



DR JS MOROKA LOCAL MUNICIPALITY

CONTRACT NUMBER: JSM-R02/21-22/W15
BID DOCUMENT

UPGRADING OF DIKGWALE BUS AND TAXI ROUTE



EXPANDED PUBLIC WORKS PROGRAMME
Creating opportunities towards human fulfilment

PREPARED BY:	PREPARED FOR:
 2MC CONSULTING ENGINEERS UNIT A3 BRADFORD HOUSE 12 BRADFORD ROAD, BEDFORDVIEW 2007 Mr. T SIBUYI Tel: 011 615 2302 Tel: 086 617 4593	 THE ACTING MUNICIPAL MANAGER DR JS MOROKA MUNICIPALITY P/BAG X 4012 SIYABUSWA 0472 Mr B.M MHLANGA Tel: (013) 973 1390/1101 Fax: (013) 973 2463/0974

NAME OF BIDDER (BIDDING ENTITY) (FULL NAME, i.e.
(CC, (PTY) LTD, LTD, JV, SOLE PROPRIETOR etc.)

:

TEL NUMBER

:

FAX NUMBER

:

E-MAIL

:

CELL NO.

:

CIDB NO.

:

THE OFFERED TOTAL OF THE PRICES INCLUDING VALUE ADDED TAX IS: R.....(In figures)

VERY IMPORTANT NOTICE ON DISQUALIFICATIONS:

A bid not complying with the peremptory requirements stated hereunder will be regarded as not being an "Acceptable bid", and as such will be rejected.

"Acceptable bid" means any bid which, in all respects, complies with the conditions of bid and specifications as set out in the bid documents, including conditions as specified in the Preferential Procurement Policy Framework Act (Act 5 of 2000) and related legislation as published in Government Gazette number 22549, dated 10 August 2001, in terms of which provision is made for this policy.

1. If a tax clearance certificate or copy thereof (or in the case of a joint venture, of all the partners in the joint venture) has not been submitted with the bid document on closing date of the bid.
2. If any pages have been removed from the bid document, and have therefore not been submitted, or a copy of the original bid document has been submitted.
3. Failure to complete the schedule of quantities as required, i.e. only lump sums provided.
4. Scratching out, writing over or painting out rates, without initialling next to the amended rates or information, affecting the evaluation of the bid.
5. The use of correction fluid (i.e. tippex) or any erasable ink, e.g. pencil.
6. Non-attendance of mandatory/compulsory (If Applicable):
 - o Site inspections or;
 - o Information/Clarification meetings
7. The Bid has not been properly signed by a party having the authority to do so, according to the example of "Authority for Signatory"
8. No authority for signatory submitted – See example, where it is stated that a duly signed and dated original or certified copy of the company's relevant resolution (for each specific bid) of their members or their board of directors, must be submitted.
9. Particulars required in respect of the bid have not been completed, except if information required on Preferencing Schedule in respect of HDI Equity and Equity Ownership Forms, is not completed, the bid will not be disqualified but no preference points will be awarded.
10. The bidder attempts to influence, or has in fact influenced the evaluation and/or awarding of the contract
11. The bid has been submitted either in the wrong bid box or after the relevant closing date and time
12. Failure to provide a valid certificate from the Department of Labour, or a declaration (Specific goals – "Equity ownership") by a designated employer that it complies with the Employment Equity Act 55 of 1998.
13. If any municipal rates and taxes or municipal service charges owed by the bidder or any of its directors to the municipality, or to any other municipality or municipal entity, are in arrears for more than three months. In a case of lease, Leaser's municipal rates and taxes are applicable.
14. If any bidder who during the last five years has failed to perform satisfactorily on a previous contract with the municipality, municipal entity or any other organ of state after written notice was given to that bidder that performance was unsatisfactory.
15. The accounting officer must ensure that irrespective of the procurement process followed, no award may be given to a person –
 - (a) who is in the service of the state, or;
 - (b) if that person is not a natural person, of which any director, manager, principal shareholder or stakeholder, is a person in the service of the state; or;
 - (c) who is an advisor or consultant contracted with the municipality in respect of contract that would cause a conflict of interest?
16. Failure to provide:
 - (a) written proof of **registration** with the CIDB, in an appropriate contractor grading designation (category), as required in the bid documentation (if applicable); or
 - (b) written proof of **application** to the CIDB **for registration** as a contractor in an appropriate designation (category), as required in the bid documentation (if applicable).
17. Bid offers will be rejected if the bidder or any of his directors is listed on the Register of Bid 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.
18. Bid offers will be rejected if the bidder has abused DR. JSMLM Supply Chain Management System.

Bidder:

Initial: Authorised signatory/ies: 1.

2.

Witness:

DR. JSMLM:

Initial: DR. JSML

19. Failure to attach a copy of a valid signed Joint Venture/Consortium agreement (if applicable) to the bid document.
20. Form of offer not completed and signed by the authorised signatory.
21. Not signing all pages on the space provided
22. Attach CV of Contracts Manager, Site Agent and Safety Officer
23. Certified Qualification of Contracts Manager (Minimum qualification in Civil / Water related projects), Site Agent and Safety Officer (Relevant Certificate)
24. Proof Of Foreign Qualification approved from SAQA (if applicable)
25. Proof of Employment, letter confirming employment (Contracts Manager, Site Agent and Safety Officer)
26. Proof of relevant experience (copies of appointment letters and respective completion certificates)
27. Proof of Purchase of the tender document must be attached; failure to do that will lead to disqualification (Not applicable when e-tender services used as per the Advert)
28. A letter from the accounting officer (in case of a close cooperation or cooperative) or accounting firm (in case of a Private company, stating that the business is going concern.
29. In case where the bidder fails to prove beyond reasonable doubt that the project will be completed with the amount stated on the form offer. The bidder in the latter case will be given an opportunity to present the facts for risk mitigation purposes.
30. The municipality also reserves the right not to appoint the lowest bidder and to appoint the bid in whole or in parts. The municipality also reserves the right to appoint the bid based on its risk assessment

Bidder:
Initial: Authorised signatory/ies: 1.

2.

Witness:

DR. JSMLM:
Initial: DR. JSMLM.....

NOTE:

IN THIS DOCUMENT AND OTHER DOCUMENTS REFERRED TO BUT NOT ATTACHED, THE FOLLOWING WORDS ARE SYNONYMOUS WITH EACH OTHER.

1. CLIENT, EMPLOYER, DR. JS MOROKA LOCAL MUNICIPALITY (DR. JSMLM).
2. BID, TENDER AND VARIATIONS THEREOFF
3. JOINT VENTURE / CONSORTIUM

Bidder:
Initial: Authorised signatory/ies: 1.

2.

Witness:

DR. JSMLM:
Initial: DR. JSMLM.....

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE **Dr J.S. Moroka Local Municipality**

BID NUMBER: ...**JSM-R02/21-22/W15**

CLOSING DATE:

CLOSING TIME:

The successful bidder will be required to fill in and sign a written Contract Form (SBD 7).

DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)

...**Dr. J.S. Moroka Local Municipality**.....

...**2601/3 Bongifundo Street Siyabuswa**.....

Bidders should ensure that bids are delivered timeously to the correct address. If the bid is late, it will not be accepted for consideration.

The bid box is generally open 24 hours a day, 7 days a week.

FORM 7.1 ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS – (NOT TO BE RE-TYPED)

THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2011, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT

**THE FOLLOWING PARTICULARS MUST BE FURNISHED
(FAILURE TO DO SO MAY RESULT IN YOUR BID BEING DISQUALIFIED)**

NAME OF BIDDER

POSTAL ADDRESS

STREET ADDRESS

TELEPHONE NUMBER CODE.....NUMBER.....

.1 CELLPHONE NUMBER.....

FACSIMILE NUMBER CODENUMBER.....

E-MAIL ADDRESS.....

VAT REGISTRATION NUMBER.....

HAS AN ORIGINAL AND VALID TAX CLEARANCE CERTIFICATE BEEN SUBMITTED? (SBD 2) YES or NO

HAS A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE BEEN SUBMITTED? (SBD 6.1) YES or NO

IF YES, WHO WAS THE CERTIFICATE ISSUED BY?

AN ACCOUNTING OFFICER AS CONTEMPLATED IN THE CLOSE CORPORATION ACT (CCA)..... ☐

A VERIFICATION AGENCY ACCREDITED BY THE SOUTH AFRICAN ACCREDITATION SYSTEM (SANAS); ☐

A REGISTERED AUDITOR ☐

[TICK APPLICABLE BOX]

Bidder:

Initial: Authorised signatory/ies: 1.

2.

DR. JSMLM:

Initial: DR. JSMLM.....

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Witness:

(A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR B-BBEE)

.1.1 ARE YOU THE ACCREDITED REPRESENTATIVE?
IN SOUTH AFRICA FOR THE GOODS / SERVICES / WORKS OFFERED?

YES or NO

[IF YES ENCLOSE PROOF]

SIGNATURE OF BIDDER

DATE.....

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

TOTAL BID PRICE

TOTAL NUMBER OF ITEMS OFFERED

ANY ENQUIRIES REGARDING THE BIDDING PROCEDURE MAY BE DIRECTED TO:

Contact Person: Mr TT Mabuza

Tel: 013 9739126/7/8/9

Fax: 013 973 9312/3

E-mail address:

ANY ENQUIRIES REGARDING TECHNICAL INFORMATION MAY BE DIRECTED TO:

Contact Person: Mr. F Mashele

Tel: 013 973 1390/1101

Fax: 013 973 2463/0974

E-mail address: MasheleF@moroka.gov.za

Bidder:
Initial: Authorised signatory/ies: 1.

2.

Witness:

DR. JSMLM:
Initial: DR. JSMLM.....

DR. JS MOROKA LOCAL MUNICIPALITY

DEPARTMENT NAME: TECHNICAL SERVICES:

CONTRACT NO: **JSM-R02/21/-22/W15**

FOR

UPGRADING OF DIKGWALE BUS AND TAXI ROUTE

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Bidder:
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DR. JSMLM:
Initial: DR. JSMLM.....

DR. JS MOROKA LOCAL MUNICIPALITY

DEPARTMENT NAME: TECHNICAL SERVICES:

CONTRACT NO: **JSM-R02/21/-22/W15**

FOR

UPGRADING OF DIKGWALE BUS AND TAXI ROUTE

**PART T1 BIDDING PROCEDURES
THE BID**

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Bidder:
Initial: Authorised signatory/ies: 1.
 2.

DR. JSMLM:
Initial: DR. JSMLM.....

Witness:



DR JS MOROKA MUNICIPALITY

INVITATION TO CONTRACTORS

Tenders are hereby invited from Contractors with necessary experience and compliance documents, have an active **CIDB grading of a minimum -4CE/3CEPE** and are in good standing with the South African Revenue Services.

Tender documents will only be available from **11 August 2021** on Tuesday and may be obtained from Dr JS Moroka Municipal Head Quarters at the cashier offices situated 2601/3 Bongimfundo Street, Siyabuswa during working hours 09h00 to 15h00 (Monday to Friday), upon payment of a non-refundable fee of **R1460.00 per document**. Only cash or bank guaranteed cheques will be accepted and cheques are to be made payable to Dr JS Moroka Municipality. No tender documents will be sold beyond these dates.

A Compulsory Site meeting and Inspection will not be held. Prospective bidders should take note that because of the current situation of COVID-19, the Municipality must adhere to the Regulations of Disaster Management Act in avoiding gatherings. Enquiries will be addressed electronically. Bidders are encouraged to forward enquiries at least two weeks before closing of tenders to allow correspondence in time.

All tenders and supporting documents shall be sealed in an envelope or package clearly marked **"Contract number: JSM-R02/21-22/W15"**

Duly completed tenders shall be placed in the tender box situated at the main entrance of Dr JS Moroka Local Municipality at 2601/3 Bongimfundo Street, Siyabuswa. No Fax or Late tenders will be accepted. Tenders will be evaluated on a 80/20 point system in terms of Dr JS Moroka Municipality's Supply Chain Management Policy in line with Preferential Procurement Framework Act 5 of 2000.

All Technical enquiries are to be directed to Mr. Floyd Mashele at (079) 512 9930 / 013 973 1101 while document procurement related enquiries are to be directed to Mr. Floyd Mashele at (079) 512 9930 / 013 973 1101.

In all cases Tenders shall reach the stipulated address not later than on Tuesday 24 August 2021 at 11:00 when tenders shall be opened and read in public.

Mr B.M. Mhlanga
Acting Municipal Manager

T1.2 BID DATA

The **Standard Conditions of Bid** for Procurements make several references to the bid data for details that apply specifically to this bid. The bid data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the standard conditions of bid.

Clause number	Data
F.1.1 ACTIONS	The Employer is: The Acting Municipal Manager Dr. JS Moroka Local Municipality 2601/3 Bongimfundo Street Private Bag X4012 Siyabuswa 0472
F.1.2 TENDER DOCUMENTS	The bid documents issued by the Employer comprise: THE BID Part T1 Bidding procedures Part T1.1 Bid notice and invitation to bid Part T1.2 Bid data Part T2 Returnable documents Part T2.1 List of returnable documents Part T2.2 Returnable schedules THE CONTRACT Part C1 Agreements and contract data C1.1 Form of offer and acceptance C1.2 Contract data C1.3 Form of Guarantee C1.4 Agreement in terms of Occupational Health and Safety Act, 1993 Part C2 Pricing Data C2.1 Pricing Instructions C2.2 Bill of Quantity Part C3 Scope of Works C3 Scope of Works Part C4 Site Information C4 Site Information
F.1.4 COMMUNICATION AND EMPLOYER'S AGENT	The employer's agent is: Name: 2MC Consulting Engineers Address: Unit A3 Bradford House 12 BRADFORD ROAD, BEDFORDVIEW 2007 Telephone: 011 615 2302 Fax : 086 617 4593 E-mail: info@2mcccons.co.za

Bidder:
Initial: Authorised signatory/ies: 1.

DR. JSMLM:
Initial: DR. JSMLM.....

2.

Witness:

Clause number	Data
F.2.1 ELIGIBILITY	Only those bidders who have in their employ management and supervisory staff satisfying the requirements of the scope of work for labour intensive competencies for supervisory and management staff are eligible to submit bids. Only those bidders who are registered with the CIDB in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a 4CE/3CEPE class of construction work, or by a contractor who is registered as a potential emerging enterprise in terms of these regulations at a contractor grading designation one level lower than the required class as specified above are eligible to submit bids, provided that the employer: - is satisfied that such a contractor has the potential to develop and qualify to be registered in that higher grade; and - ensures that financial, management or other support is provided to that contractor to enable the contractor to successfully execute that contract. Joint Ventures are eligible to submit bids provided that: - each member of the joint venture is registered with the CIDB and valid copy/ies of registration of each member is submitted with this bid; - the lead partner has a contractor grading designation in the 4CE/3CEPE class of construction work; and - the combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a -4CE/3CEPE-class of construction work, are eligible to submit bids.
F.2.7 CLARIFICATION MEETING	The arrangements for a compulsory clarification meeting are: A Compulsory Site meeting and Inspection will not be held. Prospective bidders should take note that because of the current situation of COVID-19, the Municipality must adhere to the Regulations of Disaster Management Act in avoiding gatherings. Enquiries will be addressed electronically. Bidders are encouraged to forward enquiries at least two weeks before closing of tenders to allow correspondence in time.
F.2.12 ALTERNATIVE TENDER OFFERS	<i>No alternative bid is to be accepted!</i>
F.2.13.1 SUBMITTING A TENDER OFFER	Bidders may offer to provide any of the parts, or combinations thereof, of the works, services or supply identified in the contract data.
F.2.13.3 SUBMITTING A TENDER OFFER	The whole original bid document, as issued by the DR. JSMLM, shall be submitted. No copies will be accepted. Bids may only be submitted on the Bid documentation issued by the DR. JSMLM.

Bidder:**Initial:** Authorised signatory/ies: 1.

2.

Witness:**DR. JSMLM:****Initial:** DR. JSMLM.....

Clause number	Data
F.2.13.5 SUBMITTING A TENDER OFFER	The Employer's address for delivery of bid offers and identification details to be shown on each bid offer package are: Location of bid box: Main Gate Physical address: Dr. JS Moroka Local Municipality 2601/3 Bongimfundo Street Private Bag X4012 Siyabuswa 0472 Contract number: JSM-R02/21-22/W15
F.2.15 CLOSING TIME	The closing time for submission of bid offers is: 24 August 2021 at 11:00 Telephonic, telegraphic, telex, facsimile or e-mailed bid offers will not be accepted.
F.2.16 TENDER OFFER VALIDITY	The bid offer validity period is 90 days
F.2.18 PROVIDE OTHER MATERIAL	The bidder 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.2.19 INSPECTIONS, TESTS AND ANALYSIS	Access must be provided for the following inspections, tests and analysis: concrete tests, compaction strength and ball penetration and Access must be provided for the inspection of the tenderer's offices if required.
F.2.23 CERTIFICATES	The bidder is required to submit with his bid. 1. A copy of the valid Certificate of Contractor Registration issued by the Construction Industry Development Board in terms of the Construction Industry Development Board Act (Form F006); and 2. An original Tax Clearance Certificate , issued by the South African Revenue Services 3. A copy of the valid Certificate of Competency for Contractor's Safety Officer in terms of OH/S Act (85/1993) section 16(2)
F.3.4 OPENING OF BID SUBMISSIONS	The time and location for opening of the bid offers are: Immediately after the closing time for submission of bid. Location: Dr. JS Moroka Local Municipality 2601/3 Bongimfundo Street Private Bag X4012 Siyabuswa 0472
F.3.5 TWO-ENVELOPE SYSTEM	A two-envelope procedure will not be followed.
F.3.11 EVALUATION OF BID OFFERS	The preference procedure for evaluation of responsive bid offers shall be the 80/20 point preference system, in full compliance with Form 2.3.3. Technical and general criteria will be evaluated in terms of paragraph 2.3.3.10

Bidder:**Initial:** Authorised signatory/ies: 1.

2.

Witness:**DR. JSMLM:****Initial:** DR. JSMLM.....

Clause number	Data
F.3.13.1 ACCEPTANCE OF BID OFFER	Bids containing any one or more of the errors or omissions, or bids not having complied with any one of the peremptory bid conditions as detailed on page 2 of this bid document, shall not be considered and shall automatically be rejected.
F.3.18 PROVIDE COPIES OF THE CONTRACTS	The number of paper copies of the signed contract to be provided by the Employer is one .
ADDITIONAL CONDITIONS APPLICABLE TO THIS BID	The additional conditions of bid are: 1 The Employer may also request that the bidder provide written evidence that his financial, labour and other resources are adequate for carrying out the contract. 2 The Employer reserves the right to appoint a firm of chartered accountants and auditors and/or execute any other financial investigations on the financial resources of any bidder. The bidder shall provide all reasonable assistance in such investigations. 3 The bidder shall be required to complete the Form of Offer and Acceptance (C1.1) and Bills of Quantity for all the document for which they intend to bid for 4 The bid document shall be submitted as a whole and shall not be taken apart. 5 List of returnable documents (PART T2) must be completed in full. (A bidder's company profile will not be used by the DR. JSMLM to complete PART T2 on behalf of the bidder) NB: If PART T2 is not completed in full by the bidder, this offer will be rejected.

Bidder:**Initial:** Authorised signatory/ies: 1.

2.

Witness:**DR. JSMLM:****Initial:** DR. JSMLM.....

Annex F
(Normative)
Standard Conditions of Tender

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

F.1 General

F.1.1 Actions

The employer and each tenderer submitting a tender offer shall comply with these conditions of tender. In their dealings with each other, they shall discharge their duties and obligations as set out in F.2 and F.3, timeously and with integrity, and behave equitably, honestly and transparently.

F.1.2 Tender Documents

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

F.1.3 Interpretation

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

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

F.1.3.3 For the purposes of these conditions for the calling for expressions of interest, the following definitions apply:

- a) Comparative offer means the tenderer's financial offer after the factors of non-firm prices, all unconditional discounts and any other tendered parameters that will affect the value of the financial offer have been taken into consideration
 - b) Corrupt practice means the offering, giving, receiving or soliciting of anything of value to influence the action of the employer or his staff or agents in the tender process; and
 - c) Fraudulent practice means the misrepresentation of the facts in order to influence the tender process or the award of a contract arising from a tender offer to the detriment of the employer, including collusive practices intended to establish prices at artificial levels
- quality (functionality) means the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs

F.1.4 Communication and employer's agent

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

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Bidder:
Initial: Authorised signatory/ies: 1.
2.

DR. JSMLM:
Initial: DR. JSMLM.....

Witness:

- F.1.5 The employer's right to accept or reject any tender offer**
 F.1.5.1 The employer may accept or reject any variation, deviation, tender offer, or alternative tender offer, and may cancel the tender process and reject all tender offers at any time before the formation of a contract. The employer shall not accept or incur any liability to a tenderer for such cancellation and rejection, but will give written reasons for such action upon written request to do so.
- F.1.5.2 The employer may not subsequent to the cancellation or abandonment of a tender process or the rejection of all responsive tender offers re-issue a tender covering substantially the same scope of work within a period of six months unless only one tender was received and such tender was returned unopened to the tenderer.
- F.2 Tenderer's obligations**
- F.2.1 Eligibility**
 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.2.2 Cost of tendering**
 Accept that the employer will not compensate the tenderer for any costs incurred in the preparation and submission of a tender offer, including the costs of any testing necessary to demonstrate that aspects of the offer satisfy requirements.
- F.2.3 Check documents**
 Check the tender documents on receipt for completeness and notify the employer of any discrepancy or omission.
- F.2.4 Confidentiality and copyright of documents**
 Treat as confidential all matters arising in connection with the tender. Use and copy the documents issued by the employer only for the purpose of preparing and submitting a tender offer in response to the invitation.
- F.2.5 Reference documents**
 Obtain, as necessary for submitting a tender offer, copies of the latest versions of standards, specifications, conditions of contract and other publications, which are not attached but which are incorporated into the tender documents by reference.
- F.2.6 Acknowledge addenda**
 Acknowledge receipt of addenda to the tender documents, which the employer may issue, and if necessary apply for an extension to the closing time stated in the tender data, in order to take the addenda into account.
- F.2.7 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@) 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

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

F.2.12 Alternative tender offers

F.2.12.1 Submit alternative tender offers only if a main tender offer, strictly in accordance with all the requirements of the tender documents, is also submitted. The alternative tender offer is to be submitted with the main tender offer together with a schedule that compares the requirements of the tender documents with the alternative requirements the tenderer proposes.

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

F.2.13 Submitting a tender offer

F.2.13.1 Submit a tender offer to provide the whole of the works, services or supply identified in the 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 in Black ink.

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

F.2.13.4 Sign the original and all copies of the tender offer where required in terms of the tender data.

The employer will hold all authorized signatories liable on behalf of the tenderer. Signatories for tenderers proposing to contract as joint ventures shall state which of the signatories is the lead partner whom the employer shall hold liable for the purpose of the tender offer.

Bidder:
Initial: Authorised signatory/ies: 1.

DR. JSMLM:
Initial: DR. JSMLM.....

2.

Witness:

- 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.2.14 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. Proof of posting shall not be accepted as proof of delivery. The employer shall not accept tender offers submitted by telegraph, telex, facsimile or e-mail, unless stated otherwise in the tender data.
- F.2.15.2 Accept that, if the employer extends the closing 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.
- F.2.17 Clarification of tender offer after submission**
Provide clarification of a tender offer in response to a request to do so from the employer during the evaluation of tender offers. This may include providing a breakdown of rates or prices and correction of arithmetical errors by the adjustment of certain rates or item prices (Or both). No change in the competitive position of tenderers or substance of the tender offer is sought, offered, or permitted.

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

F.2.18 Provide other material.

17

Bidder:
Initial: Authorised signatory/ies: 1.

DR. JSMLM:
Initial: DR. JSMLM.....

2.

Witness:

- F.2.18.1 Provide, on request by the employer, any other material that has a bearing on the tender offer, the tenderer's commercial position (including notarized joint venture agreements), preferencing arrangements, or samples of materials, considered necessary by the employer for the purpose of a full and fair risk assessment. Should the tenderer not provide the material, or a satisfactory reason as to why it cannot be provided, by the time for submission stated in the employer's request, the employer may regard the tender offer as non-responsive.
- F.2.18.2 Dispose of samples of materials provided for evaluation by the employer, where required.
- F.2.19 Inspections, tests, and analysis**
Provide access during working hours to premises for inspections, tests and analysis as provided for in the tender data.
- F.2.20 Submit securities, bonds, policies, etc.**
If requested, submit for the employer's acceptance before formation of the contract, all securities, bonds, guarantees, policies and certificates of insurance required in terms of the conditions of contract identified in the contract data.
- F.2.21 Check final draft**
Check the final draft of the contract provided by the employer within the time available for the employer to issue the contract.
- F.2.22 Return of other tender documents**
If so instructed by the employer, return all retained tender documents within 28 days after the expiry of the validity period stated in the tender data
- F.2.23 Certificates**
Include in the tender submission or provide the employer with any certificates as stated in the tender data.
- F.3 The employer's undertakings**
- F.3.1 Respond to clarification**
Respond to a request for clarification received up to five working days before the tender closing time stated in the Tender Data and notify all tenderers who drew procurement documents.
- F.3.2 Issue Addenda**
If necessary, issue addenda that may amend or amplify the tender documents to each tenderer during the period from the date that tender documents are available until seven days before the tender closing time stated in the Tender Data. If, as a result a tenderer applies for an extension to the closing time stated in the Tender Data, the Employer may grant such extension and, shall then notify all tenderers who drew documents.
- F.3.3 Return late tender offers**
Return tender offers received after the closing time stated in the Tender Data, unopened, (unless it is necessary to open a tender submission to obtain a forwarding address), to the tenderer concerned.
- F.3.4 Opening of tender submissions**
F.3.4.1 Unless the two-envelope system is to be followed, open valid tender submissions in the presence of tenderers' agents who choose to attend at the time and place stated in the tender data. Tender submissions for which acceptable reasons for withdrawal have been submitted will not be opened.

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

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

F.3.5 Two-envelope system

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

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

F.3.6 Nondisclosure

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) change the Employer's or the tenderer's risks and responsibilities under the contract, or
- c) affect the competitive position of other tenderers presenting responsive tenders, if it were to be rectified.

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

F.3.9 Arithmetical errors

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

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

b) If bills of quantities (or schedule of quantities or schedule of rates) 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.

F.3.9.2 Consider the rejection of a tender offer if the tenderer does not correct or accept the correction of his arithmetical errors in the manner described in F.3.9.1.

F.3.10 Clarification of a tender offer

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

F.3.11 Evaluation of tender offers

F.3.11.1 General

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

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

Bidder:
Initial: Authorised signatory/ies: 1.

DR. JSMLM:
Initial: DR. JSMLM.....

2.

Witness:

Method 4 : Financial offer, quality and preferences	1. Score quality, rejecting all tender offers that fail to score the minimum number of points for quality stated in the Tender data. 2. Score tender evaluation points for financial offer. 3. Confirm that tenderers are eligible for the preferences claimed, and if so, score tender evaluation points for preferencing. 4. Calculate total tender evaluation points. 5. Rank tender offers from the highest number of tender evaluation points to the lowest. 6. Recommend tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.
--	---

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

F.3.11.2 Scoring Financial Offers

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

N_{FO}	= $W_1 \times A$ where:
N_{FO}	= the number of tender evaluation points awarded for the financial offer.
W_1	= the maximum possible number of tender evaluation points awarded for the financial offer as stated in the Tender Data.
A	= a number calculated using either formulas 1 or 2 below as stated in the Tender Data.

