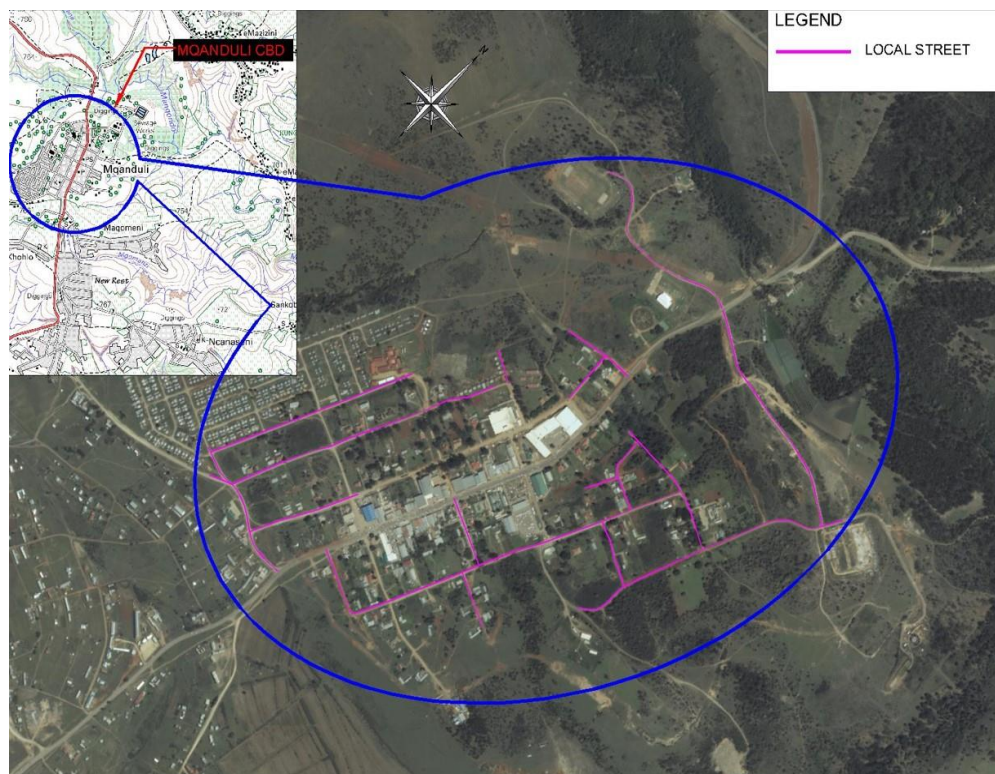


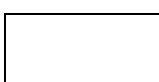
Figure 1: Locality Plan

Mqanduli is a town located approximately 30km South of Mthatha and 22km North-East of Elliotdale. The approximate central co-ordinates of the roads are as follows: Latitude – 31°49'14.19"S; Longitude – 28°45'41.44"E

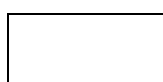
C4.6 Topography and geology

The topographical profile of the roads is considered relatively hilly with the high point of the roads being at $\pm 760\text{m}$ whilst the lowest point of the road is at $\pm 680\text{m}$ above sea level (a.m.s.l). The grade of the road ranges from 1.33% to 15.95% which is considered steep for this road classification. The area generally slopes towards south-east.

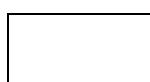
Regarding soils in the area, the vast majority of the study is characterized by mudrock with thick deposits of colluvium and a subordinate sandstone sequence with a network of dolerite sills mainly intrusive into Karoo Supergroup. It is comprised predominantly of Beaufort Geological Group of the Karoo Sequence. Beaufort group comprises of mudrock, sandstone and can further be subdivided into a series of Adelaide Formations. Mudrocks are blocky and feature desiccation cracks as well as horizontal laminations which are visible in the geological map. The material classification as per COLTO comprises of G6, G7 and G10 gravels. Copy of the geotechnical report can be made available on request.



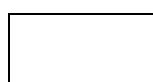
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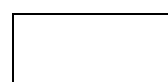
Witness 1



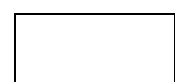
Witness 2



Employer



Witness 1



Witness 2

C4.7 Existing services

There are numerous existing services like sewer manholes, sewer pipes, overhead power cables, water pipelines encountered within the road reserve. Underground detection report was used during design to avoid clashing services, report can be made available on request. This report and existing service layout will be shared with the Contractor during site handover. In this way, this will reduce the risk of the contractor to accidentally hit existing services rampantly.

Based on local experience, the turnaround time to reinstate damaged services is very slow which can cause frustration to the businesses and residential properties around the area. As a mean to mitigate slow turnaround time a provisional sum is included in the Bill of Quantities to compensate the contractor for exposing and relocating impeding existing services before commencing with earthworks activities.

C4.8 Description of the works

The project entails upgrading of Internal Urban Roads in Mqanduli listed in Table 1. The Table depicts length and width of the roads to be upgraded.

Table 1: All roads phase 1 to be upgraded

Phase 1		
Road No	Width (m)	Length (m)
Road 3	7	483.9
Road 4	5	212.2
Road 5	5	89.3
Road 7	6	1167.3
Road 8	6	193.6
Road 10	6	334.3
Road 10A	6	96.2
Road 12	6	750.3
Road 18	6	208.8
Road 19	7	159.9
Total Length Phase 1		3695.6
Total Phase 1 and 2		

Figure 2 depicts roads under Phase 1 which to total length of 3.7km long to be upgraded.