Formula	Comparison aimed at achieving	Option 1	Option 2
1	Highest price or discount	$A = (1 + (P - P_m) / P_m)$	$A = P / P_m$
2	Lowest price or percentage commission/fee	$A = (1 - (P - P_m) / P_m)$	$A = P_m / P$

where:

P_m = the comparative offer of the most favourable tender offer.
 P = the comparative offer of tender offer under consideration.

F.3.11.3 Scoring quality (functionality)

Score quality in each of the categories in accordance with the Tender Data and calculate total score for quality.

F.3.12 Insurance provided by the employer

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

F.3.13 Acceptance of tender offer

F.3.13.1 Accept tender offer only if the tenderer complies with the legal requirements stated in the Tender Data.

F.3.13.2 Notify the successful tenderer of the employer's acceptance of his tender offer by completing and returning one copy of the form of offer and acceptance before the expiry of the validity period stated in the tender data, or agreed additional period. Providing the form of offer and acceptance does not contain any qualifying statements, it will constitute the formation of a contract between the employer and the successful tenderer as described in the form of offer and acceptance.

- F.3.14 Notice to unsuccessful tenderers**
After the successful tenderer has acknowledged the employer's notice Of acceptance, notify other tenderers that their tender offers have not been accepted.
- F.3.15 Prepare contract documents**
If necessary, revise documents that shall form part of the contract and that were issued by the employer as part of the tender documents to take account of:
- a) addenda issued during the tender period,
 - b) inclusion of some of the returnable documents,
 - c) other revisions agreed between the employer and the successful tenderer, and
 - d) the schedule of deviations attached to the form of offer and acceptance, if any.
- F.3.16 Issue final contract**
Prepare and issue the final draft of contract documents to the successful tenderer for acceptance as soon as possible after the date of the employer's signing of the form of Offer and acceptance (including the schedule of deviations, if any). Only those documents that the conditions of tender require the tenderer to submit, after acceptance by the employer, shall be included.
- F.3.17 Complete adjudicator's contract**
Unless alternative arrangements have been agreed or otherwise provided for in the contract, arrange for both patties to complete formalities for appointing the selected adjudicator at the same time as the main contract is signed.
- F.3.18 Provide copies of the 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.

DR. JS MOROKA LOCAL MUNICIPALITY

DEPARTMENT NAME: TECHNICAL SERVICES:

CONTRACT NO: **JSM-R02/21-22/W15**

FOR

UPGRADING OF DIKGWALE BUS AND TAXI ROUTE

PART T2 LIST OF RETURNABLE DOCUMENTS PAGE(S)
THE BID

The bidder must complete the following returnable documents.

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T2.2	OTHER DOCUMENTS REQUIRED FOR BID EVALUATION PURPOSES	38
T2.3	RETURNABLE SCHEDULES THAT WILL BE INCORPORATED IN THE CONTRACT	64

NOTE:

Although the documents under Part T2 is headed "Returnable Documents" in line with the CIDB model, these are not the only documents to be returned together with the bid. All the documents indicated on Part T1, must be completed and signed where applicable and submitted as a **complete set of documents**.

Bidder:
Initial: Authorised signatory/ies: 1.
2.

DR. JSMLM:
Initial: DR. JSMLM.....

Witness:

T2.1 RETURNABLE SCHEDULES REQUIRED FOR BID EVALUATION PURPOSES

CONTENTS

PAGE(S)

PART T2 LIST OF RETURNABLE DOCUMENTS

The bidder must complete the following returnable documents.

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FORM 2.1.3	STAFFING PROFILE	27
FORM 2.1.4	PROPOSED KEY PERSONNEL.....	28
FORM 2.1.5	SCHEDULE OF PREVIOUS WORK CARRIED OUT BY BIDDER	29
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Bidder:

Initial: Authorised signatory/ies: 1.

2.

Witness:

DR. JSMLM:

Initial: DR. JSMLM.....

FORM 2.1.1 SCHEDULE OF EQUIPMENTS REQUIRED FOR THE CONTRACT

The Bidder shall state below what Equipment's will be available for the work should he be awarded the Contract.

DESCRIPTION, SIZE, CAPACITY	NUMBER

Bidder:
Initial: Authorised signatory/ies: 1.

2.

Witness:

DR. JSMLM:
Initial: DR. JSMLM.....

FORM 2.1.2 SIZE OF ENTERPRISE AND CURRENT WORKLOAD

What was your turnover in the previous financial year? R _____

What is the estimated turnover for your current financial year? R _____

Physical facilities:

Provide information on offices, factories, yards and warehouses occupied by your enterprise (attach details if the space provided is not enough)

Description	Address	Area (m ²)

List your current contracts and obligations:

Description	Value (R)	Start date	Duration	Expected completed date

Do you have the capacity to supply the goods and services described in this bid, should the contract be awarded to you?

Bidder:

Initial: Authorised signatory/ies: 1.

2.

Witness:

DR. JSMLM:

Initial: DR. JSMLM.....

FORM 2.1.3 STAFFING PROFILE

Provide information on the staff that you have available to execute this contract (attach a separate list if the space provided is insufficient)

[illegible]

Bidder:
Initial: Authorised signatory/ies: 1.

2.

Witness:

DR. JSMLM:
Initial: DR. JSMLM.....

FORM 2.1.4**PROPOSED KEY PERSONNEL**

The Bidder shall list below the key personnel (including first nominee and the second choice alternate), whom he proposes to employ on the project should his Bid be accepted, both at his headquarters and on the Site, to direct and for the execution of the work, together with their qualifications, experience, positions held and their nationalities.

DESIGNATION	NAME OF	NATIONALITY	SUMMARY OF		HDI Status Yes/No	NQF 7 Certified Yes/No
	(i) NOMINEE (ii) ALTERNATE		QUALIFICA- TIONS	EXPERIENCE AND PRESENT OCCUPATION		
HEADQUARTERS Partner/director						
Project Manager						
Other key staff (give designation)						
PROJECT MONITORING Site(s) Supervisors						
Other key staff (give designation)						

Bidder:**Initial:** Authorised signatory/ies: 1.

2.

Witness:**DR. JSMLM:****Initial:** DR. JSMLM.....

FORM 2.1.5**SCHEDULE OF PREVIOUS WORK CARRIED OUT BY BIDDER**

Provide the following information on **relevant previous experience**. Indicate comparable projects of similar or larger size. This information is material to the award of the Contract.

No points will be awarded if reference cannot be reached or if it refuses to supply information. Give at least two(2) names and telephone numbers and e-mail address per reference.

EMPLOYER (Name, tel no and fax no)	CONSULTING ENGINEER (Name, tel no and fax no)	NATURE OF WORK CARRIED OUT PREVIOUSLY	VALUE OF WORK	YEAR OF COMPLETION

Bidder:**Initial:** Authorised signatory/ies: 1.

2.

DR. JSMLM:**Initial:** DR. JSMLM.....**Witness:**

--	--	--	--	--

FORM 2.1.6 FINANCIAL ABILITY TO EXECUTE THE PROJECT

Provide details on the surety you will provide if the bid is awarded to you

AMOUNT

Which of the following institutions will provide surety?

- Bank registered in terms of the Bank Act 1990 (Act 94 of 1990):
- Insurance Company registered in terms of the Short Term Insurance Act 1998 (Act 53 of 1998):

- Cash:

Provide the estimated cash flow on the project in terms of submissions of payment certificates or payment schedules to the Employer

Month no	Amount (VAT included)			
	a Received	b Payments made	a – b Net cash flow	Cumulative cash flow
1			d	j=d

Bidder:

Initial: Authorised signatory/ies: 1.

DR. JSMLM:

Initial: DR. JSMLM.....

2.

Witness:

2			E	j+e=k
3			F	k+f=l
4			G	l+g=m
5			H	m+h=n
6			Etc.	Etc.
7				
8				
9				
10				
11				
12				
Maximum negative cash flow: Take the largest negative number in the last column and write it in here → → → → → → →				

Notes:

- (i) Value added tax to be included in all amounts
- (ii) Assume payment of certificates within 30 days of approval of certificate

From what sources will you fund the above amount (e.g. Funds internally available, bank overdraft, loan, etc)

FORM 2.1.7 AUTHORITY FOR SIGNATORY

All signatories, including sole proprietors, shall confirm their authority by **attaching to the last page of this bid** a duly signed and ***dated original or certified copy*** of the relevant resolution of their members or their board of directors, as the case may be.

An example for "COMPANIES / PARTNERSHIPS / CLOSE CORPORATIONS is shown below:

"By resolution of the board of directors passed on, Mr/Ms(Full names and surname)..... has been duly authorised to sign all documents in connection with the Bid for Contract number **JSM-R02/21-22/W15** and any Contract, which may arise there from on behalf of the Bidding Entity, namely, *Company Name* (PTY) LTD"

SIGNED ON BEHALF OF THE BIDDING ENTITY: Name Surname

IN HIS CAPACITY AS: DIRECTOR / PARTNER / MEMBER

DATE:

AUTHORISED PERSON'S SIGNATURE: Name Surname

AS WITNESS: 1. Name Surname

Bidder:
Initial: Authorised signatory/ies: 1.
2.

DR. JSMLM:
Initial: DR. JSMLM.....

Witness:

An example for “JOINT VENTURES” is shown below:

We, the undersigned are submitting this bid offer in Joint Venture and hereby authorize Mr. B. BROOK, authorised signatory of the company “ABCD (PTY) LTD”, acting in the capacity of lead partner, to sign all documents in connection with the bid for *Contract number 000/2011* and any contract resulting from it on our behalf.

NAME OF FIRM	ADDRESS	DULY AUTHORIZED SIGNATORY
(Lead partner, i.e. “ABCD (PTY) LTD”)	P.O. Box 111 Springs 1560	Signature:..... Name:..... Designation:.....
Name of 2 nd Company	Address of 2 nd Company	Signature:..... Name:..... Designation:.....
Name of 3 rd Company	Address of 3 rd Company	Signature:..... Name:..... Designation:.....

An example for “SOLE PROPRIETOR” is shown below:

“I hereby certify that I’m the sole proprietor of the Bidding Entity, namely, “Company Name” and therefore duly authorised to sign the bidding documents”.

SIGNATURE OF SOLE PROPRIETOR: Name Surname

IN HIS CAPACITY AS: SOLE PROPRIETOR

DATE: September 2013

AUTHORISED PERSON'S SIGNATURE: Name Surname

AS WITNESS: 1. Name Surname

SCHEDULE OF PROPOSED SUBCONTRACTORS

Type of work to be used for	a % of contract	Name of sub-contractor	b % HDI owner-ship	c = a x b Total contribution to HDI ownership
Total % of contract sub-contracted		Total contribution of HDI ownership:		

FINANCIAL STATEMENTS

I/We agree, if required, to furnish an audited copy of the latest set of financial statements together with my/our Directors' and Auditors' report.

DETAILS OF BIDDING ENTITY'S BANK

If the bidder is a Joint Venture or partnership, the information requested below is required for each member / partner.

I/We hereby authorise the Employer/Engineer to approach all or any of the following banks for the purposes of obtaining a financial reference:

DESCRIPTION OF BANK DETAIL	BANK DETAILS APPLICABLE TO BIDDER
Name of bank	
Contact person	
Branch name	
Branch code	
Street address	
Postal address	
Telephone number	()
Fax number	()
Account number	
Type of account, (i.e. cheque account)	

Bidder:**Initial:** Authorised signatory/ies: 1.

2.

Witness:**DR. JSMLM:****Initial:** DR. JSMLM.....

BIDDER'S TAX DETAILS

Bidder's VAT vendor registration number:

Bidder's SARS tax reference number:

DESCRIPTION OF BANK DETAIL	BANK DETAILS APPLICABLE TO BIDDER
Name of bank	
Contact person	
Branch name	
Branch code	
Street address	
Postal address	
Telephone number	()
Fax number	()
Account number	
Type of account, (i.e. cheque account)	

BIDDER'S TAX DETAILS

Bidder's VAT vendor registration number:

Bidder's SARS tax reference number:

Bidder:
Initial: Authorised signatory/ies: 1.

2.

Witness:

DR. JSMLM:
Initial: DR. JSMLM.....

See condition of bid.

DESCRIPTION

See condition of bid

PAGE	DESCRIPTION

Bidder:

Initial: Authorised signatory/ies: 1.

2.

Witness:

DR. JSMLM:

Initial: DR. JSMLM.....

ACTIVITY OR PAY ITEM	DESCRIPTION OF PLANNED ACTION RESULTING IN DEVIATION FROM SPECIFIED WORK

Compliance with Employment Equity Act 55 of 1998

Attach a valid certificate from the Department of Labour, **or** a declaration (refer to "Form 2.3.5 – Specific goals") by the **designated employer**, that the employer complies with the relevant chapters of the Employment Equity Act.

Definitions in terms of the last-mentioned Act.

"Designated employer" means-

- a) an employer who employs 50 or more employees;
- b) an employer who employs fewer than 50 employees, but has a total annual turnover that is equal to or above the applicable annual turnover of a small business in terms of Schedule 4 to this Act."

"Schedule 4"**TURNOVER THRESHOLD APPLICABLE TO DESIGNATED EMPLOYERS**

Sector or sub sector in accordance with the Standard Industrial Classification	Total annual turnover
Agriculture	R 2,00 m
Mining and Quarrying	R 7,50 m
Manufacturing	R 10,00 m
Electricity, Gas and Water	R 10,00 m
Construction	R 5,00 m
Retail and Motor Trade and Repair Services	R 15,00 m
Wholesale Trade, Commercial Agents and Allied Services	R 25,00 m
Catering, Accommodation and other Trade	R 5,00 m
Transport, Storage and Communications	R 10,00 m
Finance and Business Services	R 10,00 m
Community, Social and Personal Services	R 5,00 m

Bidder:**Initial:** Authorised signatory/ies: 1.

2.

Witness:**DR. JSMLM:****Initial:** DR. JSMLM.....

DR. JS MOROKA LOCAL MUNICIPALITY

DEPARTMENT NAME: TECHNICAL SERVICES:

CONTRACT NO: JSM-R02/21-22/W15

FOR

UPGRADING OF DIKGWALE BUS AND TAXI ROUTE

T2.2 OTHER DOCUMENTS REQUIRED FOR BID EVALUATION PURPOSES

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Bidder:

Initial: Authorised signatory/ies: 1.

2.

Witness:

DR. JSMLM:

Initial: DR. JSMLM.....

FORM 2.2.1 COMPULSORY SITE INSPECTIONS / INFORMATION / CLARIFICATION MEETINGS

Where Compulsory Site Inspections and Compulsory Information, Briefing or Clarification Meetings are to be held, it shall be subject to the following conditions:

1. Necessity for Compulsory Site Inspection and Compulsory Information / Briefing / Clarification Meetings

Compulsory Inspections / Meetings must only be held where the nature of the contract is such that it requires either an inspection of a site or a briefing session. The Bid Specification Committee should indicate to the Bid Office that such a compulsory inspection or briefing is regarded as a necessity.

2. Attendance Register

An attendance register of potential bidders and the firms they represent shall be kept and signed by attendees. A copy of such Attendance Register shall immediately after the inspection/briefing be sent to the Bid Office.

3. Confirmation Notes of Inspection/Briefing Sessions

Confirmation Notes of the Compulsory Inspection or Briefing Session shall be held by or on behalf of the contact person of the Department for whom the Bid is being advertised. A copy of the notes shall be sent to each firm that was represented at the inspection/meeting as soon as possible after the inspection or meeting and before the closing date of the bid. A copy of the notes shall also be sent to the Bid Office. The relevant Department will ensure that the notes are submitted to the Bid Evaluation Committee and to the Bid Adjudication Committee.

4. Bid Documents

The bid documentation shall clearly state that where the inspection of a site or the attendance of a briefing session is compulsory, non-attendance thereof will lead to the disqualification of the bidder in question. The bid documentation shall further clearly state that if bid documents are obtained **after** the compulsory briefing session or site inspection, it will only be made available to firms that were represented at the meeting. The mere fact that a firm that was not represented at a compulsory site inspection/meeting, but nevertheless submitted to the municipality a set of bidding documents, should not be construed as creating any expectations that a bid will be considered by the Municipality.

Bidder:
Initial: Authorised signatory/ies: 1.

DR. JSMLM:
Initial: DR. JSMLM.....

2.

Witness:

FORM 2.2.1 CERTIFICATE OF BIDDER'S ATTENDANCE AT THE COMPULSORY SITE/CLARIFICATION MEETING

This is to certify that I, **(NAME IN PRINT)**

representative of (Bidder)

.....

of (address)

.....

.....

Telephone number

Fax number

visited and inspected the Site / Attended Clarification Meeting on (date)

in the company of (Engineer/Engineer's Representative)

SIGNATURE OF BIDDER'S REPRESENTATIVE:

Bidder:
Initial: Authorised signatory/ies: 1.
2.

Witness:

DR. JSMLM:
Initial: DR. JSMLM.....

FORM 2.2.2 TAX CLEARANCE CERTIFICATE

AN ORIGINAL TAX CLEARANCE CERTIFICATE, OBTAINED FROM SARS TO BE SUBMITTED WITH BID DOCUMENTS.

Bidder:
Initial: Authorised signatory/ies: 1.

2.

Witness:

DR. JSMLM:
Initial: DR. JSMLM.....

FORM 2.2.3 PROOF OF REGISTRATION WITH CONSTRUCTION INDUSTRY DEVELOPMENT BOARD

The bidder is to affix to this page either:

- Written proof of his registration with the CIDB as a Category **4CE/3CEPE** or **Higher**

Or

- Written proof of his application to the CIDB for registration as a contractor in the category listed above.

Note:

1. Failure to affix such documentation as prescribed to this page shall result in this bid not being further considered for the award of the contract.
2. Should this bid be considered for award of the contract, based on proof of submission of application for registration in the appropriate category with the CIDB, and should proof of such subsequent registration not be forthcoming to the employer before the end of business, at the last working day, prior to evaluation by the Tender Evaluation Committee of the contract, then this bid will no longer be considered for the award of the contract.

Bidder:
Initial: Authorised signatory/ies: 1.

DR. JSMLM:
Initial: DR. JSMLM.....

2.

Witness:

DECLARATION OF INTEREST

1. Any legal person, including persons employed by the state¹, or persons having a kinship with persons employed by the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid (includes an advertised competitive bid, a limited bid, a proposal or written price quotation). In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons employed by the state, or to persons connected with or related to them, it is required that the bidder or his/her authorised representative declare his/her position in relation to the evaluating/adjudicating authority where-
 - the bidder is employed by the state; and/or
 - the legal person on whose behalf the bidding document is signed, has a relationship with persons/a person who are/is involved in the evaluation and or adjudication of the bid(s), or where it is known that such a relationship exists between the person or persons for or on whose behalf the declarant acts and persons who are involved with the evaluation and or adjudication of the bid.
2. **In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.**
 - 2.1 Full Name of bidder or his or her representative:
 - 2.2 Identity Number:
 - 2.3 Position occupied in the Company (director, trustee, shareholder², member):
 - 2.4 Registration number of company, enterprise, close corporation, partnership agreement or trust:
 - 2.5 Tax Reference Number:
 - 2.6 VAT Registration Number:
 - 2.6.1 The names of all directors / trustees / shareholders / members, their individual identity numbers, tax reference numbers and, if applicable, employee / PERSAL numbers must be indicated in paragraph 3 below.

¹"State" means –

- (a) 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);
- (b) Any municipality or municipal entity;
- (c) Provincial legislature;
- (d) National Assembly or the national Council of provinces; or
- (e) Parliament.

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

Bidder:
Initial: Authorised signatory/ies: 1.

DR. JSMLM:
Initial: DR. JSMLM.....

2.

Witness:

- 2.7 Are you or any person connected with the bidder presently employed by the state? **YES / NO**
- 2.7.1 If so, furnish the following particulars:
- Name of person / director / trustee / shareholder/ member:
- Name of state institution at which you or the person connected to the bidder is employed:
- Position occupied in the state institution:
- Any other particulars:
-
-
-
- 2.7.2 If you are presently employed by the state, did you obtain the appropriate authority to undertake remunerative work outside employment in the public sector? **YES / NO**
- 2.7.2.1 If yes, did you attach proof of such authority to the bid document? **YES / NO**
- (Note: Failure to submit proof of such authority, where applicable, may result in the disqualification of the bid.
- 2.7.2.2 If no, furnish reasons for non-submission of such proof:
-
-
-
- 2.8 Did you or your spouse, or any of the company's directors / trustees / shareholders / members or their spouses conduct business with the state in the previous twelve months? **YES / NO**
- 2.8.1 If so, furnish particulars:
-
-
-
- 2.9 Do you, or any person connected with the bidder, have any relationship (family, friend, other) with a person employed by the state and who may be involved with the evaluation and or adjudication of this bid? **YES / NO**
- 2.9.1 If so, furnish particulars.
-
-
-

Bidder:
Initial: Authorised signatory/ies: 1.

DR. JSMLM:
Initial: DR. JSMLM.....

2.

Witness:

2.10 Are you, or any person connected with the bidder, aware of any relationship (family, friend, other) between any other bidder and any person employed by the state who may be involved with the evaluation and or adjudication of this bid?

YES/NO

2.10.1 If so, furnish particulars.

.....

2.11 Do you or any of the directors / trustees / shareholders / members of the company have any interest in any other related companies whether or not they are bidding for this contract?

YES/NO

2.11.1 If so, furnish particulars:

.....

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

Full Name	Identity Number	Personal Income Tax Reference Number	State Employee Number / Persal Number

Bidder:
Initial: Authorised signatory/ies: 1.

DR. JSMLM:
Initial: DR. JSMLM.....

2.

Witness:

- **4 DECLARATION**

I, THE UNDERSIGNED (NAME).....

CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 2 and 3 ABOVE IS CORRECT.

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

.....
Signature

.....
Date

.....
Position

.....
Name of bidder

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2011

1.

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, 2011.

2. GENERAL CONDITIONS

2.1 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).

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

2.3 Preference points for this bid shall be awarded for:

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

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

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

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

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

Bidder:
Initial: Authorised signatory/ies: 1.

DR. JSMLM:
Initial: DR. JSMLM.....

2.

Witness:

2. DEFINITIONS

- 2.1 **“all applicable taxes”** includes value-added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies;
- 2.2 **“B-BBEE”** means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;
- 2.3 **“B-BBEE status level of contributor”** means the B-BBEE status received by a measured entity based on its overall performance using the relevant scorecard contained in the Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;
- 2.4 **“bid”** means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of services, works or goods, through price quotations, advertised competitive bidding processes or proposals;
- 2.5 **“Broad-Based Black Economic Empowerment Act”** means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- 2.6 **“comparative price”** means the price after the factors of a non-firm price and all unconditional discounts that can be utilized have been taken into consideration;
- 2.7 **“consortium or joint venture”** means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract;
- 2.8 **“contract”** means the agreement that results from the acceptance of a bid by an organ of state;
- 2.9 **“EME”** means any enterprise with an annual total revenue of R5 million or less .
- 2.10 **“Firm price”** means the price that is only subject to adjustments in accordance with the actual increase or decrease resulting from the change, imposition, or abolition of customs or excise duty and any other duty, levy, or tax, which, in terms of the law or regulation, is binding on the contractor and demonstrably has an influence on the price of any supplies, or the rendering costs of any service, for the execution of the contract;
- 2.11 **“functionality”** means the measurement according to predetermined norms, as set out in the bid documents, of a service or commodity that is designed to be practical and useful, working or operating, taking into account, among other factors, the quality, reliability, viability and durability of a service and the technical capacity and ability of a bidder;
- 2.12 **“non-firm prices”** means all prices other than “firm” prices;
- 2.13 **“person”** includes a juristic person;
- 2.14 **“rand value”** means the total estimated value of a contract in South African currency, calculated at the time of bid invitations, and includes all applicable taxes and excise duties;
3. 2.15 **“sub-contract”** means the primary contractor’s assigning, leasing, making out work to, or employing, another person to support such primary contractor in the execution of part of a project in terms of the contract;
- 2.16 **“total revenue”** bears the same meaning assigned to this expression in the Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act and promulgated in the *Government Gazette* on 9 February 2007;

Bidder:
Initial: Authorised signatory/ies: 1.

DR. JSMLM:
Initial: DR. JSMLM.....

2.

Witness:

- 2.17 “**trust**” means the arrangement through which the property of one person is made over or bequeathed to a trustee to administer such property for the benefit of another person; and
- 2.18 “**trustee**” means any person, including the founder of a trust, to whom property is bequeathed in order for such property to be administered for the benefit of another person.

3. ADJUDICATION USING A POINT SYSTEM

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

4. POINTS AWARDED FOR PRICE

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

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

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

Where

P_s = Points scored for comparative price of bid under consideration

P_t = Comparative price of bid under consideration

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

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

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

Bidder:
Initial: Authorised signatory/ies: 1.

DR. JSMLM:
Initial: DR. JSMLM.....

2.

Witness:

B-BBEE Status Level of Contributor	Number of points (90/10 system)	Number of points (80/20 system)
1	10	20
2	9	18
3	8	16
4	5	12
5	4	8
6	3	6
7	2	4
8	1	2
Non-compliant contributor	0	0

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

Bidder:
Initial: Authorised signatory/ies: 1.

DR. JSMLM:
Initial: DR. JSMLM.....

2.

Witness:

contract is sub-contracted to an EME that has the capability and ability to execute the sub-contract.

6. BID DECLARATION

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

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

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

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

8 SUB-CONTRACTING

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

8.1.1 If yes, indicate:

(i) what percentage of the contract will be subcontracted?

.....%

(ii) the name of the sub-contractor?

.....

(iii) the B-BBEE status level of the sub-contractor?

.....

(iv) whether the sub-contractor is an EME? YES / NO (delete which is not applicable)

9 DECLARATION WITH REGARD TO COMPANY/FIRM

9.1 Name of company/firm

9.2 VAT registration number :

9.3 Company registration number
:

9.4 TYPE OF COMPANY/ FIRM

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

[TICK APPLICABLE BOX]

Bidder:

Initial: Authorised signatory/ies: 1.

2.

DR. JSMLM:

Initial: DR. JSMLM.....

Witness:

9.5 DESCRIBE PRINCIPAL BUSINESS ACTIVITIES

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

9.6 COMPANY CLASSIFICATION

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

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

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

- (i) The information furnished is true and correct;
- (ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form.
- (iii) In the event of a contract being awarded as a result of points claimed as shown in paragraph 7, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
- (iv) If the B-BBEE status level of contribution has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –
 - (a) disqualify the person from the bidding process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
 - (d) restrict the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, from obtaining business from any organ of state for a period not exceeding 10 years, after the audi alteram partem (hear the other side) rule has been applied; and
 - (e) forward the matter for criminal prosecution

Bidder:
Initial: Authorised signatory/ies: 1.

DR. JSMLM:
Initial: DR. JSMLM.....

2.

Witness:

WITNESSES:

1.

.....
SIGNATURE(S) OF BIDDER(S)

4.

DATE:

ADDRESS:

.....

.....

Bidder:
Initial: Authorised signatory/ies: 1.

2.

Witness:

DR. JSMLM:
Initial: DR. JSMLM.....

1. CONTRACT FORM - PURCHASE OF GOODS/WORKS

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

2. PART 1 (TO BE FILLED IN BY THE BIDDER)

3. I hereby undertake to supply all or any of the goods and/or works described in the attached bidding documents to ...**Dr. JS Moroka Local Municipality**..... in accordance with the requirements and specifications stipulated in contract number...**JSM-R02/21-22/W15**...., at the price/s quoted. My offer/s remains binding upon me and open for acceptance by the purchaser during the validity period indicated and calculated from the closing time of bid.
4. 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);
 - Technical Specification(s);
 - 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)
5. 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 goods and/or works 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.
6. I accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me under this agreement as the principal liable for the due fulfillment of this contract.
7. I declare that I have no participation in any collusive practices with any bidder or any other person regarding this or any other bid.
8. I confirm that I am duly authorised to sign this contract.

NAME (PRINT)

CAPACITY

SIGNATURE

NAME OF FIRM

DATE

WITNESSES

1

2.

— — —

Bidder:
Initial: Authorised signatory/ies: 1.

DR. JSMLM:
Initial: DR. JSMLM.....

2.

Witness:

CONTRACT FORM - PURCHASE OF GOODS/WORKS

9. PART 2 (TO BE FILLED IN BY THE PURCHASER)

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

ITEM NO.	PRICE (ALL APPLICABLE TAXES INCLUDED)	BRAND	DELIVERY PERIOD	B-BBEE STATUS LEVEL OF CONTRIBUTION	MINIMUM THRESHOLD FOR LOCAL PRODUCTION AND CONTENT (if applicable)

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

SIGNED ATON.....

NAME (PRINT)

SIGNATURE

OFFICIAL STAMP

WITNESSES

1.

.

2.

Bidder:

Initial: Authorised signatory/ies: 1.

2.

DR. JSMLM:

Initial: DR. JSMLM.....

Witness:

1 DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

- 2 This Standard Bidding Document must form part of all bids invited.
- 3 It serves as a declaration to be used by institutions in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.
- 4 The bid of any bidder may be disregarded if that bidder, or any of its directors have-
- abused the institution's supply chain management system;
 - committed fraud or any other improper conduct in relation to such system; or
 - failed to perform on any previous contract.
- 5 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)? The Register for Tender Defaulters can be accessed on the National Treasury's website (www.treasury.gov.za) by clicking on its link at the bottom of the home page.	Yes ☐	No ☐
4.2.1	If so, furnish particulars:		
4.3	Was the bidder or any of its directors convicted by a court of law (including a court outside of the Republic of South Africa) for fraud or corruption during the past five years?	Yes ☐	No ☐
4.3.1	If so, furnish particulars:		
4.4	Was any contract between the bidder and any organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes ☐	No ☐
4.4.1	If so, furnish particulars:		

Bidder:**Initial:** Authorised signatory/ies: 1.

2.

Witness:**DR. JSMLM:****Initial:** DR. JSMLM.....

CERTIFICATION

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

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

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

Bidder:
Initial: Authorised signatory/ies: 1.

DR. JSMLM:
Initial: DR. JSMLM.....

2.

Witness:

CERTIFICATE OF INDEPENDENT BID DETERMINATION

- 1 This Standard Bidding Document (SBD) must form part of all bids¹ invited.
- 2 Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).² Collusive bidding is a *pe se* prohibition meaning that it cannot be justified under any grounds.
- 3 Treasury Regulation 16A9 prescribes that accounting officers and accounting authorities must take all reasonable steps to prevent abuse of the supply chain management system and authorizes accounting officers and accounting authorities to:
 - a. disregard the bid of any bidder if that bidder, or any of its directors have abused the institution's supply chain management system and or committed fraud or any other improper conduct in relation to such system.
 - b. cancel a contract awarded to a supplier of goods and services if the supplier committed any corrupt or fraudulent act during the bidding process or the execution of that contract.
- 4 This SBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.
- 5 In order to give effect to the above, the attached Certificate of Bid Determination (SBD 9) must be completed and submitted with the bid:

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

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

Bidder:
Initial: Authorised signatory/ies: 1.

DR. JSMLM:
Initial: DR. JSMLM.....

2.

Witness:

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 Institution)

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

Bidder:
Initial: Authorised signatory/ies: 1.

DR. JSMLM:
Initial: DR. JSMLM.....

2.

Witness:

6. The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium³ will not be construed as collusive bidding.
7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
- (a) prices;
 - (b) geographical area where product or service will be rendered (market allocation)
 - (c) methods, factors or formulas used to calculate prices;
 - (d) the intention or decision to submit or not to submit, a bid;
 - (e) the submission of a bid which does not meet the specifications and conditions of the bid; or
 - (f) bidding with the intention not to win the bid.
8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.
9. The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.

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.

Bidder:
Initial: Authorised signatory/ies: 1.

DR. JSMLM:
Initial: DR. JSMLM.....

2.

Witness:

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

Js914w 2

Bidder:
Initial: Authorised signatory/ies: 1.

DR. JSMLM:
Initial: DR. JSMLM.....

2.

Witness:

FORM 2.2.6 DECLARATION FOR PROCUREMENT ABOVE R10 MILLION

DECLARATION FOR PROCUREMENT ABOVE R10 MILLION (VAT INCLUDED)

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

1. Are you by law required to prepare annual financial Statements for auditing? YES / NO

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.

.....
.....

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

2.2 If yes, provide particulars.

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

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

.....
.....

Bidder:
Initial: Authorised signatory/ies: 1.

DR. JSMLM:
Initial: DR. JSMLM.....

2.

Witness:

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

Bidder:
Initial: Authorised signatory/ies: 1.
2.

DR. JSMLM:
Initial: DR. JSMLM.....

Witness:

DR. JS MOROKA LOCAL MUNICIPALITY

DEPARTMENT NAME: TECHNICAL SERVICES : ROADS

CONTRACT NO: **JSM-R02/21-22/W15**

FOR

UPGRADING OF DIKGWALE BUS AND TAXI ROUTE

T2.3 RETURNABLE SCHEDULES THAT WILL BE INCORPORATED IN THE CONTRACT

CONTENTS

	PAGE(S)
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FORM 2.3.3 GENERAL INFORMATION.....	70
FORM 2.3.4 SPECIFIC GOALS.....	73

Bidder:

Initial: Authorised signatory/ies: 1.

2.

Witness:

DR. JSMLM:

Initial: DR. JSMLM.....

FORM 2.3.1**RECORD OF ADDENDA TO BID DOCUMENTS**

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

	Date	Title or Details
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		

Attach additional pages if more space is required.

.....
Signature of Authorized person:

.....
Date:

Name:

Position:

Bidder:
Initial: Authorised signatory/ies: 1.

2.

Witness:

DR. JSMLM:
Initial: DR. JSMLM.....

FORM 2.3.2 CONDITIONS PERTAINING TO TARGETED PROCUREMENT

- 2.3.2.1 PREAMBLE
- 2.3.2.2 DEFINITIONS
- 2.3.2.3 LEGISLATIVE BASE
- 2.3.2.4 SCOPE
- 2.3.2.5 PURPOSE
- 2.3.2.6 OBJECTIVES
- 2.3.2.7 GENERAL PRINCIPLES GOVERNING THE MUNICIPALITY IN ITS INTERACTION
WITH BIDDERS
- 2.3.2.8 ADJUDICATION OF BIDS
- 2.3.2.9 ADJUDICATION USING A POINT SYSTEM
- 2.3.2.10 IMPLEMENTATION FRAMEWORK
- 2.3.2.11 COMPLAINTS/DISQUALIFICATIONS
- 2.3.2.12 DISQUALIFICATIONS
- 2.3.2.13 DATABASE ON LOCAL SMME
- 2.3.2.14 ADDENDUM: DEFINITION OF A SMALL BUSINESS, SPECIFICALLY AN SMME

Bidder:
Initial: Authorised signatory/ies: 1.

DR. JSMLM:
Initial: DR. JSMLM.....

2.

Witness:

DR. JS MOROKA LOCAL MUNICIPALITY

BID DOCUMENT

2.3.2 CONDITIONS PERTAINING TO TARGETED PROCUREMENT

THE FOLLOWING IS AN EXTRACT FROM THE REVISED PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000: PREFERENTIAL PROCUREMENT REGULATIONS OF 2001

1. EVALUATION OF TENDERS

Evaluation Criteria

Municipal Supply Chain Management Policy will be used for evaluation of Prospective Service Provider as per the approved scoring system by the specification committee.

The evaluation will be done as per Preferential Procurement Regulations, 2011 issued in terms of section 5 of PPPFA, Act No. 5 of 2000.

The Construction Firm's tender responsiveness in relation to points is therefore summarized as follows:

Organising and Staffing	25
Plant	15
Experience of Firm	40
Programme and cash flow	10
Bank Ratings	10
Sub-Total	100

A firm must obtain a minimum of 60 points out of the 100 points above to be considered for price and BBB-EE evaluation/ The functionality points shall be distributed as follows below:

Bidder:
Initial: Authorised signatory/ies: 1.

DR. JSMLM:
Initial: DR. JSMLM.....

2.

Witness:

Project Manager / Contracts Manager (Maximum points obtainable 10; minimum 2)

Name:

Evaluation Criteria	Minimum Required		Elimination Factor	Points obtainable	Points Claimed
Academic Qualifications	NQF L7-Degree in Civil or equivalent		No	5	
Academic Qualifications	Diploma in Civil or equivalent		No	4	
Academic Qualifications	Diploma in Project Management or equivalent		No	4	
			Yes		
	Matric			2	
Sub-total				5	
Experience of Team Leader in similar projects			Elimination Factor		
Involvement in comparable projects (Technical)	0		Yes	0	
	1 – 2		No	1	
	3 – 4		No	3	
	5 upwards		No	5	
Sub-total				5	
Total				10	

Bidder:
Initial: Authorised signatory/ies: 1.

DR. JSMLM:
Initial: DR. JSMLM.....

2.

Witness:

Site Agent:

(Maximum Points obtainable 5, minimum 2)

Name:

Evaluation Criteria	Minimum Required	Elimination Factor	Points obtainable	Points Claimed
Academic Qualifications	Diploma in civil works or equivalent	No	2	
Academic Qualifications	No formal Education in Construction	Yes	0	
Sub-total			2	
Years of experience in similar projects	0 - 4	Yes	0	
	5 - 9	No	1	
	10 and above	No	3	
Sub-total			3	
Total			5	

Note: Should the Site Agent be the same as Contractor Manager zero points will be allocated.

Bidder:

Initial: Authorised signatory/ies: 1.

2.

Witness:

DR. JSMLM:

Initial: DR. JSMLM.....

Site Foreman:

(Maximum Points obtainable 5; minimum 2)

Name:

Evaluation Criteria	Minimum Required	Elimination Factor	Points obtainable	Points Claimed
Academic Qualifications (Note 10) Form L	N6 in Civil or equivalent	No	2	
Academic Qualifications	Matric	No	1	
Sub-total			2	
Years of experience after qualification	0-3	Yes	0	
	4 – 9	No	1	
	10 upwards	No	3	
Sub-total			3	
Total			5	

Note: Should the Site Foremen be the same Site Agent and Team leader zero points will be allocated

Safety Officer:

(Maximum Points obtainable 5; minimum 2)

Name:

Evaluation Criteria	Minimum Required	Elimination Factor	Points obtainable	Points Claimed	
Academic Qualifications	Occupational Health and Safety Certificate or equivalent (SAMTRAC)	No	2		
Sub-total			2		
Years of experience after qualification	0-3	Yes	0		
	4-9	No	1		
	10 upwards	No	3		
Sub-total			3		
Total			5		

Note: Should the Safety Officer be the same as Team leader, Site Agent, Site Foreman zero points will be allocated.

Bidder:

Initial: Authorised signatory/ies: 1.

2.

Witness:

DR. JSMLM:

Initial: DR. JSMLM.....

ORGANISING AND STAFFING/PERSONNEL		
PERSONNEL	TOTAL	SCORES
Construction Manager/Team Leader	10	
Site Agent	5	
Health and Safety Officer	5	
Site Foreman	5	
TOTAL	25	

PLANT (Maximum Points obtainable 15)

It must be noted that total points of **15** are obtainable by the Construction Firm in relation to the requirements as mentioned on the table below, failure to submit evidential supporting documents is not an eliminating factor **BUT** a zero point will be scored. Letter of intent or quotation from the lessor must be attached.

Evaluation Criteria	Minimum Required	Elimination Factor	Points obtainable (Own)	Points obtainable (leased)	Points Claimed
Firm's plant and equipment – Note: Proof of ownership of the firm's equipment must be attached and failure to do so will result in forfeiting the plant points	Excavator x 1	No	5	2.5	
	Grader x1	No	5	2.5	
	Tipper Truck x1	No	2.5	1.5	
	Firm's number of BOMAC Roller x1	No	2.5	1.5	
Sub-total			15	8	
Total			15	8	

Bidder:
Initial: Authorised signatory/ies: 1.

DR. JSMLM:
Initial: DR. JSMLM.....

2.

Witness:

Programme and cashflow (Maximum Points obtainable 10)

It must be noted that total points of **10** are obtainable by the Construction Firm in relation to the requirements as mentioned on the table below, failure to submit evidential supporting documents is not an eliminating factor **BUT** a zero point will be scored.

Evaluation Criteria	Minimum Required	Elimination Factor	Points obtainable (Own)	Points Claimed
Programme and cashflow	1 Cashflow linked to milestones	No	5	
	1.1 Cashflow not linked to programme and unbalanced	No	2	
	2 Programme with sub activities showing linkages and critical path	No	5	
	2.1 Programme without sub activities and linkages	No	2	
Sub-total			10	
Total			10	

Bidder:**Initial:** Authorised signatory/ies: 1.

2.

Witness:**DR. JSMLM:****Initial:** DR. JSMLM.....

EXPERIENCE OF FIRM (Maximum Points obtainable 40)**Note: Company's previous completed projects**

It must be noted that the experience of the firm carries a maximum of **40 points** as indicated in the table below. If proof of testimonials and appointment letters, in reference to Form E not provided, then the bidder shall obtain zero points on the experience of the firm.

Provide proof of the company's previous completed projects which is in the form appointment letters and completion certificates. Verifiable references (**appointment letters and completion certificates**) with contact details must be attached.

Similar projects are for construction of roads projects works only. (Including vat)

Evaluation Criteria	Evaluation Criteria	Elimination Factor	Points obtainable	Points Claimed
Company experience in terms of projects of a similar scope completed (Max 4 projects) undertaken in the last 10 years.	Project of similar scope (Road and storm water works) with minimum value R0.5 to R3m-5 points each	Yes	20(max)	
	Projects of similar scope with minimum value of R3.0 to R7 m-8 points each.	Yes	32 (max)	
	Projects of similar scope with minimum value of R8m-10 points each	Yes	40 (max)	
Sub-Total			40	
TOTAL(Max)			40	

Bank Ratings – Financial Performance	
10 point – Points are allocated for the cash flow management demonstrated by the tenderer from bank rating	
Rating	Points
A	10
B	8
C	6
D	4
E	2
F	0

TOTAL SCORE: _____/100

Bidder:**Initial:** Authorised signatory/ies: 1.

2.

Witness:**DR. JSMLM:****Initial:** DR. JSMLM.....

ITEM No.	DESCRIPTION	ALLOCATED POINTS
1.	Price Competitiveness	80

In relation to Tendered Price, the points allocated to the Tender Price will be calculated using the following formula:

$$N_p = \frac{80 * [1 - (T_s - T_m)]}{T_m}$$

Where: N_p = number of tender adjudication points awarded in relation to price
 T_s = Tender Sum
 T_m = Lowest Tender Sum

10 – POINTS (FOR BBEE):

BBEE status Level of Contributor	Number of points (80/20)
1	20
2	18
3	16
4	12
5	8
6	6
7	4
8	2
Non-Compliant contributor	0

In the event of a Joint Venture (JV) Tender:

A Joint venture will qualify for points for their B-BBEE status level as an unincorporated entity, provided that the entity submits their consolidated B-BBEE scorecard as if they were a group structure and that such a consolidated B-BBEE scorecard is prepared for every separate tender.

PLEASE REMEMBER:

- TO ATTACH A VALID ORIGINAL TAX CLEARANCE CERTIFICATE
- IN CASE OF A JOINT VENTURE, THE VALID ORIGINAL TAX CLEARANCE CERTIFICATE OF EACH PARTNER, THIS MUST BE SUBMITTED WITH THE BID DOCUMENT
- TO ATTACH A B-BBEE CERTIFICATE

Bidder:
Initial: Authorised signatory/ies: 1.

DR. JSMLM:
Initial: DR. JSMLM.....

2.

Witness:

FORM 2.3.3 GENERAL INFORMATION

1. Name of bidding entity:

2. Contact details

Contact name and number:

Address of bidding entity:

Postal code:

Tel no: () Fax no: ()

E-mail address:

3. Legal entity: Mark with an X.

Sole proprietor	
Partnership	
Close corporation	
Company (Pty) Ltd	
Joint venture	

In the case of a Joint venture, provide details on joint venture members:

Joint venture member	Type of entity (as defined above)

4. Income tax reference number:

(In the case of a joint venture, provide for all joint venture members)

5. VAT registration number:

(In the case of a joint venture, provide for all joint venture members)

6. Company or closed corporation registration number: _____
(In the case of a joint venture, provide for all joint venture members)

Bidder:

Initial: Authorised signatory/ies: 1.

DR. JSMLM:

Initial: DR. JSMLM.....

2.

Witness:

7. Construction Industry Development Board (CIDB) registration number-----
8. Details of proprietor, partners, closed corporation members, or company directors, indicating technical qualifications where applicable (Form on the next page).
9. For joint ventures the following must be attached:
- Written authority **of each JV partner**, for authorized signatory.
 - Written authority to be on the Letterhead of the created Joint Venture
 - The joint venture agreement.
 - The major partner to satisfy at least 40 percent of the turnover and credit amount criteria, and each other partner at least 25 percent of the criteria.

SIGNATURE OF AUTHORIZED PERSON :

DATE :

DETAILS OF PROPRIETOR, PARTNERS, CLOSED CORPORATION MEMBERS OR COMPANY DIRECTORS

.1.1.1 Name and Identity Number	.1.1.2 Relevant qualifications and experience	Years of relevant experience

Bidder:**Initial:** Authorised signatory/ies: 1.

2.

Witness:**DR. JSMLM:****Initial:** DR. JSMLM.....

FORM 2.3.4 SPECIFIC GOALS**1 Equity Ownership**

List all partners, shareholders or members of bidding entity by name, identity number, citizenship, HDI status and ownership.

In the case of a JV, complete an Equity ownership for each JV member.

Name and Surname	Position Occupied in Enterprise	Identity Number	Citizen-ship	HDI Status (Yes/No)	Date of Ownership	% Owned by HDIs	% Owned by Women	% Owned by Disabled
Total						A	B	C

Note: Where owners are themselves a company or partnership, identify the ownership of the holding firm.

In the case of joint ventures equity ownership for each of the JV members are determined as above, and the combined HDI ownership is then calculated as follows:

Joint venture members	a % Contribution to the JV	b % HDI ownership	c = a * b ÷ 100 % HDI contribution
Total HDI contribution			

A COPY OF A VALID SIGNED JOINT VENTURE AGREEMENT MUST BE ATTACHED TO THE BID DOCUMENT.

FAILURE TO COMPLY WITH ABOVE-MENTIONED WILL RESULT IN REJECTION OF THIS BID

NOTE: See table in paragraph 2.3.3.10 for specific goals and points to be awarded.

Bidder:
Initial: Authorised signatory/ies: 1.

2.

DR. JSMLM:
Initial: DR. JSMLM.....

Witness:

2 SMME Status

Provide details on the following (Refer to attached table):

Sector / Sub-Sector in which located: _____

Total Full-Time Equivalent of paid Employees: _____

Total Annual Turnover: _____

Total Gross Asset Value: _____

Size or Class (Medium, Small, Very Small, Micro): _____

Note: If all of the above does not adhere to the definition of a single class, use the Total Annual Turnover only to decide on the class.

3 Local Content (Defined as Dr JS Moroka Local Municipality)

10% of the goods or services of the bid will have local content?

Description	a % of bid value	b % Local content	c = a x b ÷ 100 Total % local content
Management and other			
Materials, goods			
Plant and equipment			
Staff, labour			
Total	100 %		%

4 JOB CREATION

Provide details on the jobs that you envisage to create through this project:

- A. New permanent employed staff, employed outside the staff component declared in Forms 2.3.1 & 2.3.4 to be allocated to this project for the intensification of labour absorption, (i.e. 5 persons for 5 months = 25 person-months).
- B. Number of person-months of work to be created (i.e. 5 persons for 5 months = 25 person-months)

Description	A	B	C
	No. of persons	Period in months	No. of person months created
A. New permanent employed staff, employed outside the staff component declared in Forms 2.3.1 & 2.3.4			AxB=C
B. Staff to be employed for the project (Temporary employed)			
Total			

Bidder:

Initial: Authorised signatory/ies: 1.

2.

Witness:

DR. JSMLM:

Initial: DR. JSMLM.....

DR. JS MOROKA LOCAL MUNICIPALITY

DEPARTMENT NAME: TECHNICAL SERVICE :

CONTRACT NO: **JSM-R02/21-22/W15**

FOR

UPGRADING OF DIKGWALE BUS AND TAXI ROUTE

THE CONTRACT

PART C1 AGREEMENT AND CONTRACT DATA

PART C2 PRICING DATA

PART C3 SCOPE OF WORKS

PART C4 SITE INFORMATION

PART C5 ANNEXURES

Bidder:
Initial: Authorised signatory/ies: 1.
2.

Witness:

DR. JSMLM:
Initial: DR. JSMLM.....

DR. JS MOROKA LOCAL MUNICIPALITY

DEPARTMENT NAME: TECHNICAL SERVICES :

CONTRACT NO: **JSM-R02/21-22/W15**

FOR

UPGRADING OF DIKGWALE BUS AND TAXI ROUTE

PART C1 AGREEMENT AND CONTRACT DATA

C1.1 FORM OF OFFER AND ACCEPTANCE

C1.2 CONTRACT DATA

C1.3 FORM OF GUARANTEE

C1.4 AGREEMENT IN TERMS OF THE OCCUPATIONAL HEALTH
AND SAFETY ACT, 1993 (ACT NO 85 OF 1993)

Bidder:
Initial: Authorised signatory/ies: 1.

2.

Witness:

DR. JSMLM:
Initial: DR. JSMLM.....

C1.1 FORM OF OFFER AND ACCEPTANCE

FORM OF OFFER AND ACCEPTANCE

(AGREEMENT)

OFFER

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract in respect of the following works: **UPGRADING OF DIKGWALE BUS AND TAXI ROUTE**

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

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

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

rand (in words);

R

(in figures),

This Offer may be accepted by the Employer by signing the Acceptance part of this Form of Offer and Acceptance and returning one copy of this document to the Bidder before the end of the period of validity stated in the Bid Data, whereupon the Bidder becomes the party named as the Contractor in the Conditions of Contract identified in the Contract Data.

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

FOR THE BIDDER:

Signature(s)

Name(s)

Capacity

(Name and address of organisation)

Name and signature of Witness _____

Date _____

82

Bidder:

Initial: Authorised signatory/ies: 1.

2.

DR. JSMLM:

Initial: DR. JSMLM.....

Witness:

ACCEPTANCE

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

The terms of the contract, are contained in

Part C1 Agreements and Contract Data, (which includes this Agreement)

Part C2 Pricing Data

Part C3 Scope of Work

Part C4 Site Information

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

Deviations from and amendments to the documents listed in the Bid Data and any addenda thereto listed in the Bid Schedules as well as any changes to the terms of the Offer agreed by the Bidder and the Employer during this process of offer and acceptance, are contained in the Schedule of Deviations attached to and forming part of this Agreement. No amendments to or deviations from said documents are valid unless contained in this Schedule, which must be duly signed by the authorised representative(s) of both parties.

The Bidder shall within two weeks after receiving a completed copy of this Agreement, including the Schedule of Deviations (if any), contact the Employer's agent (whose details are given in the Contract Data) to arrange the delivery of any bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the, Conditions of Contract identified in the Contract Data. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this Agreement.

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

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

FOR THE CLIENT:

Signature(s)

Name(s)

Capacity

DR. JS MOROKA LOCAL MUNICIPALITY
(Name and address of organisation)

Name and signature of witness _____

Date _____

Bidder:

Initial: Authorised signatory/ies: 1.

2.

DR. JSMLM:

Initial: DR. JSMLM.....

Witness:

SCHEDULE OF DEVIATIONS

Notes:

1. The extent of deviations from the bid documents issued by the Employer prior to the bid closing date is limited to those permitted in terms of the Conditions of Bid.
2. A Bidder's covering letter shall not be included in the final contract document. Should any matter in such, letter, which constitutes a deviation as aforesaid become the subject of agreements reached during the process of, offer and acceptance, the outcome of such agreement shall be recorded here.
3. Any other matter arising from the process of offer and acceptance either as a confirmation, clarification or change to the bid 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 bid 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 _____
6	Subject _____ Details _____

By the duly authorised representatives signing this Schedule of Deviations, the Employer and the Bidder agree to and accept the foregoing Schedule of Deviations as the only deviations from and amendments to the documents listed in the Bid Data and addenda thereto as listed in the Bid Schedules, as well as any confirmation, clarification or change to the terms of the offer agreed by the Bidder and the Employer during this process of offer and acceptance.

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

Bidder:
Initial: Authorised signatory/ies: 1.

DR. JSMLM:
Initial: DR. JSMLM.....

2.

Witness:

FOR THE BIDDER:

Signature(s) _____

Name(s) _____

Capacity _____

(Name and address of organisation)

Name and signature of witness

_____ Date _____

FOR THE EMPLOYER:

Signature(s) _____

Name(s) _____

Capacity _____

DR. JS MOROKA LOCAL MUNICIPALITY
(Name and address of organisation)

Name and signature of witness

_____ Date _____

Bidder:

Initial: Authorised signatory/ies: 1.

2.

Witness:

DR. JSMLM:

Initial: DR. JSMLM.....

C1.2 CONTRACT DATA

CONDITIONS OF CONTRACT

The General Conditions of Contract for Construction Works (2010) 2nd Edition, published by the South African Institution of Civil Engineering, is applicable to this Contract and is incorporated herein by reference.

Copies of these Conditions of Contract may be obtained from the South African Institution of Civil Engineering, Tel. No. (011) 805-5947/48/53.