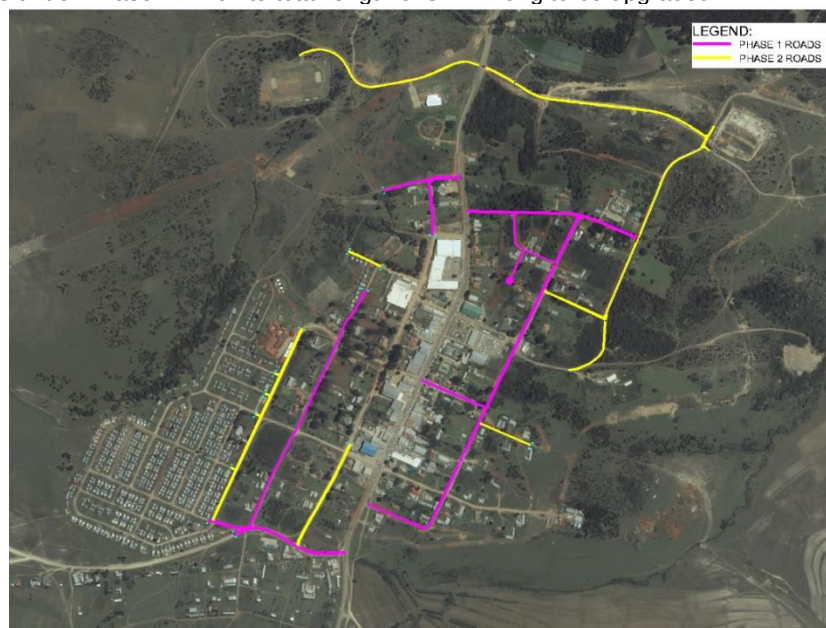
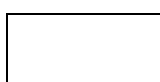
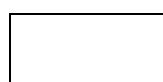


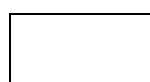
Figure 2: Project phases layout



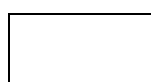
Contractor



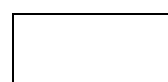
Witness 1



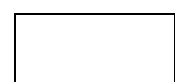
Witness 2



Employer



Witness 1



Witness 2

C4.9 Traffic

It is anticipated that there is little vehicular traffic that will be disrupted by the construction works. Notwithstanding this fact, the Construction will have to take all precautions to accommodate both vehicular and pedestrian traffic during construction. Traffic Impact Assessment can be made available on request.

Contractor

Witness 1

Witness 2

Employer

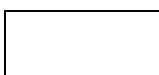
Witness 1

Witness 2

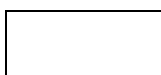
C4.3: SCHEDULE OF DRAWINGS

The drawings bound in the booklet of drawings are for tender purposes only. The work shall be carried out in accordance with the Contract Drawings which will be issued to the successful tenderer and which will form part of the Contract Document.

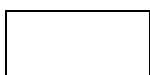
DRAWING NO	DRAWING TITLE	SIZE
1448-KSD-OTP-2022-23-RD-100	Road Layout	A3
1448-KSD-OTP-2022-23-RD-101	Road Layout and Long section (1 of 6)	A3
1448-KSD-OTP-2022-23-RD-102	Road Layout and Long section (2 of 6)	A3
1448-KSD-OTP-2022-23-RD-103	Road Layout and Long section (3 of 6)	A3
1448-KSD-OTP-2022-23-RD-104	Road Layout and Long section (4 of 6)	A3
1448-KSD-OTP-2022-23-RD-105	Road Layout and Long section (5 of 6)	A3
1448-KSD-OTP-2022-23-RD-106	Road Layout and Long section (6 of 6)	A3
1448-KSD-OTP-2022-23-SW-201	Stormwater General Layout	A3
1448-KSD-OTP-2022-23-SW-202	Stormwater Layout and Long section (1 of 4)	A3
1448-KSD-OTP-2022-23-SW-203	Stormwater Layout and Long section (2 of 4)	A3
1448-KSD-OTP-2022-23-SW-204	Stormwater Layout and Long section (3 of 4)	A3
1448-KSD-OTP-2022-23-SW-205	Stormwater Layout and Long section (4 of 4)	A3
1448-KSD-OTP-2022-23-RM-400	Road Marking Layout	A3
1448-KSD-OTP-2022-23-RM-401	Proposed Road Marking Typical Details	A3
1448-KSD-OTP-2022-23-SD-301	Speed Humps & Raised Pedestrian Crossing	A3
1448-KSD-OTP-2022-23-SD-302	Pedestrian Crossing and Bus Bays	A3
1448-KSD-OTP-2022-23-SD-303	Stormwater Manhole details	A3
1448-KSD-OTP-2022-23-SD-304	Kerb Inlet and Catchpit Details	A3
1448-KSD-OTP-2022-23-SD-305	Cross Section	A3
1448-KSD-OTP-2022-23-SD-306	Pipe Bedding Details & Stormwater Outlet Structure	A3
1448-KSD-OTP-2022-23-SD-307	Pre Cast Bus Shelter	A3
1448-KSD-OTP-2022-23-SD-308	Drain Detail	A3
1448-KSD-OTP-2022-23-SD-309	Road Furniture Details	A3



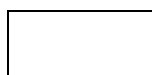
Contractor



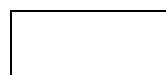
Witness 1



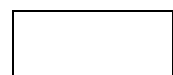
Witness 2



Employer



Witness 1



Witness 2