PART 1: DATA PROVIDED BY THE EMPLOYER

The following contract specific data are applicable to this Contract:

Clause	
1.1.1.15 1.2.1.2	The Employer is the Dr. JS Moroka Local Municipality The Employer's address for receipt of communications is: Physical address: Dr. JS Moroka Local Municipality 2603/1 Bongimfundo Street Siyabuswa 0472 Telephone: (013) 973 1101/1390 Postal address: Private Bag X 4012 Siyabuswa 0472 Fax: (013) 973 2463/0974
	The Engineer is 2MC Consulting Engineers The Engineer's address for receipt of communications is: Physical (street address) address: Unit A3 Bradford House 12 Bradford Road, Bedfordview 2007 Telephone: 011 615 2302 Fax: 086 617 4593 E-mail: info@2mccons.co.za Postal address: Unit A3 Bradford House 12 Bradford Road, Bedfordview 2007
1.1.1.12 5.1.1	Special non-working days are Sundays and the following statutory public holidays as declared by National or Regional Government: New Year's Day, Human Rights Day, Good Friday, Family Day, Freedom Day, Workers day, Youth Day, National Women's Day, Heritage Day, Day of Reconciliation, Christmas Day and the Day of Goodwill including the annual year-end shutdown periods as recommended by the South African Federation of Civil Engineering Contractors, and which commence before the Completion Date.
5.12.2.2	Extension of time due to abnormal rainfall will be determined in accordance with the principles as set out in item B1215 to the Scope of Works: Extension of time due to abnormal rainfall
3.1.3	The Engineer is required in terms of his appointment with the Employer to obtain the following specific approvals from the Employer: - Certify additional costs/expenditure - Taking over of the Works - Determining extension of Time for Completion
5.3.1	The Contractor shall commence executing the Works within twenty-eight (28) days of the Commencement Date or immediately after such time as the Documents Required Before Commencement have been approved and the initial requirements have been complied with.
	The documents required before commencement are the following: a) Contractor's health and safety plan (Clause 4.3), b) Programme of Works (Clause 5.6), c) Security (Clause 6.2), and Insurance (Clause 8.6)
5.3.2	The documents required before commencement are to be delivered within 14 (Fourteen) days after the Commencement Date
6.2	The Form of Guarantee must substantially contain the wording of the document included as "Form of Guarantee" – See Form C1.3.
6.2	The liability of the Guarantee shall be in accordance with paragraph 21 (1)(f) of the DR. JSMLM's Supply Chain Management Policy, which reads as follows: (f) where surety is required it shall be in the form of cash, a certified cheque, or a bank guarantee from a banking institution registered in terms of the Banks Act, 1990 (Act No. 94 of 1990) or from an insurer registered in terms of the Insurance Act, 1943 (Act No. 27 of 1943). Where bidders in Category A cannot raise the required surety of 2,5%, and it is feasible to deduct the amount from the first payment certificate, such concessions may be granted;

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Bidder:

Initial: Authorised signatory/ies: 1.

2.

Witness:

DR. JSMLM:

Initial: DR. JSMLM.....

Clause	Guarantees will be required as follows:																	
	<table><tr><th>CATEGORY</th><th>PROJECT VALUE</th><th>GUARANTEE</th></tr><tr><td>A</td><td>< R500 000</td><td>2,5%</td></tr><tr><td>B</td><td>R500 001 – R1 000 000</td><td>5%</td></tr><tr><td>C</td><td>R1 000 001 – R2 000 000</td><td>7,5%</td></tr><tr><td>D</td><td>>R2 000 000</td><td>10%</td></tr></table>	CATEGORY	PROJECT VALUE	GUARANTEE	A	< R500 000	2,5%	B	R500 001 – R1 000 000	5%	C	R1 000 001 – R2 000 000	7,5%	D	>R2 000 000	10%		
CATEGORY	PROJECT VALUE	GUARANTEE																
A	< R500 000	2,5%																
B	R500 001 – R1 000 000	5%																
C	R1 000 001 – R2 000 000	7,5%																
D	>R2 000 000	10%																
7	The Form of Guarantee is to be delivered within 14 (Fourteen) days after the Commencement Date																	
8.6.1.1.2	The value of materials supplied by the Employer to be included in the insurance sum is R 0.00																	
8.6.1.1.3	The amount to cover professional fees for repairing damage and loss to be included in the insurance sum is R 0.00																	
8.6.1.2	A Coupon Policy for Special Risks is to be issued. (To be approved by the Employer's Claims Management Services Provider)																	
8.6.1.3	The limit of the liability insurance is R10 000 000,00 for any single claim – the number of claims to be unlimited during the construction and Defects Liability period. (To be approved by the Employer's Claims Management Services Provider)																	
8.6.1.5	The following additional and varied insurances are required: Not applicable																	
6.5.1.2.3	The percentage allowances to cover all charges for the Contractor's and subcontractor's profits, timekeeping, clerical work, insurance, establishment, superintendence and the use of hand tools is 10%																	
5.5.1	The whole of the Works shall be completed within 4 Months with effect from date of appointment																	
5.13.1	The penalty for failing to complete the Works is R5000,00 per day or part thereof, beyond the stated completion date, for each individual work order or instruction																	
6.8.2	Contract Price Adjustment: Is applicable Price adjustment shall be in accordance with the Contract Price Adjustment Schedule included in the General Conditions of Contract. The value of "x" is 0,15 The values of the coefficients are: a = 0,3 b = 0,3 c = 0,35 d = 0,05 The urban area nearest the Site is Marble Hall The base month is Appointment Month or August 2010																	
6.8.3	The following are special materials: <table><tr><th>Special Material</th><th>Unit</th><th>Rate or Price for the base month</th></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr></table> The basis for price adjustment for special materials is as follows: *Indicate whether the material shall be delivered in bulk or in containers. When called upon to do so, the Contractor shall substantiate the above or price with acceptable documentary evidence			Special Material	Unit	Rate or Price for the base month												
Special Material	Unit	Rate or Price for the base month																
6.10.1.5	The percentage advance on materials not yet built into the Permanent Works but delivered is eighty percent (80%)																	
6.10.3	The percentage retention on the amounts due to the Contractor is 10%																	
6.10.3	A Retention Money Guarantee is not permitted.																	
7.8	The Defects Liability Period is twelve (12) calendar months per work completed.																	
10.3	Disputes are to be settled in terms of paragraph 50 of the SCM Policy, which reads as follows: Resolution of disputes, objections, complaints and queries (1) The accounting officer must appoint an independent and impartial person, not directly involved in the supply chain management processes – (a) to assist in the resolution of disputes between the municipality and other persons regarding - (i) any decisions or actions taken in the implementation of the supply chain management system; or (ii) any matter arising from a contract awarded in the course of the supply chain management system; or (b) to deal with objections, complaints or queries regarding any such decisions or actions or any matters arising from such contract. (2) The accounting officer, or another official designated by the accounting officer, is responsible for assisting the appointed person to perform his or her functions effectively. (3) The person appointed must – (a) strive to resolve promptly all disputes, objections, complaints or queries received; and																	

Bidder:**Initial:** Authorised signatory/ies: 1.

2.

DR. JSMLM:**Initial:** DR. JSMLM.....**Witness:**

C1.3 FORM OF GUARANTEE

PRO FORMA

PERFORMANCE GUARANTEE

For use with the General Condition for Contract for Construction Works, Second Edition, 2010

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:

.2 CONTRACT DETAILS

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

.3 PERFORMANCE GUARANTEE

1. The Guarantor's liability shall be limited to the amount of the Guaranteed Sum.
2. The Guarantor's period of liability shall be from and including the date of issue of this Performance Guarantee and up to and including the Expiry Date or the date of issue by the Engineer of the Certificate of Completion of the Works or the date of payment in full of the Guaranteed Sum, whichever occurs first. The Engineer and/or the Employer shall advise the Guarantor in writing of the date on which the Certificate of Completion of the Works has been issued.
3. The Guarantor hereby acknowledges that:
 - 3.1 any reference in this Performance Guarantee to the Contract is made for the purpose of convenience and shall not be construed as any intention whatsoever to create an accessory obligation or any intention whatsoever to create a suretyship;

Bidder:

Initial: Authorised signatory/ies: 1.

2.

Witness:

DR. JSMLM:

Initial: DR. JSMLM.....

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

Bidder:

Initial: Authorised signatory/ies: 1.

2.

Witness:

DR. JSMLM:

Initial: DR. JSMLM.....

14. Where this Performance Guarantee is issued in the Republic of South Africa the Guarantor hereby consents in terms of Section 45 of the Magistrate's Courts Act No 32 of 1944, as amended, to the jurisdiction of the Magistrate's Court of any district having jurisdiction in terms of Section 28 of the said Act, notwithstanding that the amount of the claim may exceed the jurisdiction of the Magistrate's Court.

Signed at.....

Date.....

Guarantor's signatory (1).....

Capacity.....

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

Capacity.....

Witness signatory (1).....

Witness signatory (2).....

Bidder:

Initial: Authorised signatory/ies: 1.

2.

Witness:

DR. JSMLM:

Initial: DR. JSMLM.....

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, Second Edition, 2010, 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 duration of 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 be paid in respect of time spent upon or in connection with the adjudication including time spent traveling :

Bidder:
Initial: Authorised signatory/ies: 1.

DR. JSMLM:
Initial: DR. JSMLM.....

2.

Witness:

- 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.

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 the 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*

C1.4 AGREEMENT IN TERMS OF THE OCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT NO 85 OF 1993)

THIS AGREEMENT made at _____

on this the _____ day of _____ in the year _____

between **THE DR. JS MOROKA LOCAL MUNICIPALITY** (hereinafter called "the **Employer**") of the one part, herein represented by

in his capacity as _____

and

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

_____ in his capacity as _____

WHEREAS the Employer is desirous that certain works be constructed, viz **CONTRACT NO. JSM-R02/21-22/W15 UPGRADING OF DIKGWALE BUS AND TAXI ROUTE**

and has accepted a Bid by the Mandatory for the construction, completion and maintenance of such Works and whereas the Employer and the Mandatory have agreed to certain arrangements and procedures to be followed in order to ensure compliance by the Mandatory with the provisions of the Occupational Health and Safety Act, 1993 (Act 85 of 1993);

NOW THEREFORE THIS AGREEMENT WITNESSETH AS FOLLOWS:

- 1 The Mandatory shall execute the work in accordance with the Contract Documents pertaining to this Contract.
- 2 This Agreement shall hold good from its Commencement Date, which shall be the date of a written notice from the Employer or 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 52.1 of the General Conditions of Contract (hereinafter referred to as "the GCC"),
 - (b) the date of termination of the Contract in terms of Clauses 54, 55 or 56 of the GCC.
- 3 The Mandatory declares himself to be conversant with the following:
 - (a) All the requirements, regulations and standards of the Occupational Health and Safety Act (Act 85 of 1993), hereinafter referred to as "The Act", together with its amendments and with special reference to the following Sections of The Act:
 - (i) Section 8 : General duties of employers to their employees;
 - (ii) Section 9 : General duties of employers and self-employed persons to persons other than employees;

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Bidder:

Initial: Authorised signatory/ies: 1.

2.

Witness:

DR. JSMLM:

Initial: DR. JSMLM.....

- (iii) Section 37 : Acts or omissions by employees or mandataries, and
- (iv) Subsection 37(2) relating to the purpose and meaning of this Agreement.
- (b) The procedures and safety rules of the Employer as pertaining to the Mandatory and to all his subcontractors.
- 4 In addition to the requirements of Clause 33 of the GCC and all relevant requirements of the above-mentioned Volume 3, the Mandatory agrees to execute all the Works forming part of this Contract and to operate and utilise all machinery, plant and equipment in accordance with the Act.
- 5 The Mandatory is responsible for the compliance with the Act by all his subcontractors, whether or not selected and/or approved by the Employer.
- 6 **The Mandatory warrants that all his and his subcontractors' workmen are covered in terms of the Compensation for Occupational Injuries and Diseases Act, 1993 which cover shall remain in force whilst any such workmen are present on site. A letter of good standing from the Compensation Commissioner to this effect must be produced to the Employer upon signature of the agreement.**
- 7 The Mandatory undertakes to ensure that he and/or subcontractors and/or their respective employers will at all times comply with the following conditions:
 - (a) The Mandatory shall assume the responsibility in terms of Section 16.1 of the Occupational Health and Safety Act. The Mandatory shall not delegate any duty in terms of Section 16.2 of this Act without the prior written approval of the Employer. If the Mandatory obtains such approval and delegates any duty in terms of section 16.2 a copy of such written delegation shall immediately be forwarded to the Employer.
 - (b) All incidents referred to in the Occupational Health and Safety Act shall be reported by the Mandatory to the Department of Labour as well as to the Employer. The Employer will further be provided with copies of all written documentation relating to any incident.
 - (c) The Employer hereby obtains an interest in the issue of any formal inquiry conducted in terms of section 32 of the Occupational Health and Safety Act into any incident involving the Mandatory and/or his employees and/or his subcontractors.

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

SIGNED FOR AND ON BEHALF OF THE EMPLOYER:

WITNESS 1

NAME 1
(IN CAPITALS)

SIGNED FOR AND ON BEHALF OF THE MANDATORY:

WITNESS 1

NAME 1
(IN CAPITALS)

Bidder:
Initial: Authorised signatory/ies: 1.

DR. JSMLM:
Initial: DR. JSMLM.....

2.

Witness:

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

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

An example is given below:

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

Mr/Ms _____ whose signature appears below, has been duly authorised to sign the AGREEMENT in terms of THE OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT 85 of 1993) on behalf of _____

SIGNED ON BEHALF OF THE COMPANY: _____

IN HIS/HER CAPACITY AS : _____

DATE : _____

SIGNATURE OF SIGNATORY : _____

WITNESS 1

NAME 1
(IN CAPITALS)

DR. JS MOROKA LOCAL MUNICIPALITY

DEPARTMENT NAME: TECHNICAL SERVICES

CONTRACT NO: JSM-R02/21-22/W15

FOR

UPGRADING OF DIKGWALE BUS AND TAXI ROUTE

PART C2 PRICING DATA

C2.1 PRICING INSTRUCTIONS

C2.2 BILL OF QUANTITY

Bidder:
Initial: Authorised signatory/ies: 1.
2.
Witness:

DR. JSMLM:
Initial: DR. JSMLM.....

C2.1 PRICING INSTRUCTIONS

- 1 The General Conditions of Contract, the Contract Data, the Specifications (including the Project Specifications) and the Drawings shall be read in conjunction with the Bill of Quantities.
- 2 The Bill comprises items covering the Contractor's profit and costs of general liabilities and of the construction of Temporary and Permanent Works.

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

Clause 8 of each Standardized Specification, and the measurement and payment clause of each Particular Specification, read together with the relevant clauses of the Project Specifications, all set out which ancillary or associated activities are included in the rates for the specified operations.

- 3 Descriptions in the Bill of Quantities are abbreviated and may differ from those in the Standardized and Project Specifications. No consideration will be given to any claim by the Contractor submitted on such a basis. The Bill has been drawn up generally in accordance with the latest issue of Civil Engineering Quantities ¹. Should any requirement of the measurement and payment clause of the appropriate Standardized or Project Specification(s) be contrary to the terms of the Bill or, when relevant, to the Civil Engineering Quantities, the requirement of the appropriate Standardized, Project, or Particular Specification as the case may be, shall prevail.
- 4 Unless stated to the contrary, items are measured net in accordance with the Drawings without any allowance having been made for waste.
- 5 The amounts and rates to be inserted in the Bill of Quantities shall be the full inclusive amounts to the Employer for the work described under the several items. Such amounts shall cover all the costs and expenses that may be required in and for the construction of the work described, and shall cover the costs of all general risks, profits, taxes (but excluding value-added tax), liabilities and obligations set forth or implied in the documents on which the Bid is based.
- 6 The quantities set out in the schedule of quantities are only approximate quantities. The quantities of work finally accepted and certified for payment, and not the quantities given in the schedule of quantities, will be used to determine payments to the contractor.
- 7 An amount or rate shall be entered against each item in the Bill of Quantities, whether or not quantities are stated. An item against which no amount or rate is entered will be considered to be covered by the other amounts or rates in the Bill.

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

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

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

Bidder:

Initial: Authorised signatory/ies: 1.

2.

DR. JSMLM:

Initial: DR. JSMLM.....

Witness:

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

Ordering of materials are not to be based on the Bill of Quantities, but only on information issued for construction purposes.

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

Unit	:	The unit of measurement for each item of work as defined in the Standardized, Project or Particular Specifications
Quantity	:	The number of units of work for each item
Rate	:	The payment per unit of work at which the Bidder bids to do the work
Amount	:	The quantity of an item multiplied by the billed rate of the (same) item
Sum	:	An amount billed for an item, the extent of which is described in the Bill of Quantities, the Specifications or elsewhere, but of which the quantity of work is not measured in units

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

mm	=	millimetre
m	=	metre
km	=	kilometre
km-pass	=	kilometre-pass
m ²	=	square metre
m ² -pass	=	square metre-pass
ha	=	hectare
m ³	=	cubic metre
m ³ -km	=	cubic metre-kilometre
kW	=	kilowatt
kN	=	kilonewton
kg	=	kilogram
t	=	ton (1 000 kg)
%	=	per cent
MN	=	meganewton
MN-m	=	meganewton-metre
PC Sum	=	Prime Cost Sum
Prov Sum	=	Provisional Sum

Bidder:
Initial: Authorised signatory/ies: 1.

DR. JSMLM:
Initial: DR. JSMLM.....

2.

Witness:

NB: PLEASE STATE THE FOLLOWING:

- ARE/IS BID PRICE/S FIRM:

YES	NO
-----	----
- IF THE BID PRICE(S) ARE NOT FIRM, SUPPLY THE INFORMATION REGARDING ESCALATION APPLICABLE TO THIS BID:

.....

.....

Bidder:
Initial: Authorised signatory/ies: 1.

2.

Witness:

DR. JSMLM:
Initial: DR. JSMLM.....

SUMMARY: Paving of New Dikgwale Bus and Taxi Route - Paving Blocks Surfacing		
SECTION	DESCRIPTION	AMOUNT
1200	GENERAL REQUIREMENTS & PROVISIONS	
1300	CONTRACTORS ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS	
1500	ACCOMMODATION OF TRAFFIC	
1600	OVERHAUL	
1700	CLEARING AND GRUBBING	
1800	DAYWORKS	
2200	PREFABRICATED CULVERTS	
2300	CONCRETE KERBING, CONCRETE CHANNELLING, CHUTES AND DOWNPIPES, AND CONCRETE LININGS FOR OPEN DRAINS	
3300	MASS EARTHWORKS	
3400	PAVEMENT LAYERS OF GRAVEL MATERIAL	
3500	STABILIZATION	
4100	PRIME COAT	
4200	ASPHALT SURFACING	
5600	ROAD SIGNS	
5700	ROAD MARKINGS	
5800	LANDSCAPING AND PLANTING PLANTS	
5900	FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS	
7300	CONCRETE BLOCK PAVING FOR ROADS	
SUB-TOTAL 1		
ADD 10% CONTIGENCIES		
SUB-TOTAL 2		
ADD 15% VAT		
TOTAL CARRIED TO FORM OF OFFER		

SUMMARY: Paving of New Dikgwale Bus and Taxi Route - Paving Blocks Surfacing

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
1200	SECTION 1200: GENERAL REQUIREMENTS & PROVISIONS				
12.01	Locating existing services (known and unknown)	No	20		
12.02	Quality control tests ordered by Engineer	PCSum	1	R 25 000.00	R25 000.00
12.03	Charges and profit on 12.02	%	25000		
12.05	Remuneration of Liaison Office & Health and Safety Manager				
12.05 (a)	Remuneration of CLO	Month	4	R 5 500.00	R22 000.00
12.05 (b)	Charges for profit on 12.05(a)	%	22000		
12.05 (c)	Remuneration of Health and Safety Manager	Month	4	R 6 500.00	R26 000.00
12.07	Wages and salaries of local and other labourer employed by the Contractor and Emerging Contractor i.r.o. Training periods				
12.07 (a)	Wages and Salaries of local and other labourer employed by the Contractors and emerging Contractors i.r.o. training periods	Man-day	50		
12.07 (b)	Accredited training courses for selected local and other labourers including Wages during training periods				
i)	Safety Induction (SAQA ID 13973)	Person	10	R 1 000.00	R10 000.00
ii)	First Aid (SAQA ID 9995)	Person	4	R 1 000.00	R4 000.00
iii)	Concrete (SAQA ID 12916)	Person	10	R 2 500.00	R25 000.00
iv)	Hand tools (SAQA ID 12877)	Person	10	R 2 500.00	R25 000.00
v)	Small Plant (SAQA ID 12875)	Person	10	R 2 500.00	R25 000.00
vi)	Kerb Laying (SAQA ID 14575)	Person	2	R 1 500.00	R3 000.00
vii)	Paving (SAQA ID 9974)	Person	2	R 1 500.00	R3 000.00
viii)	Personal Finance (SAQA ID 9268)	Person	2	R 5 000.00	R10 000.00
12.07(c)	Contractors charge to allow for handling costs and profit i.r.o. sub- item 12.07(b)	%	105000		
12.07(d)	In-house training of emerging Contractors	LSum	1		
B12.08	Protection, removal, realignment and replacement of services as ordered by the Engineer				
	(a) Utility services				
	(i) The removal, protection and replacement of utility service		Prov Sum		R50 000.00
	(ii) Handling costs and profit in respect of item B12.08(a)		%		
12/F10.01	HIV AND AIDS AWARENESS	Lump Sum	1		
1200	TOTAL CARRIED FORWARD				

SUMMARY: Paving of New Dikgwale Bus and Taxi Route - Paving Blocks Surfacing

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
1200	TOTAL BROUGHT FORWARD				
12.09	Relocating of other services				
12.09 (a)	Relocate other services (eg. Telkom)	Prov S	1	R 20 000.00	R20 000.00
12.09 (b)	Charges for profit on PS12.09(a)	%	20000		
12.10	Contract Notice Board (as directed by Engineer)	No	2		
12.11	Complying with JSM safety specification and Contractor safety plan (OHS)	LSum	1		
12.12(a)	Implementation of Site Management System	LSum	1		
12.12(b)i	Audit of Site Management System	Prov S	1	R 15 000.00	R15 000.00
12.12(b)ii	Profit on above item PS12.17(b)	%	15000		
12.13	Royalties on borrow materials	m ³	4752		
12.14 (a)	Payment of personal security personnel for Engineers staff	Prov S	1	R 5 000.00	R5 000.00
12.14(b)	Profit on above PS12.14(a)	%	5000		
1200	TOTAL CARRIED TO SUMMARY				

SUMMARY: Paving of New Dikgwale Bus and Taxi Route - Paving Blocks Surfacing

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE		AMOUNT
1300	SECTION 1300: CONTRACTORS ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS					
B13.01(a)	Fixed obligations	Incl.	1	R	-	
13.01(b)	Value-related obligations	Incl.	1	R	-	
13.01(c)	Time-related obligations	Incl.	1	R	-	
13.01(d)	Provision of offices and related items for use by Engineer	Incl.	1	R	-	
1300	TOTAL CARRIED TO SUMMARY					

SUMMARY: Paving of New Dikgwale Bus and Taxi Route - Paving Blocks Surfacing

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
1500	SECTION 1500: ACCOMMODATION OF TRAFFIC				
15.01	Accommodating traffic and maintaining temporary deviations	km	0.50		
15.03	Temporary traffic control facilities				
15.03 (a)	Flagmen	Man-day	150		
15.03 (b)	Portable STOP and GO-RY signs	No	4		
15.03 (c)	Temporary traffic-control signals as specified or as shown on the drawings	No	4		
15.03 (d)	Amber flicker lights	No	Rate Only		
15.03 (e)	Road signs, R- and TR series, (1 200mm dia.)	No	4		
15.03 (f)	Road signs, TW-series (1 500mm sides)	No	4		
15.03 (g)	Road signs, STW-DTG, TGS and TG- series (excluding delineators and barricades)	m ²	Rate Only		
15.03 (h)	Delineators (TW401/TW402), 600mm x 150mm				
i)	Single	No	30		
ii)	Mounted back to back	No	Rate Only		
15.03 (i)	Movable barricade/road sign combination	No	10		
15.03 (j)	Traffic cones (750mm high)	No	30		
15.03 (n)	Other signs or facilities				
i)	Provision of other signs or facilities	Prov S	1	R 25 000.00	R25 000.00
ii)	Contractors handling charges and profit in respect of sub-item PS15.03(n)(i)	%	25000		
1500	TOTAL CARRIED TO SUMMARY				

SUMMARY: Paving of New Dikgwale Bus and Taxi Route - Paving Blocks Surfacing

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
1600	SECTION 1600: OVERHAUL				
16.03	Overhaul on material hauled in excess of a free-haul distance 10km (ordinary overhaul)	m ³ -km	6000		
1600	TOTAL CARRIED TO SUMMARY				

SUMMARY: Paving of New Dikgwale Bus and Taxi Route - Paving Blocks Surfacing

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
1700	SECTION 1700: CLEARING AND GRUBBING				
17.01	Clearing and grubbing	m ²	5000		
17.02	Removal and grubbing or large trees and tree stumps:				
17.02(a)	Girth exceeding 1m up to and including 2m	No	3		
17.02(b)	Girth exceeding 2m up to and including 3m	No	2		
17.02(c)	Girth exceeding 3m	No	Rate Only		
17.05	Cleaning out of hydraulic structures:				
17.05(a)	Pipes with an internal diameter up to and including 750mm	m ³	4		
17.05(b)	Pipes with an internal diameter exceeding 750mm	m ³	Rate Only		
17.05(c)	Box culverts up to and including 1.5m vertical dimension	m ³	Rate Only		
17.05(d)	Box culverts exceeding 1.5m vertical dimension	m ³	Rate Only		
17.06	Removal and storage of selected vegetation:				
17.06(a)	Cost of removal, storing, protection and replanting in a protected and fenced-off area of selected vegetation	Prov S	1	R 21 794.00	R21 794.00
17.06(b)	Charge on provisional sum	%	21794		
1700	TOTAL CARRIED TO SUMMARY				

SUMMARY: Paving of New Dikgwale Bus and Taxi Route - Paving Blocks Surfacing

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
1800	SECTION 1800: DAYWORKS				
18.01	Note: Executed on instruction of the Engineer only Labour Charges				
18.01(a)	Skilled	hr	Rate Only		
18.01(b)	Semi-skilled	hr	Rate Only		
18.01(c)	Un-skilled	hr	Rate Only		
18.02	Plant charges				
18.02(a)	Tipper trucks				
i)	Capacity 3m3 (small)	hr	Rate Only		
ii)	Capacity 5m3 (medium)	hr	Rate Only		
iii)	Capacity 10m3 (large)	hr	Rate Only		
18.02(b)	Flatbed trucks				
i)	Capacity 2 ton (small)	hr	Rate Only		
ii)	Capacity 5 ton (medium)	hr	Rate Only		
iii)	Capacity 10 ton (large)	hr	Rate Only		
18.02(c)	(c) LDV (specify size)				
i)	LDV up to 1 ton	km	Rate Only		
18.02(d)	Water tankers				
i)	Capacity 500 litre (small, towable)	hr	Rate Only		
ii)	Capacity 8 000 litre (medium)	hr	Rate Only		
iii)	Capacity 15 000 litre (large)	hr	Rate Only		
18.02(e)	Crawler excavators				
i)	Smaller than 93kw (small)	hr	Rate Only		
ii)	Bigger than 93kw but smaller than 200kw (medium)	hr	Rate Only		
iii)	Bigger than 200kw but smaller than 400kw (large)	hr	Rate Only		
18.02(f)	Tractor loader backhoe (TLB)				
i)	Smaller than 70kw	hr	Rate Only		
18.02(g)	Walk behind vibrating rollers				
i)	Model - Bomag 60 or similar (small)	hr	Rate Only		
ii)	Model - Bomag 76 or similar (medium)	hr	Rate Only		
iii)	Model - Bomag 90 or similar	hr	Rate Only		
18.02(h)	Plate compactors				
i)	Vipac or similar	hr	Rate Only		
18.02(i)	Rammers				
i)	Model - Wacker or similar	hr	Rate Only		
18.02(j)	Concrete mixers				
i)	Volume 100 litre wet (small, towable)	hr	Rate Only		
ii)	Volume 175 litre wet (medium)	hr	Rate Only		
iii)	Volume 250 litre wet (large)	hr	Rate Only		
1800	TOTAL CARRIED FORWARD				

SUMMARY: Paving of New Dikgwale Bus and Taxi Route - Paving Blocks Surfacing

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
1800	TOTAL BROUGHT FORWARD				
18.02(k)	Diesel compressors including hoses and tools				
i)	Capacity smaller than 200 cfm (small)	hr	Rate Only		
ii)	Capacity bigger than 200 cfm smaller than 400 cfm (medium)	hr	Rate Only		
iii)	Capacity bigger than 400 cfm (large)	hr	Rate Only		
18.02(l)	Waterpumps				
ii)	Capacity bigger than 400 but smaller than 600 litre/min (medium)	hr	Rate Only		
i)	Low-bed (suitable for the largest piece of equipment above)	hr	Rate Only		
18.02(n)	Grader (Cat 140 G or similar)	hr	Rate Only		
1800	TOTAL CARRIED TO SUMMARY				

SUMMARY: Paving of New Dikgwale Bus and Taxi Route - Paving Blocks Surfacing

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
2200	SECTION 2200: PREFABRICATED CULVERTS				
22.01	Excavation:				
22.01(a)	Excavating soft material situated within the following depth ranges below the surface level:				
i)	0m up to 1.5m	m ³	99		
ii)	Exceeding 1,5m and up to 3,0m	m ³			
iii)	Exceeding 3,0m and up to 4,5m	m ³	Rate Only		
22.01(b)	Extra-over sub-item 22.01 (a) for excavation in intermediate material irrespective of depth	m ³	30		
22.01(c)	Extra-over sub-item 22.01(a) for excavation in hard material, irrespective of depth	m ³	10		
22.01(d)	Excavate unsuitable material from trench bottom, dispose within the free-haul distance, and re-fill with suitable imported material compacted to 90% MOD. AASHTO density	m ³	25		
22.02	Backfilling:				
22.02(a)	Using the excavated material	m ³	69		
22.02(b)	Using imported selected material	m ³	10		
22.02(c)	Extra-over sub-items 22.02(a) and (b) for soil cement Backfilling				
i)	with 3% Cement	m ³	Rate Only		
ii)	with 5% Cement	m ³	Rate Only		
22.03	Concrete pipe culverts:				
22.03(b)	On Class B bedding				
i)	600mm dia. Type 100D	m			
ii)	750mm dia. Type 100D	m	Rate Only		
iii)	825mm dia. Type 100D	m	Rate Only		
iv)	900mm dia. Type 100D	m	Rate Only		
22.17	Manholes, catchpits, precast inlet and outlet structures complete				
22.17(a)	Manholes				
22.17(a)(1)	Precast concrete for drainage: shallow depth using 1500mm dia. Rings				
i)	Up to 1,5m deep	No			
ii)	1,5m to 2,0m deep	No			
22.17(11)b	Catchpits as per drawing attached	No			
22.17(g)	Grid inlets				
22.17(g)1	Heavy Duty Concrete Grid inlet not exceeding 2m deep complete with grid, frame -				
i)	Pipe dia. not exceeding 750mm dia.	No	Rate Only		
ii)	Pipe dia. exceeding 750mm dia. but not exceeding 2000mm dia.	No	Rate Only		
2200	TOTAL CARRIED FORWARD				

SUMMARY: Paving of New Dikgwale Bus and Taxi Route - Paving Blocks Surfacing

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
2200	TOTAL BROUGHT FORWARD				
22.17(h)	Extra-over or less than Item 22.17(g) for variation in depth				
i)	Pipe dia. not exceeding 750mm dia.	m	Rate Only		
ii)	Pipe dia. exceeding 750mm dia. but not exceeding 2 000mm dia.	m	Rate Only		
22.17(i)	Extra-over or less than Item 22.17(g) for polymer concrete Heavy Duty Grid inlet 1 000 x 500mm	No	Rate Only		
22.17(j)	Field inlet as per drawing				
22.17(k)	Field inlet not exceeding 2m deep complete				
i)	Pipe dia. not exceeding 750mm dia.	No			
ii)	Pipe dia. exceeding 750mm dia. but not exceeding 2 000mm dia.	No	Rate Only		
2200	TOTAL CARRIED TO SUMMARY				

SUMMARY: Paving of New Dikgwale Bus and Taxi Route - Paving Blocks Surfacing

2300	SECTION 2300: CONCRETE KERBING, CONCRETE CHANNELLING, CHUTES AND DOWNPIPES, AND CONCRETE LININGS FOR OPEN DRAINS				
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
23.01	Concrete kerbing				
23.01(a)	Precast kerbing to SABS 927				
i)	Figure 3 kerb	m	Rate Only		
ii)	Figure 7 kerb	m	Rate Only		
iii)	Figure 8 kerb (all types)	m	660		
iv)	Figure 12 kerb	m			
23.08(a)	Cast in-situ concrete lining Class 25/19				
23.08(a)1	Standard side drain				
i)	Type v1 - v4	m ³	Rate Only		
23.08(b)3	Trapezoidal (2m wide)				
i)	Type t2	m ³	165		
23.09	Formwork to cast in situ concrete lining for open drains (Class F2 surface finish)				
23.09(a)	To sides with formwork on the internal face only	m ²	550		
23.09(b)	To sides with formwork on both internal and external faces (each face measured)	m ²	Rate Only		
23.09(c)	To ends of slabs	m ²	45		
23.10	Sealed joints in concrete linings of open drains				
23.10(a)	Polysulphide sealants	m	250		
23.10(b)	Polyurethane-based sealant	m	Rate Only		
23.10(c)	Silicone-based sealant	m	Rate Only		
2300	TOTAL CARRIED TO SUMMARY				

SUMMARY: Paving of New Dikgwale Bus and Taxi Route - Paving Blocks Surfacing

3300	SECTION 3300: MASS EARTHWORKS				
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
B33.01	Cut to spoil, including free-haul up to 10km				
33.01(a)	Gravel material in compacted layer thickness of 200mm and less				
i)	Compacted to 90% MOD. AASHTO density	m ³	770		
33.01(g)	Supply and compact dump rock	m ³	Rate Only		
33.01(h)	Fill from commercial sources	m ³	Rate Only		
33.03	Extra-over item 33.01 for excavating and breaking down material in:				
33.03(a)	Soft excavation	m ³	700		
33.03(b)	Intermediate excavation	m ³	308		
33.03(c)	Hard excavation	m ³	77		
33.04	Cut to spoil including free-haul up to 10km				
P33.04(a)	Intermediate excavation	m ³	875		
P33.04(b)	Hard excavation	m ³	88		
33.06	Variation in the number of roller passes (applicable to sub-items 33.01(a)(iii) and 33.01 (b)(iii) and Item 33.11)				
33.06(e)	Impact rolling 3-pass	m ³	Rate Only		
33.10	Roadbed preparation and the compaction of material:				
33.10(b)	Compaction to 93% MOD. AASTHO density	m ³	495		
33.13	Finishing off cut and slopes, medians and interchange areas:				
33.13(a)	Cut slopes	m ²	400		
33.13(b)	Fill slopes	m ²	300		
3300	TOTAL CARRIED TO SUMMARY				

SUMMARY: Paving of New Dikgwale Bus and Taxi Route - Paving Blocks Surfacing

3400	SECTION 3400: PAVEMENT LAYERS OF GRAVEL MATERIAL				
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
34.01	Pavement layers constructed from gravel taken from cut or borrow including free-haul up to 10km:				
34.01(a) i)	Gravel selected layer 93% MOD. AASHTO density selected layer 150mm thick	m ³	Rate Only		
ii)	93% MOD. AASHTO density selected layer 125mm thick	m ³	Rate Only		
34.01(d)	Gravel sub-base (chemically/ mechanically stabilized material) compacted to:				
i)	95% MOD. AASHTO density sub-base layer 150mm thick - G5 Material	m ³	495		
34.01(g)	Gravel shoulder/sidewalks compacted to:				
i)	93% MOD. AASHTO density selected layer 150mm thick	m ³	33		
ii)	E.O. Item 34.01 for Imported G5	m ³	Rate Only		
34.01(h)	Gravel wearing course				
i)	95 MOD. AASHTO	m ³	Rate Only		
34.14	Extra-over Item 34.01 for construction of layers from commercial sources:				
34.14(a) i)	C4 Material - Gravel base (chemically/mechanically stabilized material) compacted to: 97% MOD. AASHTO density base layer 150mm thick	m ³	450		
3400	TOTAL CARRIED TO SUMMARY				

SUMMARY: Paving of New Dikgwale Bus and Taxi Route - Paving Blocks Surfacing

3500	SECTION 3500: STABILIZATION				
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
35.01	Chemical/Mechanical stabilization extra- over unstabilized compacted layers				
35.01(a)	Gravel selected upper sub-base layer 150mm thick	m ³	495		
35.01(b)	Gravel upper base layer 200mm thick	m ³	Rate Only		
35.02	Chemical stabilizing agent:				
35.02(a) i)	Ordinary Portal cement CEM V S-V 32,5N	t	30		
35.02(c)	Road lime	t	Rate Only		
35.02(g) i)	Other stabilizing agents Masonry cement	t	Rate Only		
ii)	Slagment (1.5%)	t	Rate Only		
iii)	Bitumen emulsion	t	Rate Only		
35.03	Mechanical modification (extra-over untreated layer):				
35.03(a)	By adding a soil binder	m ³	Rate Only		
35.03(b)	By mixing materials form different sources	m ³	495		
3500	TOTAL CARRIED TO SUMMARY				

SUMMARY: Paving of New Dikgwale Bus and Taxi Route - Paving Blocks Surfacing

4100	SECTION 4100: PRIME COAT				
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
41.02	Prime and Tack coat				
41.02(c)	MC.30 cut-back bitumen	l	Rate Only		
41.02(e)	Invert bitumen emulsion (MSP1)	l	Rate Only		
41.02(f)	ELO type emulsion	l	Rate Only		
41.03	Aggregate for blinding	m ²	Rate Only		
4100	TOTAL CARRIED TO SUMMARY				

SUMMARY: Paving of New Dikgwale Bus and Taxi Route - Paving Blocks Surfacing

4200	SECTION 4200: ASPHALT SURFACING				
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
42.02	Asphalt surfacing				
42.02(a)	Continuously fine graded fine asphalt 60/70 pen. Bitumen				
i)	25mm thick	m ²	Rate Only		
ii)	30mm thick	m ²			
iii)	18mm thick Micro Asphalt	m ²	Rate Only		
42.04	Tack coat of 30% stable - grade emulsion	m ²	Rate Only		
42.05	Binder variations				
42.05(a)	Penetration grade bitumen	l	Rate Only		
42.08	100mm cores in asphalt paving	No	Rate Only		
4200	TOTAL CARRIED TO SUMMARY				

SUMMARY: Paving of New Dikgwale Bus and Taxi Route - Paving Blocks Surfacing

5600	SECTION 5600: ROAD SIGNS				
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
56.01	Road sign boards with painted or coloured semi-matt background. Symbols, lettering and borders in semi-matt black or in Class 1 retro-reflective material, where the sign board is constructed from:				
56.01(c)	Prepainted galvanized steel plate (Chromadek 1.6mm thick or approved equivalent):				
i)	Area not exceeding 2m2	m ²	30		
ii)	Area exceeding 2m2 but not 10m2	m ²	Rate Only		
56.02	Extra-over Item 56.01 for using:				
56.02(a)	Background of retro reflective material:				
i)	Class 1	m ²	Rate Only		
56.03	Road sign supports (overhead road sign structures excluded)				
56.03(a)	Steel tubing (dip galvanised D- profile)	kg	100		
56.05	Excavation and backfilling for road sign supports (not applicable to km posts)	m ³	15		
56.06	Extra-over Item 56.05 for cement-treated soil backfill	m ³	10		
5600	TOTAL CARRIED TO SUMMARY				

SUMMARY: Paving of New Dikgwale Bus and Taxi Route - Paving Blocks Surfacing

5700	SECTION 5700: ROAD MARKINGS				
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
57.02	Retro-reflective road marking paint:				
57.02(a)	White lines (broken or unbroken)				
i)	100mm wide	m	500		
ii)	200mm wide	m	50		
57.02(b)	Yellow lines (broken or unbroken)				
i)	100mm wide	m	10		
ii)	200mm wide	m	Rate Only		
57.02(c)	Red lines (broken or unbroken)				
i)	100mm wide	m	Rate Only		
ii)	200mm wide	m	Rate Only		
57.02(d)	White lettering and symbols	m ²	50		
57.02(e)	Yellow lettering and symbols	m ²	Rate Only		
57.04	Variations in rate or application				
57.04(a)	White paint	l	10		
57.04(b)	Yellow paint	l	10		
57.04(c)	Red paint	l	Rate Only		
57.06	Setting out and pre-marking the lines (excluding traffic-island marking lettering and symbols)	km	0.5		
57.08	Removal of existing, temporary or permanent road markings by:				
57.08(a)	Sandblasting	m ²	Rate Only		
57.08(b)	Overpainting as temporary measure	m ²	Rate Only		
57.09	Removal of existing roadstuds	No	Rate Only		
5700	TOTAL CARRIED TO SUMMARY				

SUMMARY: Paving of New Dikgwale Bus and Taxi Route - Paving Blocks Surfacing

5800	SECTION 5800: LANDSCAPING AND PLANTING PLANTS				
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
58.01	Trimming				
58.01(a)	Machine trimming	m²	200		
58.01(b)	Hand trimming	m²	200		
5800	TOTAL CARRIED TO SUMMARY				
5900	SECTION 5900: FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS				
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
59.01	Finishing the road and road reserve:				
59.01(a)	Dual carriageway road	km	Rate Only		
59.01(b)	Single carriageway road	km	0.5		
5900	TOTAL CARRIED TO SUMMARY				

SUMMARY: Paving of New Dikgwale Bus and Taxi Route - Paving Blocks Surfacing

7300	SECTION 7300: CONCRETE BLOCK PAVING FOR ROADS				
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
73.01	Concrete block paving:				
73.01(a)	Grey interlocking precast concrete paving blocks type SA, including straight cutting of units to fit between edge restraints, laid on and including 20mm river sand bed, compacted and plaster sand broomed into joints on completion				
i)	60mm to sidewalks	m ²	Rate Only		
ii)	80mm to roads	m ²	3300		
73.01(b)	230 x 115 x 75mm Thick semi- facebrick terra cotta coloured paving bricks, including straight cutting of units to fit between edge restraints, laid on and including 20mm river sand bed, compacted and plaster sand broorned into joints on completion				
i)	75mm to sidewalks	m ²	Rate Only		
ii)	75mm to roads	m ²	Rate Only		
73.02	Cast-in-situ concrete edge and intermediate beams (30Mpa/19mm edge beam size 150mm wide x 150mm high, wood floated on top, angle rounded edges and 110mm thick jointex expansion joints at 3m centres)				
73.02(a)	Straight sections	m ²	Rate Only		
73.02(b)	Circular sections	m ²	Rate Only		
73.04	Existing Paving:				
73.04(a)	Lifting up existing paving blocks including neatly stacking on site designated by the Engineer				
i)	60mm interlocking paving	m ²	Rate Only		
ii)	80mm interlocking paving	m ²	Rate Only		
iii)	50mm Clay brick paving	m ²	Rate Only		
iv)	75mm Clay brick paving	m ²	Rate Only		
73.04(b)	Lifting up existing paving blocks and spoil material				
i)	60mm interlocking paving	m ²	Rate Only		
ii)	80mm interlocking paving	m ²	Rate Only		
73.05	Reinstatement of existing paving				
PS73.05(a)	Take from stockpile on site existing paving blocks and reinstate in similar position, including levelling and compacting earthworks to 93% MOD. AASHTO density, supply and lay new 20mm river sand bedding and re-lay existing bricks, compacting and brooming				
i)	60mm interlocking paving	m ²	Rate Only		
ii)	80mm interlocking paving	m ²	Rate Only		
73.06	Polyethylene sheeting: Extra-over Item 73.01				
i)	0,15mm thick	m ²	3300		
7300	TOTAL CARRIED TO SUMMARY				

DR. JS MOROKA LOCAL MUNICIPALITY

DEPARTMENT NAME: TECHNICAL SERVICES

CONTRACT NO: JSM-R02/21-22/W15

FOR

UPGRADING OF DIKGWALE BUS AND TAXI ROUTE

PART C3 SCOPE OF WORKS

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- C3.5.1 Generic Specification

Bidder:

Initial: Authorised signatory/ies: 1.

2.

Witness:

DR. JSMLM:

Initial: DR. JSMLM.....

- C3.6 HEALTH AND SAFETY**
- C3.6.1 Health and Safety requirements and procedures
- C3.6.2 Protection of the Public
- C3.6.3 Barricades and lighting
- C3.6.4 Traffic control on roads
- C3.6.5 Measures against disease and epidemics
- C3.6.6 Aids awareness

Bidder:
Initial: Authorised signatory/ies: 1.
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Initial: DR. JSMLM.....

Witness:

STATUS

In the event of any discrepancy between the Scope of Works and a part or parts of the COLTO Standard Specifications for Road and Bridge Works for State Road Authorities 1998 edition, the Bill of Quantities or the Drawings, the Project Specifications shall take precedence and prevail in the Contract.

C3.1 DESCRIPTION OF THE WORKS

C3.1.1 EMPLOYER'S OBJECTIVES

The employer's objectives are to deliver public infrastructure using labour-intensive methods where possible.

Labour-intensive works comprise the activities described in SANS 1921-5/Earthworks activities which are to be performed by hand/Labour-Intensive Specification⁽¹⁾ and its associated specification data. Such works shall be constructed using local workers who are temporarily employed in terms of this scope of work.

C3.1.2 OVERVIEW OF THE WORKS

The project entails upgrading of **UPGRADING OF DIKGWALE BUS AND TAXI ROUTE** from gravel to surfacing and stormwater. The section of the Bus and Taxi Route that needs to be upgraded is about 500m long and 6m width.

The scope of work will include, among others, the upgrading of existing road layer works, concrete paving blocks and upgrading of existing drainage system.

The project would entail but not limited to:

- Accommodation of traffic
- Earthworks
- Rip and re-compact sub-base
- Base layer
- Surfacing of the road with 80mm interlocking concrete paving blocks
- Concrete trapezoidal drain
- Removing and Relaying existing pipe kerbs,
- Speed humps, road markings and signs
- Training of Targeted local Labours

Bidder:

Initial: Authorised signatory/ies: 1.

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Witness:

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C3.1.3 EXTENT OF WORKS

Roadworks

The Upgrading of **UPGRADING OF DIKGWALE BUS AND TAXI ROUTE** will be as follows:

- Earthworks
- Sub-Base Layer
- Base layer (stabilized)
- Concrete Paving Blocks (80mm)
- Road marking and signs and speed humps

C3.1.4 LOCATION OF THE WORKS

The road under consideration is a Bus and Taxi Route located in DIKGWALE, under Dr JS Moroka Local Municipality in the Nkangala District Municipality of Mpumalanga Province. The GPS co-ordinates are as follows:

Start of Road: S 25°12'8.57"S E 28°54'8.28"E.

End of Road: S 25°12'6.30"S E 28°53'59.24"E.

C3.1.5 TEMPORARY WORKS

Bypass route will be provided to accommodate traffic during Construction.

Bidder:

Initial: Authorised signatory/ies: 1.

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Witness:

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C3.2 ENGINEERING

C3.2.1 DESIGN

Works designed by, per design stage:	
Concept, feasibility and overall process	Employer
Basic engineering and detail layouts to bid stage	Employer
Final design to approved for construction stage	Employer
Temporary works	Contractor
Preparation of as-built drawings	Contractor

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

C3.2.2 EMPLOYER'S DESIGN

- (a) Works as described in scope of works above

C3.2.3 CONTRACTOR'S DESIGN

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

C3.2.4 DRAWINGS

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

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

All information in possession of the Contractor, required by the Engineer and/or the Engineer's Representative to complete the as-built/record drawings, must be submitted to the Engineer's Representative before a Certificate of Completion will be issued.

Bidder:

Initial: Authorised signatory/ies: 1.

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The Drawings prepared by the Employed for the permanent Works are listed below. The Employer reserves the right to issue amended and/or additional drawings during the Contract.

DRAWING NO.	REV	DRAWING DESCRIPTION
ROADS		
100-KP-001	A	KEY PLAN AND DRAWING LIST
100-RD-001	A	ROADS LAYOUT PLAN
100-RD-002	A	LONG SECTION
100-RD-003	A	LONG SECTION
100-RD-004	A	CROSS SECTION
100-RD-005	A	ROAD DETAILS
100-RD-006	A	ROAD MARKING DETAILS
100-RD-007	A	TRAFFIC ACCOMMODATION PLAN
100-TD-001	A	INFORMATION BOARD
STORMWATER		
100-SW-001	A	STORMWATER LAYOUT PLAN
100-SW-002	A	STORMWATER CHANNEL LONG SECTION

C3.2.5 DESIGN PROCEDURES

- interfaces with existing structures, plant etc;
- any temporary works requirements, if any, e.g. specialized items of equipment;
- design integration before and during construction;
- procedures for all necessary approvals;
- special procedures e.g. environmental;
- design change procedures, and
- record keeping and tracking of documents.

C3.3 PROCUREMENT

C3.3.1 PREFERENTIAL PROCUREMENT

C3.3.1.1 Requirements

The preferential procurement will be in accordance with the **Preferential Procurement Policy Framework Act, 2000 (Act No 5 of 2000)** and the **Preferential Procurement Regulations 2001**.

Preference points will be awarded for the targeting of local resources in accordance with the resource specification for the Implementation of Targeted Construction Procurement **SOUTH AFRICA NATIONAL STANDARDS (SANS)**

C3.3.1.2 Resource standard pertaining to targeted procurement

Bidder:

Initial: Authorised signatory/ies: 1.

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Witness:

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1914-4: 2002: Participation of Targeted Enterprises and Targeted Labour, issued by the South African Bureau of Standards.

Tender evaluation points for preferences is scored in relation to the extent to which the tenderer commits himself/herself to the employment of targeted labour or engaging targeted enterprises in the execution of the contract as reflected in the tendered Contract Participation Goal.

C3.3.2 SUBCONTRACTING

C3.3.2.1 Scope of mandatory subcontract works and specialised works

Mandatory

- The reallocation of specialise services such as Telkom, Eskom cables

Local

- Concrete Works (V-drains, Kerbing, Paving and Stone Pitching)

C3.3.2.2 Preferred subcontractors/suppliers

The will be no preferred specific supplier/subcontractor on this project.

C3.3.2.3 Subcontracting procedures

The names of all proposed Sub-contractors to be employed by the Contractor must be submitted to the Engineer and the client for approval before they are engaged in any activities on site. Approved subcontractors shall not further subcontract work subcontracted to them. Subcontractors should not communicate directly to the Engineer but via the main Contractor. The sub-contractor and contractor shall make use of CLO for sourcing local labour from the local community

C3.3.2.4 Attendance on subcontractors

Experience Local Contractors will be engaged for the implementation of this project. The Local Sub contractors will be developed without sacrificing the quality of work.

C3.3.2.5 MINIMUM WAGE

C3.3.2.5.1 Requirements

The minimum requirements wage rate for an unskilled Labourer should be R22.50 /hour.

Bidder:

Initial: Authorised signatory/ies: 1.

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Witness:

DR. JSMLM:

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C3.4 CONSTRUCTION

C3.4.1 STANDARD SPECIFICATIONS

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

- (a) COLTO Standard Specifications for Road and Bridge Works for State Road Authorities 1998 edition.
- (a) Various other specifications specified in the Project Specifications.

The applicable standardized specifications for this Contract shall be the following:

Section	1100	Definitions
Section	1200	General Requirements and Provisions
Section	1300	Contractor's Site Establishment on Site and General Obligations
Section	1400	Housing, Offices and Laboratories for the Engineer's Site Personnel
Section	1500	Accommodation of Traffic
Section	1600	Overhaul
Section	1700	Clearing and Grubbing
Section	2100	Drains
Section	2200	Prefabricated Culverts
Section	2300	Concrete Kerbing, Concrete Channelling, Chutes and Down pipes and Concrete Linings for Open Drains
Section	3100	Borrow Materials
Section	3300	Mass Earthworks
Section	3400	Pavement Layers of Gravel Material
Section	3500	Stabilisation
Section	3600	Crushed-Stone Base
Section	3800	Breaking up Existing Pavement Layers
Section	4100	Prime Coat
Section	4200	Asphalt Base and Surfacing
Section	4300	Seals : Materials and General Requirements
Section	5200	Gabions
Section	5400	Guardrails
Section	5500	Fencing
Section	5600	Road Signs
Section	5700	Road Markings
Section	5800	Landscaping and Planting Plants
Section	8100	Testing Materials and Workmanship
Section	8200	Quality Control (Scheme 1)

Bidder:

Initial: Authorised signatory/ies: 1.

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Witness:

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C3.4.2 VARIATIONS TO STANDARDIZED PROJECT SPECIFICATIONS

C3.4.2.1 Project Specifications Relating to Standard Specifications

This part of the project specifications deals with matters relating to the standard specifications. Where reference is made in the standard specifications to the project specifications this part shall also contain the relevant information e.g. the requirements where a choice of materials or construction methods are provided for the standard specifications. In certain clauses the standard specifications allow a choice to be specified in the project specifications between alternative materials or methods of construction and for additional requirements to be specified to suit a particular contract. Details of such alternatives or additional requirements applicable to this contract are contained in this part of the project specifications. It also contains some additional specifications and amendments of the standard specifications required for this particular contract. The number of each clause and each payment item in this part of the project specifications refers to the number of the relevant clause or payment item in the standard specifications. The number of a new clause or a new payment item, which does not form part of a clause or a payment item in the standard specifications and 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.

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

Clauses and pay items referring to emerging contractors are prefixed by E in the project specifications.

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Witness:

Standard specifications that are applicable to this contract can be seen below. Variations to these standard specifications can be seen in the following section:

Section	1200	General Requirements and Provisions
Section	1300	Contractor's Site Establishment on Site and General Obligations
Section	1400	Housing, Offices and Laboratories for the Engineer's Site Personnel
Section	1500	Accommodation of Traffic
Section	2200	Prefabricated Culverts
Section	2300	Concrete Kerbing, Concrete Channelling, Chutes and Down pipes and Concrete Linings for Open Drains
Section	3500	Stabilisation
Section	4100	Prime Coat
Section	4200	Asphalt Base and Surfacing
Section	5700	Road Markings

Bidder:

Initial: Authorised signatory/ies: 1.

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Witness:

VARIATIONS AND ADDITIONS TO REQUIREMENTS OF STANDARD SPECIFICATIONS

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

OBLIGATIONS

B1303 PAYMENT

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

"..... and provided the Contractor has fulfilled his obligations as far as the Engineer's office, laboratory and housing accommodation is concerned".

Add the following new pay item:-

Add the following new pay item:-

Item	Unit	
B13.01(a) Services for Community Liaison Officer The CLO will be paid R6000/pm. Contractor will only claim Handling fee under item B13.01 (b)		Prov Sum
B13.01(b) Handling cost and profit in respect of sub-items B13.01(a)		%
B13.02 Training:		
(a) Provisional sum for training allowance to targeted labour undergoing training		Prov Sum
(i) Technical Skills		
(ii) Generic Skills		
(iii) Entrepreneurial skills		
(iv) Remuneration of labours undergoing technical skills training.		
(v) Training Venue		
Payment of items will be based on acceptable quote from at least three accredited training service providers. Payment will be as invoiced from nominated service provider after completion of training. Contractor will claim handling fee under item B13.02 (b)		
(b) Contractors handling costs, profit and all other charges in respect of sub-item B13.02 (a)		%
B13.04 Relocation and/or protection of existing services: (a) By the contractor		Prov Sum

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Witness:

Payment of the item will be based on actual time of personnel and equipment to carry out the required relocation and/or protection of services. Any materials to be used must be approved by the Engineer on site.

(b) By the service provider

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

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

B13.05 Information Board	
Supply, transport to site and erect contract signboard as indicated on drawing	Number (No.)

Bidder:
Initial: Authorised signatory/ies: 1.
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Witness:

DR. JSMLM:
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SECTION 1400 : HOUSING, OFFICES AND LABORATORIES FOR THE ENGINEER'S SITE PERSONNEL

B1402 OFFICES AND LABORATORIES

(a) General

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

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

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

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

B1401 MEASUREMENT AND PAYMENT

Amend the following pay items under item:

Item

Unit

14.01 (a) Provisional items and items paid for in a lump sum:

(a) Provisional sum for the office accommodation for the Engineer. Prov sum

Payment will be from agreed quotation of renting the office of the Engineer from local office parks or rental of mobile office space.

(b) Handling cost and profits in respect of sub-item B1401 (a) %

B14.03 (b) Prime cost items and items paid for in a lump sum:
Add the following sub-items

(d) Provisional Sums items

(i) Provision for use by the Engineer for an independent laboratory Prov sum

Payment will be as invoice by the independent laboratory for test conducted
On instruction of Engineer

(ii) Handling cost and profits in respect of sub-item B1403 (d) (i) %

(iii) Provision of a direct independent telephone line for the Engineer, including the cost of calls in connection with contract administration and telephone rental Prov sum

Bidder:

Initial: Authorised signatory/ies: 1.

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Witness:

(iv) Handling Cost and profits in respect of sub-item B1403 (d) (iii)

(v) Provision for Training of Engineering Technician Prov sum

Payment will be made monthly for the remuneration of Engineering Technician appointed by Client/Engineer for on-site Training.

(vi) Handling cost and profits in respect of sub-item B1403 (d) (i) %

Bidder:

Initial: Authorised signatory/ies: 1.

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Witness:

SECTION 1500 : ACCOMMODATION OF TRAFFIC

B1501 SCOPE

Add to Clause 1501 the following :

The scope of this section shall also include the preparation and submission to the Engineer for approval of traffic management plans. The traffic management plans shall demonstrate how the Contractor intends accommodating and controlling traffic through the site. The plans must incorporate all the requirements of the specifications in respect of the accommodation of traffic, including the traffic control devices and the personnel involved. A traffic safety officer shall be specifically named in the Plan together with 24 hr contact details. Copies of the plans shall be made available to the Engineer, the Employer, Local Authorities, the Police and Emergency Services.

The accommodation of traffic shall generally be undertaken in the following manner:

- (a) Via gravel diversions, where practical in terms of space and the terrain.
- (b) By dealing with traffic under construction where no diversions are possible.
- (c) By diverting traffic along the existing road where the route is being realigned.

B1502 GENERAL REQUIREMENTS

(a) Safety

Add to Sub-clause 1502(a) the following :

Information in respect of intersections, accesses, bus stops, traffic volumes, pedestrians etc is given in Part B of these Project Specifications.

(b) Providing Temporary Deviations

Add to Sub-clause 1502(b) the following :

The contractor shall keep the provincial traffic police, the municipal traffic departments and the engineer fully informed with regard to any changes in the normal traffic flow and obtain their approval for these changes.

During the non-working hours, all unnecessary obstructions to the traffic shall be removed and all signs no longer applicable to the situation shall be removed or effectively covered.'

It is a condition of this contract that not more than 1.5 km of deviation should be open to public traffic at any one time, and that not more than three separate deviations should be open at any one time. No additional payments will be made where situations arise that the contractor has deviations cross over the roadway under construction.

(i) Traffic Safety Officer

Add to Sub-clause 1502(i) the following :

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.

Delete Sub-clause 1502(i), sub-sub-clauses (ii) and (iii) and replace with the following:

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Bidder:

Initial: Authorised signatory/ies: 1.

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Witness:

- (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 unit 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 9:30 and by 16:30, 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 10:00 and by 17:00 each day. The traffic Safety Officer shall keep a duplicate book for this specific purpose.

The Traffic Safety Officer shall also submit to the Engineer by 10:00 each morning, a record of all matters 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, stop/go and traffic signal control men employed.

The traffic safety officer shall be equipped with a cellular telephone and shall have a vehicle and 3 labourers at his disposal 24 hrs a day and he shall be directly answerable to the Contractor's Site Agent. The Traffic Safety vehicle shall be a truck with a capacity of 5 tons and shall be equipped with a high visibility rear panel as shown on Figure 24 of Road Signs Note No.13. The traffic Safety Officer shall have a direct line of communication at all times with the police and traffic officers responsible for the area within limits of the Contract. The provision of the Road Safety Vehicle, driver, three labourers and the cost of the cellular telephone shall be deemed to be included in the rates tendered for the Contractor's establishment on site.

Add to Sub-clause 1502(i) the following new sub-sub-clauses:

- (ix) Ensure that all obstructions, soil and gravel heaps, related to the Contractors activities be removed before nightfall where applicable and as instructed by the Engineer and that the roads are safe for night traffic.
- (x) The Traffic Safety Officer shall, in addition to the duties listed in Clause 1502 (i), 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, and shall be responsible for the erection and maintenance of all traffic signs necessary for the accommodation of traffic."

Add the following new Sub-clauses to Clause 1502:

(j) **Public traffic**

The contractor must plan and conduct his activities so as to bring about the least possible disruption to the traffic on the road. All halting of traffic will require the prior approval of the engineer and must be pre-arranged with the appropriate traffic authorities.

In all dealings with the public the Contractor shall bear in mind the public's right to enjoy the use of the road, and the Employer's desire to interfere as little as possible with this right. At all points of contact with the public, the Contractor shall deal with deliberate courtesy and understanding in any discussions or disputes.

Bidder:

Initial: Authorised signatory/ies: 1.

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Witness:

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(k) Failure to comply with provisions

The failure or refusal of the Contractor to provide barricades or traffic signs at the proper time, or to take the necessary precautions for the safety and convenience of public traffic as specified or instructed by the Engineer, shall be sufficient cause for the suspension of all

work under this Contract without any additional compensation to the Contractor until the required accommodation of traffic has been completed to the satisfaction of the Engineer. The above shall be sufficient cause for the Engineer to deduct penalties as follows:

- A fixed penalty of R5 000,00 per occurrence shall be deducted for each and every occurrence of non-compliance with any of the requirements of Section 1500 of the standard specifications and section B1500 of the Project Specifications.
- In addition a time-related penalty of R500,00 per hour over and above the fixed penalty shall be deducted for non-compliance to rectify any defects in the accommodation of traffic within the allowable time after 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.

The penalties shall be deducted from the payment certificate for the month in which the non-compliance occurs.

Payment will also be deducted in accordance with Payment Item B15.01 of these Project Specifications.

(l) Access to work area

Construction traffic will only be permitted to enter or leave the work area at points approved by the Engineer and as clearly indicated on the traffic management plans. When any access point is in use, flagmen shall be provided for each such point. At least two flagmen shall be stationed at the access point to control the movement of construction traffic, and to warn public traffic on both lanes of the existing road. It is not the purpose of these flagmen to stop public traffic flow.

(m) Extension of time for completion

Accommodation of public traffic on the works or any delays caused thereby, as well as any suspensions due to failure by the Contractor to comply with the provisions for the accommodation of traffic, will not be regarded as special circumstances for an extension of time.

B1503 TEMPORARY TRAFFIC-CONTROL FACILITIES

Replace the first sentence of the first paragraph of Clause 1503 with the following :

The Contractor shall provide, erect and maintain the necessary traffic-control devices, road signs, channelisation devices, barricades, warning devices and road markings (hereinafter referred to as traffic-control devices) in accordance with these special provisions and as shown on the drawings and in the South African Road Traffic Signs Manual in conjunction with the latest edition of Road Signs Note No.13 Roadworks, and remove them when no longer required. It shall be incumbent upon the Contractor to see to it that the abovementioned traffic-control devices are present where required at all times and are functioning properly, and he shall replace any that have been damaged, lost, stolen or obliterated at his own cost.

Replace the third paragraph of Clause 1503 with the following :

The type of construction, spacing and placement of traffic-control devices shall be in accordance with the latest edition of Road Signs Note No.13, Roadworks, these special provisions, the drawings and the South African Road Signs Manual. The recommended arrangements of the traffic control devices illustrated in Appendices 1 to 6 of Road Signs Note No.13 and/or drawings shall not be departed from without prior approval of the Engineer. Typical arrangements expected to be used in the Contract are given on the tender drawings.

However, this shall not absolve the Contractor of his obligations in preparing traffic management plans as per this Project Specification.

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

(b) Road signs and barricades

Add to Sub-clause 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 tendered 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 Road Signs Note No.13.

The covering of permanent road signs, if applicable, shall be by utilising a hessian bag, which shall be pulled over the sign in the form of a hood and fastened to the sign posts. Plastic bags or other materials and fastening by means of adhesive tape shall not be permitted. The cost of covering of permanent road signs shall be deemed to be covered by the tendered rates of items B15.03.

No work may proceed on any section where accommodation of traffic is required until such time as the relevant requirements with regards to signposting are met and written approval of the Engineer is obtained. The Contractor shall keep sufficient surplus signs, delineators and barricades on the site to allow for the immediate replacement of damaged or missing items, in any case, within three hours of instructions having been given by the Engineer. Delineators shall be of the flexible plastic reversible variety and not of the rigid metal variety.

Should the Contractor fail to respond to an instruction to re-erect a road sign within the designated time or fail to comply to the requirements, the work on that section will be suspended without any compensation to the Contractor.

(c) Channelisation devices and barricades

Add to Sub-clause 1503(c) the following:

Delineators shall be of plastic and shall be capable of withstanding winds caused by passing traffic in typical working conditions without falling over. To achieve this, the base shall be ballasted using sand bags.

Traffic cones manufactured in a fluorescent red-orange or red plastic material shall be used only at short term lane deviations during daylight. Cones used on all deviations shall be 750 mm high. Lane closures which continue into the night time shall be demarcated by delineators only.

The use of steel drums as channelization devices will not be allowed on this Contract unless instructed by the Engineer. Channelization shall be effected by the use of delineators or cones as detailed in Road Signs Note No. 13 - Roadworks.

(e) **Warning devices**

Add to Sub-clause 1503(e) 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 shall obtain a clearance permit from the Engineer before being allowed onto the site.

Rotating lights shall have an amber lens of minimum height of 200 mm and shall be mounted to ensure clear visibility 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 are manoeuvring in or out of traffic or are travelling or parked alongside roads open to public traffic.

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

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

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

Add the following New Sub-clauses to Clause 1503 :

(g) **Other signs and 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 with the requirements of the South African Traffic Signs Manual, Road Note 13 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."

Cones shall be manufactured and positioned in accordance with the details specified on the drawings.

All traffic cones and road signs shall be kept clean and visible at all times. All bituminous or other foreign material shall be removed by the Contractor, or the dirty traffic cones and road signs shall be replaced with new ones at the cost of the Contractor, as directed by and to the satisfaction of the Engineer.

(h) **Safety jackets**

The Contractor will be responsible to ensure that all construction workers, staff of the Engineer and visitors shall wear safety jackets when moving around on site. The jackets shall be of an approved type, orange in colour and shall be to the approval of the Engineer. The Contractor shall provide the Engineer with two jackets. Payment for Engineer's jackets will be as indicated in item B15.14 in the bill of quantities.

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

Amend Clause 1513 as follows :

In the third line of the third paragraph, delete "4 km" and replace with "1 km".

In the second line of the fourth paragraph, delete the word "four" and replace with "one". Also, delete "2 km" and replace with "1 km".

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."

Bidder:

Initial: Authorised signatory/ies: 1.

2.

Witness:

DR. JSMLM:

Initial: DR. JSMLM.....

B2107: MEASUREMENT AND PAYMENT

Item

Unit

B21.01 Excavation for open drains

Add the following to the penultimate paragraph:

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

"This item does not include the excavations for the earth channel along the road profile as per typical cross section, which is deemed included in the mass earthworks (Section 3300). This item is specifically for additional open drains leading away from the road profile, like mitre drains, etc."

SECTION 2300 : CONCRETE KERBING, CONCRETE CHANNELLING, CHUTES AND DOWNPIPES AND CONCRETE LININGS FOR OPEN DRAINS

B2302 MATERIALS

(b) Kerbing and channeling

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

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

B2304 CONSTRUCTION

(b) Prefabricated concrete kerbing and channeling

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

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

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

(e) Cast in-situ kerbs and channels

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

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

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

Add the following new Sub-clauses to Clause 2304 :

(m) Formwork and finish

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

Bidder:

Initial: Authorised signatory/ies: 1.

2.

DR. JSMLM:

Initial: DR. JSMLM.....

Witness:

SECTION 3300: MASS EARTHWORKS

B3303: CLASSIFICATION OF CUT AND BORROW

(a) Classes of excavation

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

(i) Soft excavation

Add the following at the end:

Or

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

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

(iii) Hard Excavation

Add the following:

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

B3306: CUT AND BORROW

(a) Dimensions of Cuts

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

Add the following:

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

B3307: FILLS

(d) Benching

Add the following:

"Benching of fill and pavement layer material is required to be undertaken into the existing fill embankments and pavement layers. No additional payment shall be made over and above the normal pay items applicable to earthworks and pavement layers where benching is required for widening of the existing road formation. Benching shall be undertaken as shown on the drawings.

It is a requirement that benching shall always be started at the bottom of the existing fill progressing to the top of the formation. The dimensions and details of benching are shown on the drawings."

(i) Widening of fills

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

Add the following:

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

Bidder:

Initial: Authorised signatory/ies: 1.

2.

DR. JSMLM:

Initial: DR. JSMLM.....

Witness:

B3312: MEASUREMENT AND PAYMENT

General directions

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

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

Item

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

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

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

(A) SECTION 3400: PAVEMENT LAYERS OF GRAVEL MATERIAL

B3402: MATERIALS

(a) General

All layers shall comply with the requirements of Tables 3402/1, 3402/2, 3402/4 and 3402/5 of the Standard Specification. The requirements of Section 3500:

Stabilization shall also apply to the relevant layers.

Material requirements for gravel pavement layers are in accordance with TRH4 and shall be indicated on the drawings.

There shall be no measurement of Intermediate class excavation. All excavation that is not Hard shall be deemed as Soft.

B3406: QUALITY OF MATERIALS AND WORKMANSHIP

Add to Clause 3406 the following:

Test results and re-measurements shall be assessed in accordance with the provisions of Section 8200: Quality Control (Scheme 1) of the standard specifications, as amended in these project specifications.

B3407: MEASUREMENT AND PAYMENT

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

B34.04: In-situ reconstruction of existing pavement layers as:

(a) Gravel selected layer compacted to 93% of modified AASHTO density using
ii) Non cemented material, 150mm thick (m³)

The unit of measurement shall be the cubic meter of compacted pavement layer, and the quantity shall be calculated from the authorized dimensions of the completed layer.

B34.06: Extra over item 34.04 for adding extra material as specified

(a) Gravel selected layer (neat G7 or better commercially sourced) m³)

Bidder:

Initial: Authorised signatory/ies: 1.

2.

Witness:

DR. JSMLM:

Initial: DR. JSMLM.....

The unit of measurement shall be the cubic meter of compacted pavement layer, and the quantity shall be calculated from the authorized dimensions of the completed layer. The tendered rates shall provide full compensation for procuring from commercial sources, furnishing and placing all materials and compacting of the material, over an unlimited free haul distance where material is obtained from commercial sources, and for the testing, protecting and maintaining of layers as specified.

Bidder:
Initial: Authorised signatory/ies: 1.
2.

DR. JSMLM:
Initial: DR. JSMLM.....

Witness:

SECTION 3500 : STABILISATION

B3502 MATERIALS

(a) Chemical stabilizing agents

Add to Sub-clause 3502(a) the following :

The new SABS ENV 197-1 standard specifications will be applicable to this Contract (Refer to Clause B1229 in the Project Specification). According to these specifications the following cements are prescribed:

- (ii) Ordinary Portland cement : CEM 1
- (iii) Portland blast-furnace cement : CEM III/A, III/B AND III/C
- (iv) **Ground granulated blast-furnace cement : As specified in 3502(a)(iv)**
- (v) Portland fly-ash cement : CEM II/A-V, CEM II/B-V, CEM II/A-W, CEM II/B-W

B3503 CHEMICAL STABILIZATION

(i) Construction limitations

Add to Sub-clause 3503(i) the following :

Cement stabilization shall not be carried out during falling temperatures when the ambient air temperature falls below 7°C or during rising temperatures when the ambient temperature is below 3°C.

The surface temperature of a compacted stabilized layer shall not be allowed to fall below 1°C during the first three (3) days after stabilization. The Contractor shall be responsible for taking all measures necessary in this regard and shall especially refrain from stabilizing when such night temperatures are probable.

All stabilized layers which have been damaged by frost or by the formation of ice in the layer shall be removed and replaced by the Contractor at his expense unless agreed otherwise by the Engineer. The Contractor shall make due allowance for these requirements in his construction programme, and no claims in this regard will be considered.

B3509 QUALITY OF MATERIALS AND WORKMANSHIP

Add to Clause 3509 the following:

Test results and re-measurements shall be assessed in accordance with the provisions of Section 8300 : Quality Control (Scheme 2) of the standard specifications, as amended in these project specifications.

The Contractor shall advise the Engineer at least 24 hours in advance of any stabilization work to enable him to organise and conduct his own control tests.

Where the stabilising agent is to be spread by hand, the pockets of stabilising agent shall be placed on the layer at regular intervals. However, spreading shall not be carried out before the engineer is satisfied that the correct quantity of stabilising agent can be spread.

Stabilised layers shall be covered for curing within 24 hours, as specified. If the stabilised layer is found to have failed, the cover material shall be removed and the layer rectified if instructed by the engineer. No additional payment shall be made for such removal and remedial work.'

Bidder:

Initial: Authorised signatory/ies: 1.

2.

Witness:

DR. JSMLM:

Initial: DR. JSMLM.....

B3510 MEASUREMENT AND PAYMENT

Delete the note at the start of the measurement and payment clause dealing with work in restricted areas. On this Contract, no extra over payment will be made due to the nature of the site or the size of the work area available. All costs associated with carrying out the works are deemed to be included in the tendered rates for the items in the Bill of Quantities.

Payment Item 35.02 Chemical stabilising agent

Add the following note to this payment item:

The notation used for Portland cement and Portland blast-furnace cement corresponds with the notation specified in SABS ENV 197-1.

Bidder:
Initial: Authorised signatory/ies: 1.
2.

DR. JSMLM:
Initial: DR. JSMLM.....

Witness:

SECTION 4100 : PRIME COAT

B4102 MATERIALS

(a) Priming Material

Add to the words “, such as MSP 1 or similar,” to the last of the listed priming materials, that is inverted bitumen emulsion.

(a) Aggregate for blinding

Add the following sentence:

“Blinding of the primed surface with aggregate shall only be permitted to facilitate vehicular access to adjoining properties”

B4104 WEATHER AND OTHER LIMITATIONS

Delete adverse condition (g) of Clause 4104 and replace with the following :

- (g) when the moisture content of the top 50mm of the base layer is more than 50% of the optimum moisture content as determined according to TMH 1, Method A7”.

B1406 APPLICATION OF THE PRIME COAT

Add the following to paragraph (c):

“The nominal application rate of the prime shall be 0,8 l/m². Unless directed otherwise by the engineer or indicated on the drawings, the edges of the primed surface shall be 150mm wider than the edges of the surfacing.”

“(j) Application in areas treated by reworking and construction of a new base shall be primed using a mechanical distributor complying with sub-clause 4103(a). The edges of the previously constructed or existing surfacing shall be adequately protected by approved means to ensure that an overlap of prime not exceeding 50mm is sprayed onto the previously constructed or existing surfacing.”

B4108: TOLERANCES

Replace the first paragraph with the following:

“The actual spray rates measured at spraying temperature shall not deviate by more than 8.0% from that ordered by the engineer. The engineer may, at his discretion, conditionally accept application rates falling outside this tolerance at reduced payment in accordance with Table B4108/1.

TABLE B4108/1: Payment reduction factors for conditionally accepted prime coat

Deviation specified spray rate at spraying temperature. (%)	Payment reduction factor of tendered rate.
±8,0	1.00
±9,0	0.97
±10,0	0.95
±11,0	0.90
±12,0	0.85
±13,0	0.80

Bidder:

Initial: Authorised signatory/ies: 1.

2.

Witness:

DR. JSMLM:

Initial: DR. JSMLM.....

Any deviation outside these limits shall not be paid for, however, the engineer shall have the right to instruct the contractor to make up any deficiency, or blind excessive prime without additional payment. Where so instructed, the material for blinding shall consist of approved, but shall consist of screened 4,75mm nominal single size aggregate. The use of crusher dust for blinding shall not be permitted. If under-spraying occurs, and it is accepted by the engineer, only the actual quantities applied shall be paid for."

B4109: TESTING

Add the following:

"No payment will be made if this condition is not adhered to. The contractor shall provide, at his cost, representative samples of every batch of prime delivered onto site."

SECTION 4200 : ASPHALT BASE AND SURFACING

B4202 MATERIALS

Add to Sub-clause the following:

(a) Bituminous binders

Road-grade bitumen shall comply with SABS 307. B12 (60/70) penetration grade bitumen shall be used.

(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."

"Only Grade 1 aggregate shall be used for Asphalt."

(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

Grading limits for Medium Continuously Graded shall be used as the target for grading

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:

Bidder:

Initial: Authorised signatory/ies: 1.

2.

DR. JSMLM:

Initial: DR. JSMLM.....

Witness:

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

B4203: COMPOSITION OF ASPHALT BASE AND SURFACING MIXTURES

In the first paragraph, third last line, after "or active filler content" add:
"or aggregate content"

Replace the fifth paragraph with the following:

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

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

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

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

(a) Weather conditions

Amend the following:

Bidder:

Initial: Authorised signatory/ies: 1.

2.

Witness:

DR. JSMLM:

Initial: DR. JSMLM.....

Asphalt may be mixed and placed only under favourable weather conditions and shall not be mixed or placed when rain is imminent or during misty or wet conditions.

The following wind and temperature conditions are regarded as being suitable for paving work:

- (i) While the air temperature is rising, work may be performed at temperature of – 7°C with an allowable wind velocity of less than 25km/h
- (ii) With the falling air temperatures, work must be stopped when the temperature reaches 7°C regardless of the wind velocity and may not be restarted before the temperature is definitely rising.

(b) Moisture

Add the following at the end of the second last paragraph after “engineer”
“even if the underlying layer has been previously primed.”

(c) Surface Requirements

(iii) Tack Coat

Add the following paragraph:

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

B4206: PRODUCING AND TRANSPORTING THE MIXTURE

(b) Production of the mixture

(ii) Using drum-type mixer plants

Add the following:

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

(c) Transporting the mixture

Add the following paragraph:

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

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

Bidder:

Initial: Authorised signatory/ies: 1.

2.

DR. JSMLM:

Initial: DR. JSMLM.....

Witness:

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. 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."

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 4 kg/m²" and "5 to 6 kg/m²"

In the last sentence of the fifth paragraph, delete "between 0,6 and 1,0 mm" and replace with: "between 0,8 and 1,2 mm".

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%	98%

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

Bidder:

Initial: Authorised signatory/ies: 1.

2.

Witness:

DR. JSMLM:

Initial: DR. JSMLM.....

At least 25 % of the cores drilled on the completed asphalt layers to determine the density, must be drilled at areas near the joints."

B4211: LAYING TRIAL SECTIONS

Add the following:

"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."

Bidder:

Initial: Authorised signatory/ies: 1.

2.

DR. JSMLM:

Initial: DR. JSMLM.....

Witness:

SECTION 5600: ROAD SIGNS

B5601 SCOPE

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

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

Add the following:

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

.3.1.1 B5603 MANUFACTURING OF ROAD SIGN BOARDS AND SUPPORTS

(a) Road signboards

Add the following:

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

.3.1.2 (a)(ii) Steel profile road signboards

Add the following:

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

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

.3.1.3 B5604 ROAD SIGN FACES AND PAINTING

Add the following new sub-clause:

.3.1.4 "(e) Application of retro-reflective material

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

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

.3.1.5 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

Bidder:

Initial: Authorised signatory/ies: 1.

2.

DR. JSMLM:

Initial: DR. JSMLM.....

Witness:

B5606 ERECTING ROAD SIGNS

(c) Erection

Add the following:

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

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

B5608 DISMANTLING, STORING AND RE-ERECTING EXISTING ROAD SIGNS

Add the following:

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

Dismantling shall include sign panels and ground mounted sign supports.

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

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

B5609 MEASUREMENT AND PAYMENT

Amend the following payment item:

ITEM	UNIT
------	------

B56.01	Road sign boards with painted or coloured semi-matt background. Symbols, lettering, and borders in diamond grade retro-reflective material, where the sign board is constructed from:"	m ²
--------	--	----------------

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

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

Add the following payment item:

B56.10 Hazard plates at culverts

(a) Provision and erection of hazard plates at culvert structures as per drawing No

Bidder:

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2.

DR. JSMLM:

Initial: DR. JSMLM.....

Witness:

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

Bidder:

Initial: Authorised signatory/ies: 1.

2.

DR. JSMLM:

Initial: DR. JSMLM.....

Witness:

SECTION 5700: ROAD MARKINGS

B5702 MATERIALS

- (a) **Paint**
- (ii) Retro-reflective road-marking paint

Add to Sub-clause 5702(a)(ii) the following :

During actual painting the Contractor shall supply sealed samples of the paint to be used to the Engineer together with details of the paint batch numbers and testing carried out on these particular batches by the paint manufacturer to prove compliance with this specification. These samples shall be kept until the end of the defects liability period.

B5704 MECHANICAL EQUIPMENT FOR PAINTING

Add to Clause 5704 the following :

The machine shall always operate in the direction of the traffic when applying lane markings.

C3.4.3 PROJECT SPECIFICATIONS: ADDITIONAL SPECIFICATIONS

The following Particular Specifications are applicable to this Contract and are contained in this document.

- C3.4.3.1 REQUIREMENTS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT REGULATIONS
- C3.4.3.2 ENVIRONMENTAL MANAGEMENT PLAN
- C3.4.3.3 PROVISION OF STRUCTURED TRAINING
- C3.4.3.4 REQUIREMENTS OF EXTEND PUBLIC WORKS PROGRAMME
- C3.4.3.5 HIV /AIDS REQUIREMENTS

Bidder:
Initial: Authorised signatory/ies: 1.
2.

DR. JSMLM:
Initial: DR. JSMLM.....

Witness:

C3.4.3.1 OCCUPATIONAL HEALTH AND SAFETY ACT 1993: HEALTH AND SAFETY SPECIFICATION

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C3.4.3.1.1 INTRODUCTION

C3.4.3.1.2 SCOPE

C3.4.3.1.3 GENERAL OCCUPATIONAL HEALTH AND SAFETY PROVISIONS

C3.4.3.1.4 OPERATIONAL CONTROL

ANNEXURE 1: MEASURING INJURY EXPERIENCE

ANNEXURE 2: EXECUTIVE SHE RISK MANAGEMENT REPORT

ANNEXURE 3: LIST OF RISK ASSESSMENTS

Bidder:
Initial: Authorised signatory/ies: 1.
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Witness:

DR. JSMLM:
Initial: DR. JSMLM.....

C3.4.3.1 OCCUPATIONAL HEALTH AND SAFETY ACT 1993 : HEALTH AND SAFETY SPECIFICATION

C3.4.3.1.1 Introduction

In terms of the Construction Regulation 4(1) (a) of the Occupational Health and Safety Act, No. 85 of 1993, Dr JS Moroka Local Municipality, as the Client, is required to compile a Health & Safety Specification for any intended project and provide such specification to any prospective tenderer.

The Client's further duties are as in C3.5.1.3.1.1. below and in the Construction Regulations, 2003.

This specification has as objective to ensure that Principal Contractors entering into a Contract with the Dr JS Moroka Local Municipality achieve an acceptable level of OH&S performance. This document forms an integral part of the Contract and Principal and other Contractors should make it part of any Contracts that they may have with Contractors and/or Suppliers.

Compliance with this document does not absolve the Principal Contractor from complying with minimum legal requirements and the Principal Contractor remains responsible for the health & safety of his employees and those of his Mandataries.

C3.4.3.1.2 Scope

Development of a health & safety specification that addresses all aspects of occupational health and safety as affected by the abovementioned contract work.

The specification will provide the requirements that Principal Contractors and other Contractors will have to comply with in order to reduce the risks associated with the abovementioned contract work that may lead to incidents causing injury and/or ill health, to a level as low as reasonably practicable.

C3.4.3.1.3 General Occupational Health & Safety Provisions

(a) Hazard Identification & Risk Assessment (Construction Regulation 7)

(i) Risk Assessments

Annexure 3 contains a list of Risk Assessment headings that have been identified by **Dr JS Moroka Local Municipality** as possibly applicable to the abovementioned contract work. It is, by no means, exhaustive and is offered as assistance to Contractors intending to tender.

(ii) Development of Risk Assessments

Every Principal Contractor performing Construction work shall, before the commencement of any Construction work or work associated with the aforesaid Construction work and during such work, cause a Risk Assessment to be performed by a competent person, appointed in writing, and the Risk Assessment shall form part of the OH&S Plan and be implemented and maintained as contemplated in Construction regulation 5(1).

The Risk Assessment shall include, at least:

- the identification of the risks and hazards to which persons may be exposed to
- the analysis and evaluation of the risks and hazards identified
- a documented plan of safe work procedures to mitigate, reduce or control the risks and hazards that have been identified
- a monitoring plan and
- a review plan

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Based on the Risk Assessments, the Principal Contractor must develop a set of site-specific OH&S rules that will be applied to regulate the OH&S aspects of the construction.

The Risk Assessments, together with the site-specific OH&S rules must be submitted to the **Dr JS Moroka Local Municipality** before mobilisation on site commences.

Despite the Risk Assessments listed in Annexure 7, the Principal Contractor is required to conduct a baseline Risk Assessment and the aforesaid listed Risk Assessments must be incorporated into the base-line Risk Assessment. The baseline Risk Assessment must further include the Standard Working procedures (SWP) and the applicable Method Statements based on the Risk Assessments

All out-of-scope work must be associated with a Risk Assessment.

(iii) Review of Risk Assessments

The Principal Contractor is to review the Hazard Identification, Risk Assessments and SWP's at each Production Planning and Progress Report meeting as the Contract work develops and progresses and each time changes are made to the designs, plans and construction methods and processes.

The Principal Contractor must provide the Client, other Contractors and all other concerned-parties with copies of any changes, alterations or amendments as contemplated in above.

(b) Legal Requirements

All Contractors entering into a Contract with the **Dr JS Moroka Local Municipality** shall, as a minimum, comply with the

- Occupational Health & Safety Act and Regulations (Act 85 of 1993). A current, up-to-date copy of the OHS Act must be available on site at all times
- Compensation for Occupational Injuries & Diseases Act (Act 130 of 1993). The principal Contractor will be required to submit a letter of Registration and "good-standing" from the Compensation Insurer before being awarded the Contract. A current, up-to-date copy of the COID Act must be available on site at all times.
- Where work is being carried out on mines' premises the Contractor will have to comply with the Mine Health & Safety Act and Regulations (Act. 29 of 1996) and any other OH&S requirements that the mine may specify. A current, up-to-date copy of the OHS Act must be available on site at all times.

(c) Structure and Responsibilities

(i) Overall Supervision and Responsibility for OH&S

- * It is a requirement that the Principal Contractor, when he appoints Contractors (Sub-contractors) in terms of Construction Regulations 5(3), (5), (9), (10) and (12) he includes an OHS Act Section 37(2) agreement: "Agreement with Mandatary" in his agreement with such Contractors.
- * Any OH&S Act (85/1993), Section 16(2) appointee/s as detailed in his/her/their respective appointment forms

(ii) Further (Specific) Supervision Responsibilities for OH&S

The Contractor shall appoint designated competent employees and/or other competent persons as required by the Act and Regulations. Below is a list of identified appointments and may be used to select the appropriate appointments for the current contract:

Ref. Section/Regulation in OHS Act	
Batch Plant Supervisor	(Construction Regulation 6(1))
Construction Vehicles/Mobile Plant/Machinery Supervisor	(Construction Regulation 21)
Demolition Supervisor	(Construction Regulation 12)
Drivers/Operators of Construction Vehicles/Plant	(Construction Regulation 21)
Electrical Installation and Appliances Inspector	(Construction Regulation 22)
Emergency/Security/Fire Coordinator	(Construction Regulation 27)
Excavation Supervisor	(Construction Regulation 11)
Explosive Powered Tool Supervisor	(Construction Regulation 19)
Fall Protection Supervisor	(Construction Regulation 8)
First Aider	(General Safety Regulation 3)
Fire Equipment Inspector	(Construction Regulation 27)
Formwork & Support work Supervisor	(Construction Regulation 10)
Hazardous Chemical Substances Supervisor	(HCS Regulations)
Incident Investigator	(General Admin Regulation 29)
Ladder Inspector	(General Safety Regulation 13A)
Lifting Equipment Inspector	(Construction Regulation 20)
Materials Hoist Inspector	(Construction Regulation 17)
OH&S Committee	(OHS Act Section 19)
OH&S Officer	(Construction Regulation 6(6))
OH&S Representatives	(OHS Act Section 17)
Person Responsible for Machinery	(General Machinery Regulation 2)
Scaffolding Supervisor	(Construction Regulation 14)
Stacking & Storage Supervisor	(Construction Regulation 26)
Structures Supervisor	(Construction Regulation 9)
Suspended Platform Supervisor	(Construction Regulation 15)
Tunneling Supervisor	(Construction Regulation 13)
Vessels under Pressure Supervisor	(Vessels under Pressure Regulations)
Working on/next to Water Supervisor	(Construction Regulation 24)
Welding Supervisor	(General Safety Regulation 9)

The appointments must be in writing and the responsibilities clearly stated together with the period for which the appointment is made. This information must be communicated and agreed with the appointees.

Copies of appointments must be submitted to the **Dr JS Moroka Local Municipality** together with concise CV's of the appointees. All appointments must be officially approved by **Dr JS Moroka Local Municipality**. Any changes in appointees or appointments must be communicated to **Dr JS Moroka Local Municipality** forthwith.

The Principal Contractor must, furthermore, provide **Dr JS Moroka Local Municipality** with an organogram of all Contractors that he/she has appointed or intends to appoint and keep this list updated on a weekly basis.

Where necessary, or when instructed by the **Dr JS Moroka Local Municipality** or an Inspector of the Department of Labour, the Principal Contractor must appoint a competent OH&S Officer subject to the approval of the **Dr JS Moroka Local Municipality**

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Initial: DR. JSMLM.....

In addition **Dr JS Moroka Local Municipality** may require that a Traffic Safety Officer be appointed for any project.

(iii) Designation of OH&S Representatives (Section 18 of the OHS Act)

Where the Principal Contractor employs more than 20 persons (including the employees of other Contractors (sub-contractors) he has to appoint one OH&S Representatives for every 50 employees or part thereof. General Administrative Regulation 6 requires that the appointment OR election and subsequent designation of the OH&S Representatives are executed in consultation with Employee Representatives or Employees. (Section 17 of the Act and General Administrative Regulation 6. & 7)

OH&S Representatives have to be designated in writing and the designation must include the area of responsibility of the person and term of the designation.

(iv) Duties and Functions of the OH&S Representatives (Section 19 of the OHS Act)

The Principal Contractor must ensure that the designated OH&S Representatives conduct a minimum monthly inspection of their respective areas of responsibility using a checklist and report thereon to the Principal Contractor.

OH&S representatives must be included in accident/incident investigations

OH&S representatives must attend all OH&S committee meetings.

(v) Appointment of OH&S Committee (Section 20 of the OHS Act)

The Principal Contractor must establish an OH&S Committee consisting of all the designated OH&S Representatives together with a number of management representatives that are not allowed to exceed the number of OH&S representatives on the committee and a representative of the Client who shall act as the chairman without a vote. The members of the OH&S committee must be appointed in writing.

The OH&S Committee must meet minimum monthly and consider, at least, the following Agenda:

1. Opening & Welcome
2. Present/Apologies/Absent
3. Minutes of previous Meeting
4. Matters Arising from the previous Minutes
5. OH&S Reps Reports
6. Incident Reports & Investigations
7. Incident/Injury Statistics
8. Other Matters
9. Endorsement of Registers and other statutory documents by a representative of the Principal Contractor
10. Close/Next Meeting

(d) Administrative Controls and the Occupational Health & Safety File

The OH&S File (Construction Regulation 5 (7)

As required by Construction Regulation 5(7), the Principal Contractor and other Contractors will each keep an OH&S File on site containing the following documents as a minimum:

- * *Notification of Construction Work (Construction Regulation 3.)*
- * *Copy of OH&S Act (updated) (General Administrative Regulation 4.)*
- * *Proof of Registration and good standing with a COID Insurer (Construction Regulation 4 (g)*

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- * OH&S Programme agreed with the Client including the underpinning Risk Assessment/s & Method Statements (Construction regulation 5 (1))
 - * Copies of OH&S Committee and other relevant Minutes
 - * Designs/drawings (Construction Regulation 5 (8))
 - * A list of Contractors (Sub-Contractors) including copies of the agreements between the parties and the type of work being done by each Contractor (Construction Regulation 9)
 - * Appointment/Designation forms as per (a)(i) & (ii) above.
 - * Registers as follows:
 - * Accident/Incident Register (Annexure 1 of the General Administrative Regulations)
 - * OH&S Representatives Inspection Register
 - * Asbestos Demolition & Stripping Register
 - * Batch Plant Inspections
 - * Construction Vehicles & Mobile Plant Inspections by Controller
 - * Daily Inspection of Vehicles. Plant and other Equipment by the Operator/ Driver/User
 - * Demolition Inspection Register
 - * Designer's Inspection of Structures Record
 - * Electrical Installations, -Equipment & -Appliances (including Portable Electrical Tools)
 - * Excavations Inspection
 - * Explosive Powered Tool Inspection, Maintenance, Issue & Returns Register (incl. cartridges & nails)
 - * Fall Protection Inspection Register
 - * First Aid Box Contents
 - * Fire Equipment Inspection & Maintenance
 - * Formwork & Support work Inspections
 - * Hazardous Chemical Substances Record
 - * Ladder Inspections
 - * Lifting Equipment Register
 - * Materials Hoist Inspection Register
 - * Machinery Safety Inspection Register (incl. machine guards, lock-outs etc.)
 - * Scaffolding Inspections
 - * Stacking & Storage Inspection
 - * Inspection of Structures
 - * Inspection of Suspended Platforms
 - * Inspection of Tunnelling Operations
 - * Inspection of Vessels under Pressure
 - * Welding Equipment Inspections
 - * Inspection of Work conducted on or Near Water
 - * All other applicable records
- Greater Giyani Municipality will conduct an audit on the OH&S file of the Principal Contractor from time-to-time.
- (e) OH&S Goals & Objectives & Arrangements for Monitoring & Review of OH&S Performance
The Principal Contractor is required to maintain a CIFR of at least 8 (See Annexure 1. to this document: "Measuring Injury Experience) and report on this to **Dr JS Moroka Local Municipality** on a monthly basis
- (f) Notification of Construction Work (Construction Regulation 3.)
- The Principal Contractor must, where the Contract meets the requirements laid down in Construction Regulation 3, within 5 working days, notify the Department of Labour of the intention to carry out construction work and use the form (Annexure A in the Construction Regulations) for the purpose. A copy must be held on the OH&S File and a copy must be forwarded to **Dr JS Moroka Local Municipality** for record keeping purposes.

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Witness:

(g) Training, Awareness and Competence

The contents and syllabi of all training required by the Act and Regulations are to be included in the Principal Contractor's OH&S Plan.

(ii) General Induction Training

All members of Contractor's Site management as well as all the persons appointed as responsible for OH&S in terms of the Construction and other Regulations will be required to attend a general induction session by the Client

All employees of the Principal and other Contractors to be in possession of proof of General Induction training.

(ii) Site Specific Induction Training

The Principal Contractor will be required to develop Contract work project specific induction training based on the Risk Assessments for the Contract work and train all employees and other Contractors and their employees in this.

All employees of the Principal and other Contractors to be in possession of proof of Site Specific OH&S Induction training at all times.

(iii) Other Training

All operators, drivers and users of construction vehicles, mobile plant and other equipment to be in possession of valid proof of training.

All employees in jobs requiring training in terms of the Act and Regulations to be in possession of valid proof of training as follows:

OH&S Training Requirements: (as required by the Construction Regulations and as indicated by the OH&S Specification & the Risk Assessment/s):

- * General Induction (Section 8 of the Act)
- * Site/Job Specific Induction (also visitors) (Sections 8 & 9 of the Act)
- * Site/Project Manager
- * Construction Supervisor
- * OH&S Representatives (Section 18 (3) of the Act)
- * Training of the Appointees indicated above
- * Operators & Drivers of Construction Vehicles & Mobile Plant (Construction Regulation 21)
- * Basic Fire Prevention & Protection (Environmental Regulations 9 and Construction regulation 27)
- * Basic First Aid (General Safety Regulations 3)
- * Storekeeping Methods & Safe Stacking (Construction Regulation 26)
- * Emergency, Security and Fire Co-coordinator

(iv) Awareness & Promotion

The Principal Contractor is required to have a promotion and awareness scheme in place to create an OH&S culture in employees. The following are some of the methods that may be used:

- Toolbox Talks

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- OH&S Posters
- Videos
- Competitions
- Suggestion schemes
- Participative activities such as OH&S Safety circles.

(v) Competence

The Principal Contractor shall ensure that his and other Contractors personnel appointed are competent and that all training required to do the work safely and without risk to health, has been completed before work commences.

The Principal Contractor shall ensure that follow-up and refresher training is conducted as the contract work progresses and the work situation changes.

Records of all training must be kept on the OH&S File for auditing purposes.

(h) Consultation, Communication and Liaison

OH&S Liaison between the Client, the principal Contractor, the other Contractors, the Designer and other concerned parties will be through the OH&S committee as contemplated in above.

In addition to the above, communication may be directly to the Client or his appointed Agent, verbally or in writing, as and when the need arises.

Consultation with the workforce on OH&S matters will be through their Supervisors, OH&S Representatives, the OH&S committee and their elected Trade Union Representatives, if any.

The Principal Contractor will be responsible for the dissemination of all relevant OH&S information to the other Contractors e.g. design changes agreed with the Client and the Designer, instructions by the Client and/or his/her agent, exchange of information between Contractors, the reporting of hazardous/dangerous conditions/ situations etc.

The Principal Contractor will be required to do Site Safety Walks with **Dr JS Moroka Local Municipality** at least on a basis to be determined between the two parties.

The Principal and other Contractors will be required to conduct Toolbox Talks with their employees on a weekly basis and records of these must be kept on the OH&S File. Employees must acknowledge the receipt of Toolbox Talks which record must, likewise be kept on the OH&S File.

The Principal Contractors most senior manager on site will be required to attend all **Dr JS Moroka Local Municipality** OH&S meetings and a list of dates, times and venues will be provided to the Principal Contractor by **Dr JS Moroka Local Municipality**

(i) Checking, Reporting and Corrective Actions

(i) Monthly Audit by Client (Construction Regulation 1(d)

Dr JS Moroka Local Municipality will be conducting a Monthly Audit to comply with Construction Regulation 4(1)(d) to ensure that the principal Contractor has implemented and is maintaining the agreed and approved OH&S Plan.

(ii) Other Audits and Inspections by **Dr JS Moroka Local Municipality**:

Dr JS Moroka Local Municipality reserves the right to conduct other ad hoc audits and inspections as deemed necessary. This will include Site Safety Walks.

(iii) Conducting an Audit

A representative of the Principal Contractor must accompany **Dr JS Moroka Local Municipality** on all Audits and Inspections and may conduct his/her own audit/inspection at the same time. Each party will, however, take responsibility for the results of his/her own audit/inspection results.

(iv) Contractor's Audits and Inspections

The Principal Contractor is to conduct his own monthly internal audits to verify compliance with his own OH&S Management system as well as of with this specification.

(v) Inspections by OH&S Representative's and other Appointees

OH&S Representatives must conduct weekly inspections of their areas of responsibility and report thereon to their foreman or supervisor whilst other appointees must conduct inspections and report thereon as specified in their appointments e.g. vehicle, plant and machinery drivers, operators and users must conduct daily inspections before start-up.

(vi) Recording and Review of Inspection Results

All the results of the abovementioned inspections to be in writing, reviewed at OH&S committee meetings, endorsed by the chairman of the meeting and placed on the OH&S File.

(vii) Reporting of Inspection Results

The Principal Contractor is required to provide the Client with a monthly report in the format as per the attached Annexure 2: "SHE Risk Management Report"

(j) Incident Reporting and Investigation

Reporting of Accidents and Incidents (Section 24 and General Administrative Regulation 8 of the OHS Act)

The Principal Contractor must report all incidents where an employee is injured on duty to the extent that he/she:

- * dies
- * becomes unconscious
- * loses a limb or part of a limb
- * is injured or becomes ill to such a degree that he/she is likely either to die or to suffer a permanent physical defect or likely to be unable for a period of at least 14 days either to work or continue with the activity for which he/she was usually employed

OR where:

- * a major incident occurred
- * the health or safety of any person was endangered
- * where a dangerous substance was spilled
- * the uncontrolled release of any substance under pressure took place
- * machinery or any part of machinery fractured or failed resulting in flying, falling or uncontrolled moving objects
- * machinery ran out of control

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Witness:

to **Dr JS Moroka Local Municipality** within two days and to the Provincial Director of the Department of Labour within seven days (Section 24 of the Act & General Administrative Regulation 8.) EXCEPT that, where a person has died, has become unconscious for any reason or has lost a limb or part of a limb or may die or suffer a permanent physical defect, the incident must be reported to both **Dr JS Moroka Local Municipality** and the Provincial Director of the Department of Labour forthwith by telephone, telefax or E-mail.

The Principal Contractor is required to provide **Dr JS Moroka Local Municipality** with copies of all statutory reports required in terms of the Act within 7 days of the incident occurring.

The Principal Contractor is required to provide **Dr JS Moroka Local Municipality** with copies of all internal and external accident/incident investigation reports including the reports contemplated below within 7 days of the incident occurring.

Accident and Incident Investigation (General Administrative Regulation 9)

The Principal Contractor is responsible for the investigation of all accidents/incidents where employees and non-employees were injured to the extent that he/she/they had to be referred for medical treatment by a doctor, hospital or clinic

The results of the investigation to be entered into the Accident/Incident Register listed in above.

The Principal Contractor is responsible for the investigation of all minor and non-injury incidents as described in Section 24 (1) (b) & (c) of the Act and keeping a record of the results of such investigations including the steps taken to prevent similar accidents in future.

The Principal Contractor is responsible for the investigation of all road traffic accidents and keeping a record of the results of such investigations including the steps taken to prevent similar accidents in future.

The **Dr JS Moroka Local Municipality** reserves the right to hold its own investigation into an incident or call for an independent external investigation.

C3.4.3.1.4 Operational Control

(a) Emergency Preparedness, Contingency Planning and Response

The Principal Contractor must appoint a competent person to act as Emergency Controller/ Coordinator. The Principal Contractor must conduct an emergency identification exercise and establish what emergencies could possibly develop. He/she must then develop detailed contingency plans and emergency procedures, taking into account any emergency plan that **Dr JS Moroka Local Municipality** may have in place.

The Principal Contractor and the other Contractors must hold regular practice drills of contingency plans and emergency procedures to test them and familiarise employees with them.

(b) First Aid (General Safety Regulation 3)

The Principal Contractor must provide First Aid equipment (including a stretcher) and have qualified First Aider/s as required by General Safety Regulation 3 of the OHS Act.

The Contingency Plan of the Principal Contractor must include the arrangements for speedily and timeously transporting injured/ill person/s to a medical facility or of getting emergency medical aid to person/s that may require it.

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The Principal Contractor must have firm arrangements with his other Contractors in place regarding the responsibility of the other Contractors injured/ill employees.

(c) Security

The Principal Contractor must establish site access rules and implement and maintain these throughout the construction period. Access control must include the rule that non-employees will not be allowed on site unaccompanied.

The Principal Contractor must develop a set of Security rules and procedures and maintain these throughout the construction period

(d) Fall Protection (Working in Elevated Positions (Construction regulation 8.)

A pre-emptive Risk Assessment will be required for any work to be carried out above two metres from the ground or any floor level and will be classified as "Work in Elevated Positions".

As far as is practicable, any person working in an elevated position will work from a platform, ladder or other device that is at least as safe as if he/she is working at ground level and whilst working in this position be wearing a single belt with lanyard that will be worn to prevent the person falling from the platform, ladder or other device utilised. This safety belt will be, as far as is possible, secured to a point away from the edge over which the person might fall and the lanyard must be of such a length that the person will not be able to move over the edge.

Alternatively any platform, slab, deck or surface forming an edge over which a person may fall may be fitted with guard rails at two different heights as prescribed in SABS 085: Code of Practice for the Design, Erection, Use and Inspection of Access Scaffolding.

Where the requirement in is not practicable, the person will be provided with a full body harness that will be worn and attached above the wearer's head at all times and the lanyard must be fitted with a shock absorbing device OR the person must be attached to an approved, by AL, fall arrest system.

Where the requirements are not practicable, a suitable catch net must be erected.

Workers working in elevated positions must be trained to do this safely and without risk to health
Where work on roofs is carried out, the Risk Assessment must take into account the possibility of persons falling through fragile material. Skylights and openings in the roof.

(e) Structures (Construction Regulation 9)

The Principal Contractor must ensure that:

- Steps are taken to ensure that no structure becomes unstable or collapses due to construction work being performed on it or in the vicinity of it
- No structure is overloaded to the extent where it becomes unsafe
- He/she has received from the designer the following information:
 - Information on known or anticipated hazards relating to the construction work and the relevant information required for the safe execution of the construction work
 - A geo-scientific report (where applicable)
 - The loading the structure is designed to bear
 - The methods and sequence of the construction process

- all drawings pertaining to the design are on site and available for inspection

(f) Formwork & Support Work (Construction Regulation 10.)

- Formwork & Support work (F&SW) must be carried out under the supervision of competent person designated in writing
- F&SW structures must be so designed, erected, supported, braced and maintained that it will be able to support any vertical or lateral loads that may be applied
- No load to be imposed onto the structure that the structure is not designed to carry
- F&SW must be erected in accordance with the structural design drawings for that F&WS and, if there is any uncertainty, the designer must be consulted before proceeding with the erection/use of the F&WS
- All drawings pertaining to the F&SW must be kept available on site
- All equipment used in the erection of F&WS must be checked by a competent person before use
- The foundation or base upon which F&SW is erected must be able to bear the weight and keep the structure stable
- Employees erecting F&SW must be trained in the safe work procedures for the erection, moving and dismantling of F&SW
- Safe access (and emergency escape) must be provided for workers
- A competent person must inspect F&SW structures that have been erected before, during and after pouring of concrete or the placing of any other load and thereafter daily until the F&SW is stripped. The results of all inspections must be recorded in a register kept on site
- The F&SW must be left in place until the concrete has reached sufficient strength to bear its own weight plus any additional weight that may be imposed upon it and not until the designated competent person has authorised its stripping in writing
- Any damaged F&SW must be repaired/rectified immediately
- Deck panels must be secured against displacement
- The slipping of persons on release agents on deck panels prevented
- Persons health must be protected against the use of solvents, oils or other similar substances

(g) Excavations (Construction Regulation 11.)

Where excavations will exceed 1,5 m in depth the Contractor will be required to submit a Method Statement to Dr JS Moroka Local Municipality for approval before commencing with the excavation and Dr JS Moroka Local Municipality will issue a permit to proceed once the Risk Assessment and Method Statement are approved.

- Excavation work must be carried out under the supervision of a competent person who has been appointed in writing
- Before excavation work begins the stability of the ground must be evaluated
- Whilst excavation work is being performed, the contractor must take suitable and sufficient steps to prevent any person from being buried or trapped by a fall or dislodgement of material
- No person may be required or permitted to work in an excavation that has not been adequately shored or braced or where:
 - the excavation is in stable material or where
 - the sides of the excavation are sloped back to at least the maximum angle of repose measured relative to the horizontal plane
- The shoring or bracing may not be left out unless written permission has been obtained from the appointed competent person and shoring and bracing must be designed and constructed to safely support the sides of the excavation

Bidder:

Initial: Authorised signatory/ies: 1.

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Witness:

- Where uncertainty exists regarding the stability of the soil the opinion of a competent professional engineer or professional technologist must be obtained whose opinion will be decisive. The opinion must be in writing and signed by the engineer or technologist as well as the appointed excavator
- No load or material may be placed near the edge of an excavation if it is likely to cause a collapse of the trench unless suitable shoring has been installed to be able to carry the additional load
- Any neighbouring building, structure or road that may be affected or endangered by the excavation must be protected from damage or collapse
- Every excavation must be provided with means of access that must be within 6 metres of any worker within the excavation
- The location and nature of any existing services such as water, electricity, gas etc. must be established before any excavation is commenced with and any service that may be affected by the excavation must be protected and made safe for workers in the excavation
- Every excavation including the shoring and bracing or any other method to prevent collapse must be inspected by the appointed competent person as follows:
 - Daily before work commences
 - After every blasting operation
 - After an unexpected collapse of the excavation
 - After substantial damage to any supports
 - After rain

The results of any inspections must be recorded in a register kept on site

- Every excavation accessible to the public or that is adjacent to a public road or thoroughfare or that threatens the safety of persons, must be adequately barricaded or fenced to at least one metre high and as close to the excavation as practicable and
- Provided with warning lights or visible boundary indicators after dark or when visibility is poor
- Upon entering an excavation the requirements of General Safety Regulation 5 must be observed:
 - **any** confined space may only be entered after the air quality has been tested to ensure that it is safe to breathe and does not contain any flammable mixture or
 - **the** confined space has been purged and ventilated of any hazardous or flammable gas, vapour, dust or fumes and
 - **the** safe atmosphere must be maintained or
 - **employees** have to be using breathing apparatus and wearing a safety harness with a rope with the free end of the rope being attended to by a person outside the confined space, furthermore,
 - **an** additional person trained in resuscitation must be in full-time attendance immediately outside the confined space and
 - **additional** breathing and rescue apparatus must be kept immediately outside the confined space for rescue purposes
 - **all** pipes, ducts etc. that may leak into the confined space to be blanked off sufficiently to prevent any leakage or seepage
 - **the** employer must ensure that all employees have left the confined space after the completion of work
 - **where** flammable gas is present in a confined space no work may be performed in close proximity to the flammable atmosphere that may ignite the flammable gas or vapour.

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(h) Demolition Work (Construction Regulation 12.)

- Demolition work to be carried out under the supervision of a competent person who has been appointed in writing
- A detailed structural engineering survey of the structure to be demolished to be carried out and a method statement on the procedure to be followed in demolishing the structure to be developed by a competent person, before any demolition may be commenced
- As demolishing progresses the structural integrity of the structure to be checked at intervals as determined in the method statement by the appointed competent person in order to prevent any premature collapse
- Steps must be taken to ensure that where a structure is being demolished:
 - no floor, roof or any other part of the structure is overloaded with debris or material that would make it unsafe
 - precautions are taken to prevent the collapse of the structure when any frame or support is cut or removed
 - shoring or propping is applied where necessary
 - No person must be required or allowed to work under unsupported overhanging material

THE STABILITY OF AN ADJACENT BUILDING, STRUCTURE OR ROAD MUST BE MAINTAINED AT ALL TIMES

- The location and nature of any existing services such as water, electricity, gas etc. must be established before any demolition is commenced with and any service that may be affected by the demolition must be protected and made safe for workers
- Every stairwell in a building being demolished must be adequately illuminated
- Convenient and safe means of access must be provided
- A catch platform or net must be erected over every entrance to the building or structure being demolished where the likelihood exists of material or debris falling on persons entering and leaving and every other area where the likelihood exists of material or debris falling on persons, must be fenced or barricaded
- No material may be dropped on the outside of the building unless the area into which it is dropped is fenced off or barricaded
- Waste and debris may only be disposed of from a height in a chute with the following design:
 - Adequately constructed and rigidly fastened
 - If inclined >45 degrees enclosed on all four sides
 - Fitted with a gate or control mechanism to control the flow of material that may not freefall down the chute
 - Discharged into a container or a barricaded area
 - Demolition equipment may only be used on floors or slabs that are able to support it
- Asbestos related work must be conducted to the requirements of the Asbestos regulations promulgated under the OHS Act and in particular Asbestos Regulation 21:
 - Demolition of asbestos may only be carried out by a registered (with the Department of Labour) Asbestos Contractor
 - All asbestos materials likely to become airborne must be identified
 - A Plan of Work must be submitted for approval to an Approved Asbestos Inspection Authority (AAIA) (approved by the Department of Labour) 30 days prior to commencement of demolishing work unless the Plan was drawn up by an AAIA and a signed (by all parties) copy must be submitted to the Department of Labour 14 days before commencement of the demolishing

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Bidder:

Initial: Authorised signatory/ies: 1.

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Witness:

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During demolition work:

- all asbestos containing material must be disposed of safely workers must be issued with appropriate PPE and the proper use thereof enforced
- After the demolition has been completed the area/premises must be thoroughly checked to ensure that all asbestos waste has been removed
- No person is allowed to:
 - Use compressed air or permit the use of compressed air to remove asbestos dust from any surface or person
 - Smoke, eat, drink or keep food or beverages in an area not specifically designated for this
 - Apply asbestos by spraying

Lead related work must be conducted to the requirements of the Lead regulations promulgated under the OHS Act

Where demolition work will involve the use of explosives a method statement must be developed by a competent person in accordance with applicable explosives legislation.

(i) Tunnelling (Construction Regulation 13.)

- To be performed in accordance with the Tunnelling Regulations as published under the Mines Health & Safety Act (29 of 1996)
- No person shall enter a *tunnel that has a height dimension less than 800 mm
 - * Definition of Tunnelling: "the construction of any tunnel beneath the natural surface of the earth for the purpose other than the searching for or winning of a mineral

(j) Access Scaffolding (Construction Regulation 14)

Access Scaffolding must be erected, used and maintained safely in accordance with Construction Regulation 14 and SA Bureau of Standards Code of Practice, SANS 085 entitled, "The Design, Erection, Use & Inspection of Access Scaffolding.

Detailed consideration must be given to all scaffolding to ensure that it is properly planned to meet the working requirements, designed to carry the necessary loadings and maintained in a sound condition. It must also be ensured that there is sufficient material available to erect the scaffolding properly.

Scaffolding may only be erected, altered or dismantled by a person who has adequate training and experience in this type of work or under the supervision of such a person.

(k) **Suspended Platforms & Boatswains Chairs (Construction Regulation 15 & 16)**

The Contractor to design, erect, use and maintain suspended platforms in accordance with the requirements of Construction Regulation 15.

Boatswains chairs are to be erected, used maintained and inspected in accordance with the requirements of Construction Regulation 16.

(l) **Batch Plants (Construction Regulation 18)**

The Contractor to erect, operate and maintain Batch Plants in accordance with the requirements of Construction Regulation 18.

Explosive Powered Tools (Construction Regulation 19)

Every Explosive Powered Tools (EPT) must be:

- Provided with a guard around the muzzle to confine flying fragments or particles
- A firing mechanism that will prevent the EPT from firing unless it is pushed against the surface and at right angle (where the EPT is fitted with an intermediate piston between the charge and the nail this requirement is waived)

Bidder:

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Witness:

The Contractor or user must ensure that:

- Only the correct type of cartridge is used
- The EPT is cleaned inspected and cleaned daily before use by an appointed competent person who keeps register with the findings of his inspection and the details of cleaning, service and repairs
- The safety devices are in good working order before the EPT is use
- When the EPT is not being used it is stored in an unloaded condition together with the cartridges in a safe/secure place inaccessible to unauthorised persons
- A warning notice is displayed at the point where the EPT is in use
- The issue and return of cartridges must be by issue/returns register signed by both issuer and user and empty cartridge cases must be returned with unspent cartridges
- Users/operators of the EPT have received the necessary training and has been authorised as competent to use/operate the EPT
- Users/operators must wear the prescribed PPE whilst using/operating the tool

(m) **Cranes & Lifting Equipment (Construction Regulation 20)**

Cranes and Lifting equipment must be designed and constructed in accordance with generally accepted technical standards and operated, used, inspected and maintained in accordance with the requirements of Driven Machinery Regulation 8 of the OHS Act:

- to be clearly and conspicuously marked with the maximum mass load (MML) that it is designed to carry safely. When the MML varies with the conditions of use, the a table should be used by the driver/operator
- each winch on a lifting machine must al all time have, at least, three full turns of rope on the drum when the winch has been run to its lowest limit
- fitted with a brake or other device capable of holding the MML. This brake or device to automatically prevent the downward movement of the load when the lifting power is interrupted
- fitted with a load limiting device that automatically arrest the lift when
- the load reaches its highest safe position or
- when the mass of the load is greater than the MML
- every chain or rope on a lifting machine that forms an integral part of the machine must have a factor of safety as prescribed by the manufacturer of the machine and where no standard is available the factor of safety must be:
 - chains – 4 (four)
 - steel wire ropes - 5 (five)
 - fibre ropes - 10 (ten)
- every hook or load attaching device must be designed such or fitted with a device that will prevent the load from slipping off or disconnecting
- every lifting machine must be inspected and load tested by a competent person every time it has been dismantled and re-erected and every 12 months after that. The load test must be in accordance with the manufacturers prescription or to 110% of the MML
- in addition all ropes, chains, hooks or other attaching devices, sheaves, brakes and safety
- devices forming an integral part of a lifting machine must be inspected every 6 months by a competent person
- all maintenance, repairs, alterations and inspection results must be recorded in a log book
- and each lifting machine must have its own log book.
- no person may be lifted by a lifting machine not designed for lifting persons unless in a cradle approved by the inspector of the Department of Labour
- every jib crane with an MML of 5 000 kg or more at minimum jib radius must be provided
- with a load indicator or a load lifting limiting device

Bidder:

Initial: Authorised signatory/ies: 1.

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Witness:

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Lifting Tackle:

- to be manufactured of sound material, well constructed and free from patent defects
- to be clearly and conspicuously marked with ID number and MML
- factor of safety:
 - Natural fibre ropes - 10(ten)
 - Man-made fibre ropes & woven webbing - 06(six)
 - Steel wire ropes – single rope - 06(six)
 - Steel wire ropes – combination slings - 08(eight)
 - Mild Steel chains - 05(five)
 - High tensile/alloy steel chains - 04(four)
- steel wire ropes must be discarded (not used any further for lifting purposes) when excessive wear and corrosion is evident and must be examined by a competent person every three months for this purpose and the results recorded.

Operator

- Every lifting machine operator must be trained specifically for the type of lifting machine that he/she is operating
- Operators of Jib cranes with a MML of 5 00 kg or more must be in possession of a certificate of training issued by an accredited (by The Department of Labour) training provider.

Construction Regulation 20:

Where tower cranes (TC) are used:

- account must be taken of the effects of wind force on the structure
- account must be taken of the bearing capacity of the ground on which the TC is to be erected
- the bases for the TC and tracks for rail mounted TC's must be firm and level
- must be erected at a safe distance from excavations
- clear space must be provided and maintained for erection, operation, maintenance and dismantling
- TC operators must be competent to carry out the work safely
TC operators must be in possession of a valid medical certificate testifying that the holder is physically and psychologically fit to work on a TC.

All lifting operations where the lift will exceed 2000 kg must be planned by a competent person and the plan submitted to Dr JS Moroka Local Municipality for approval and permission to carry out the lift.

(n) Construction Vehicles & Mobile Plant (Construction Regulation 21)

Construction Vehicles and Mobile Plant will be inspected by Dr JS Moroka Local Municipality prior to being allowed on a project site and suppliers of hired vehicles, plant and equipment will be required to comply with this specification as well as the OHS Act and Regulations.

Construction Vehicles and Mobile Plant (CV&MP) to be:

- of acceptable design and construction
- maintained in good working order
- used in accordance with their design and intention for which they were designed
- operated/driven by trained, competent and authorised operators/ drivers. No unauthorised persons to be allowed to drive CV&MP

Bidder:

Initial: Authorised signatory/ies: 1.

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Witness:

- operators and drivers of CV&MP must be in possession of a valid medical certificate declaring the operator/drive physically and psychologically fit to operate or drive CV&MP
- provided with safe and suitable means of access
- fitted with adequate signalling devices to make movement safe including reversing
- excavations and other openings must be provided with sufficient barriers to prevent CV&MP from falling into same
- provided with roll-over protection
- inspected daily before start-up by the driver/operator/user and the findings recorded in a register/log book
- CV&MP to be fitted with two head and two tail lights whilst operating under poor visibility conditions
- No loose tools, material etc. is allowed in the driver/operators compartment/cabin nor in the compartment in which any other persons are transported
- CV&MP used for transporting persons must have seats firmly secured and sufficient for the number of persons being transported

No person may ride on a CV&MP except for in a safe place provided for the purpose

The construction site must be organised to facilitate the movement of CV&MP and that pedestrians and other vehicles are not endangered. Traffic routes to be suitable, sufficient in number and adequately demarcated

CV&MP left unattended after hours adjacent to roads and areas where there is traffic movement must be fitted with lights reflectors or barricades to prevent moving traffic to come into contact with the parked CV&MP.

In addition CV&MP left unattended after hours must be parked with all buckets, booms etc. full lowered, the emergency brakes engaged and, where necessary, the wheels chocked, the transmission in neutral and the motor switched off and the ignition key removed and stored safely

Workers employed adjacent or on public roads must wear reflective safety vests

All CV&MP inspection records must be kept in the OH&S File

(o) Electrical Installations (Construction Regulation 22)

The installation of temporary electricity for Construction shall be in accordance with the Construction regulation 22 and the Electrical Installation Regulations.

The Contractor must ensure that:

- existing services are located and marked before construction commences and during the progress thereof
- where the abovementioned is not possible, workers with jackhammers etc. are protected against electric shock by the use of suitable protective equipment e.g. rubber mats, insulated handles etc
- electrical installations and -machinery are sufficiently robust to withstand working conditions on site
- temporary electrical installations must be inspected at least once per week by a competent person and a record of the inspections kept on the OH&S File
- electrical machinery used on a construction site must be inspected daily before start-up by the competent driver/operator or any other competent person and a record of the inspections kept on the OH&S File
- all temporary electrical installations must be controlled by a competent person appointed in writing

(p) Electrical & Mechanical Lock-Out

Bidder:

Initial: Authorised signatory/ies: 1.

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Witness:

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An electrical and mechanical lock-out procedure must be developed by the Principal Contractor and submitted to Dr JS Moroka Local Municipality for approval before construction commences. This lock-out procedure to be adhered to by all Contractors on site.

(q) Use & Storage of Flammables (Construction Regulation 23)

The Contractor to ensure that:

- No person is required or permitted to work in a place where there is the danger of fire or an explosion due to flammable vapours being present unless adequate precautions are taken
- No flammable is used or applied e.g. in spray painting, unless in a room or cabinet or other enclosure specially designed and constructed for the purpose unless there is no danger of fire or explosion due to the application of adequate ventilation
- The workplace is effectively ventilated. Where this cannot be achieved:
 - Employees must wear suitable respiratory equipment
 - No smoking or other sources of ignition is allowed in the area
 - The area is conspicuously demarcated as “flammable”
- Flammables stored on a construction site are stored in a well-ventilated, reasonably fire-resistant container, cage or room that is kept locked with access control measures in place and sufficient fire fighting equipment installed and fire prevention methods practised e.g. proper housekeeping
- Flammables stored in a permanent flammables store are stored so that no fire or explosion is caused i.e.:
 - stored in a locked well-ventilated reasonably fire resistant container, cage or room conspicuously demarcated as “Flammable Store – No Smoking or Naked Lights”
 - the flammables store to be constructed of two-hour fire retardant walls and roof and separated from adjoining rooms or workplaces by means of a two-hour fire retardant fire wall
 - Adequate and suitable fire fighting equipment installed around the flammables store and marked with the prescribed signs
 - All electrical switches and fittings to be of a flameproof design
 - Any work done with tools in a flammables store or work areas to be of a non-sparking nature
 - No Class A combustibles such as paper, cardboard, wood, plastic, straw etc. to be stored together with Flammables
 - The flammable store to be designed and constructed to, in the event of spillage of liquids in the store, to contain the full quantity + 10% of the liquids stored
 - A sign indicating the capacity of the store to be displayed on the door
 - Only one day's quantity of Flammable is to be kept in the workplace
 - Containers (including empty containers) to be kept closed to prevent fumes/vapours from escaping and accumulating in low lying areas
 - Metal containers to be bonded to earth whilst decanting to prevent build-up of static
 - Welding and other flammable gases to be stored segregated as to type of gas and empty and full cylinders

(r) Working on or Near Water (Construction Regulation 24)

The Principal Contractor must ensure that, where construction work is being carried out over or in close proximity to water:

- Measures are in place to prevent workers from falling into the water and drowning. These measure to include the availability of lifejackets
- Measures are in place to rescue any worker/ that has fallen into the water
- Measures for the timeous warning of flooding are in place

Bidder:

Initial: Authorised signatory/ies: 1.

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Witness:

(s) Housekeeping (Construction Regulation 25)

The Contractor to ensure that:

- Housekeeping is continuously implemented
- Materials & equipment are properly stored
- Scrap, waste & debris are removed regularly
- Materials placed for use are placed safely and not allowed to accumulate or cause obstruction to free flow of pedestrian and vehicular traffic
- Waste & debris not to be removed by throwing from heights but by chute or crane
- Where practicable, Construction sites are fenced off to prevent entry of unauthorised persons
- Catch platforms or –nets are erected over entry and exit ways or over places where persons are working to prevent them being struck by falling objects
- An unimpeded work space is maintained for every employee
- Every workplace is kept clean, orderly and free of tools etc. that are not required for the work being done materials
- As far as is practicable, every floor, walkway, stair, passage and gangway is kept in good state of repair, skid-free and free of obstruction, waste and materials
- The walls and roof of every indoors workplace is sound and leak-free
- Openings in floors, hatchways, stairways and open sides of floors or buildings are barricaded, fences, boarded over or provided with protection to prevent persons from falling

(t) Stacking & Storage (Construction Regulation 27)

The Contractor/Employer must ensure that:

- A competent person is appointed in writing to supervise all stacking and storage on a construction site
- Adequate storage areas are provided and demarcated
- The storage areas are kept neat and under control
- The base of any stack is level and capable of sustaining the weight exerted on it by the stack
- The items in the lower layers can support the weight exerted by the top layers.
- Cartons and other containers that may become unstable due to wet conditions are kept dry
- Pallets and containers are in good condition and no material is allowed to spill out
- The height of any stack does not exceed 3X the base unless stepped back at least half the depth of a single container at least every fifth tier or
- the approval of an inspector has been obtained to build the stacks higher with the aid of a machine. (The operator of the machine must be protected against items falling from overhead off the stack and no items may overhang)
- The articles that make up a single tier are consistently of the same size, shape and mass
- Structures for supporting stacks are structurally sound and able to support the mass of the stack
- No articles are removed from the bottom of the stack first but from the top tier first
- Anybody climbing onto a stack can and does do it safely and that the stack is sufficiently stable to support him/her
- Stacks that are in danger of collapsing are broken down and restacked
- Stability of stacks are not threatened by vehicles or other moving plant and machinery
- Stacks are built in a header and stretcher fashion and that corners are securely bonded
- Stepped back at least half the depth of a single container at least every fifth tier
- Persons climbing onto stacks do not approach unguarded moving machinery or electrical installations

Bidder:

Initial: Authorised signatory/ies: 1.

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Witness:

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- (u) Storage of Flammables and Hazardous Chemicals (Hazardous Chemical Substances Regulations)
See (u) above and (v) below.

Fire Prevention and Protection

The Principal Contractor must ensure that:

- The risk of fire is avoided
- Sufficient & suitable storage of flammables is provided
- Sources of ignition is obviated wherever flammable or highly combustible material is present in the workplace e.g.:
 - notices prohibiting smoking is displayed and enforced
 - welding and flame cutting is only allowed under controlled conditions that includes written hot work permits
 - only spark-free hand and power tools are used
 - no grinding, cutting and shaping of ferrous metals are allowed using electrically driven power tools that produces sparks
 - flameproof switches & fittings are to be used in the flammable atmosphere
 - Good housekeeping is maintained to prevent the accumulation of unnecessary combustibles
 - Adequate ventilation is maintained
 - Adequate and suitable fixed and portable fire appliances is provided and maintained in good working order.
 - Maintenance must include:
 - Regular inspection by a competent person appointed in writing and keeping a register
 - Annual inspection and service by an accredited service provider
- All employees are instructed in the use of the Fire equipment and know how to attempt to extinguish a fire
- A sufficient number of employees are appointed and trained to act as Emergency Team to deal with fires and other emergencies
- Employees are informed re. emergency evacuation procedures and escape routes
- Emergency escape routes are kept clear at all times
- After evacuation assembly points are demarcated
- Evacuation is practised to ensure that all is evacuated timeously
- Roll-call is held after evacuation to account for all personnel and ensure that no-one has been left behind.
- A clearly audible to all persons on site siren or alarm is fitted

(v) Eating, Changing, Washing & Toilet Facilities (Construction Regulation 28)

The following will be the minimum requirements:

Toilets

The provision of Toilets is required in terms of the National Building Regulations and Construction Regulation 28.

Chemical toilets are allowed instead of the water borne sewerage type. Toilets have to be provided at a ratio of 1 toilet per 30 workers

Showers

At least cold water showers of some sort have to be provided to a ratio of 1 shower per 15 workers.

Change Rooms

Some form of screened off changing facility must be provided separately for each sex.

Eating Facility

Some form of shelter from the sun, wind and rain must be provided

Bidder:

Initial: Authorised signatory/ies: 1.

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Witness:

(w) Living Accommodation

Where the site is in a remote location and transport home is not readily available, reasonable and suitable living accommodation must be provided.

(x) Personal & Other Protective Equipment (Sections 8/15/23 or the OHS Act)

The Contractor is required to identify the hazards in the workplace and deal with them. He must either remove them or, where impracticable take steps to protect workers and make it possible for them to work safely and without risk to health under the hazardous conditions.

Personal Protective equipment (PPE) should, however, be the last resort and there should always first be an attempt to apply engineering and other solutions to mitigating hazardous situations before the issuing of PPE is considered.

Where it is not possible to create an absolutely safe and healthy workplace the Contractor is required to inform employees regarding this and issue, free of charge, suitable equipment to protect them from any hazards being present and that allows them to work safely and without risk to health in the hazardous environment.

It is a further requirement that the said equipment be maintained by the Contractor, that he instructs and trains the employees in the use of the equipment and ensures that the prescribed equipment is used by the employee/s.

Employees do not have the right to refuse to use/wear the equipment prescribed by the employer and, if it is impossible for an employee to use or wear prescribed protective equipment through health or any other reason, the employee cannot be allowed to continue working under the hazardous condition/s for which the equipment was prescribed but an alternative solution has to be found that may include relocating or discharging the employee.

The Contractor may not charge any fee for protective equipment prescribed by him/her but may charge for equipment under the following conditions:

- Where the employee requests additional issue in excess of what is prescribed
- Where the employee has patently abused or neglected the equipment leading to early failure
- Where the employee has lost the equipment

All employees shall, as a minimum, be required to wear the following PPE on any Dr JS Moroka Local Municipality projects:

- **Protective overalls**
- **Protective footwear**
- **Protective headwear**
- **Eye/face protection**

(y) Portable Electrical Tools & Equipment (Electrical Machinery Regulation 9)

Portable electrical tools and equipment includes every unit that takes electrical power from a 15 amp. plug point and is moved around for use in the workplace i.e. drills, saws, grindstones, portable lights, etc. In addition electrical appliances such as fridges, hotplates, heaters, etc. must be inspected and maintained to the same standards as portable electrical tools and appliances.

The use, inspection and maintenance of portable electrical tools and equipment must be governed by the following:

- Regular inspections by a competent person appointed in writing
- Inspection results must be recorded in a register
- Only competent authorised persons are allowed to use portable electrical tools and equipment
- The correct protective equipment is worn/used whilst operating portable electrical tools and equipment

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Portable Electrical Tools

- Must be maintained in good condition at all times to prevent an electrical shock to the user
- The main source must incorporate an earth leakage protection device or receive power through a double wound transformer or be double insulated and clearly marked as such
- All equipment must be fitted with a switch to allow for safe & easy starting and stopping

Portable Lights

- Must be fitted with a robust non-hygroscopic non-conducting handle
- Live metal parts/parts which may become live must be protected against contact
- The lamp must be protected by a strong guard
- The cable lead-in must withstand rough handling
- It is suggested that a register be kept for each piece of equipment and findings of regular inspections must be entered
- Inspections must concentrate on plug, cord, switch and any obvious faults
- When used in wet/damp/metal container conditions, it must be protected as for portable electrical tools, above

(z) Public Health & Safety (Section 9 of the OHS Act)

The Principal Contractor will be responsible for ensuring that non-employees affected by the construction work are made aware of the dangers likely to arise from said construction work as well as the precautionary measures to be observed to avoid or minimise those dangers. This includes:

- Non- employees entering the site for whatever reason
- The surrounding community
- Passers by to the site

Appropriate signage must be posted to this effect and all employees on site must be instructed on ensuring that non-employees are protected at all times

All non-employees entering the site must receive induction into the hazards and risks and the control measures for these.

(aa) Hazardous Chemical Substances

The Contractor/Employer must ensure that:

- Employees receive the necessary information & training to be able to use and store HCS safely
- Employees obey lawful instructions regarding:
 - the wearing and use of protective equipment
 - the use and storage of HCS
 - the prevention of the release of HCS
 - the wearing of exposure monitoring and measuring equipment
 - the cleaning up and disposal of materials containing HCS
 - housekeeping, personal hygiene and the protection of the environment
 - the Risk Assessments required in terms of Construction Regulation 7 include employee exposure to HCS and that the necessary to protect persons from being detrimentally affected by HCS present or used in the workplace, are taken
 - suppliers provide the necessary information in the form of a Material Safety Data Sheet (MSDS) regarding an HCS required to ensure the safe use and storage of that HCS

Bidder:

Initial: Authorised signatory/ies: 1.

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Witness:

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- an up-to-date list is kept on site of HCS's stored and used together with the MSDS's of the said HCS's
- HCS containers are clearly marked as to the contents and main hazardous category e.g. "Flammable" or "Corrosive" and the reference number of the HCS on the list indicated above
- HCS e.g. Asbestos dust is not cleared by the use of compressed air but is vacuumed
- No person eats or drinks in a HCS workplace
- HCS waste is disposed of safely in terms of hazardous waste disposal requirements

(ab) Project/Site Specific Requirements

See Annexure 3

Annexure 1: Measuring Injury Experience

Annexure 2: Executive SHE Risk Management Report

Annexure 3: List of Risk Assessments

Bidder:

Initial: Authorised signatory/ies: 1.

2.

Witness:

DR. JSMLM:

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ANNEXURE 1: MEASURING INJURY EXPERIENCE

Injury experience has traditionally been measured by the use of a disabling injury frequency rate, the so-called "DIFR". The DIFR is calculated by multiplying the number of disabling injuries by 1 million and dividing by the number of man-hours worked.

Lately the DIFR has been replaced internationally with a DIIR: disabling injury incidence rate. The only difference between the two rates are that the 10 million in the calculation is replaced with 200 000. (200 000 purported to be the number of hours and average person works in a lifetime.)

The use of the two rates above has proved to be somewhat problematical as they are open to manipulation and disabling injuries are often "hidden" by returning the injured employee to the workplace so as not to lose a shift and therefore having to register a disabling injury.

The Construction Industry recently decided to promote the use of a new frequency rate based on the number of compensation injury claims as these are more difficult to hide or manipulate because the reporting of compensable injuries is a legal requirement.

The industry is hoping that adoption of this new measurement of injury experience will enable the industry to monitor itself as far as work related injuries are concerned.

Below follows an explanation of this new rating system.

COMPENSATION INCIDENCE FREQUENCY RATE (CIFR)

FORMULA

No. of Compensation Claims X 200 000

*220 man hours X No. of Employees

DEFINITIONS

No. of Compensation

Claims: **The number of claims lodged with the COID insurer for the period under review**

200 000: The fixed factor to align the rate with other rates used internationally

Man-hours Worked

Include: * Hourly Paid Employees
 * Sub-contractors (No. of Employees X *220 each)
 * Staff (No. of Employees X *220 hours each)

220 man-hours: The *average number of hours worked by one employee in one month in the Construction industry.

* Overtime, absence on leave or sick leave, unrecorded after hours time worked by senior and middle management factored into this average.

No. of Employees: The actual or average number of employees employed for the period under review.

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ANNEXURE 2: EXECUTIVE SHE RISK MANAGEMENT REPORT

The SAFCEC OH&S committee recently developed the following report in an attempt to standardise on reporting and assist contractors in obtaining a clear picture of their SHE Risk Management performance. It is hoped that clients will also accept this standardised report. Your comments/suggestions for improvement is invited.

EXAMPLE ONLY: ALL INFORMATION IS FICTITIOUS

XYZ construction

*SHE RISK MANAGEMENT REPORT

PERIOD JANUARY TO MARCH 2002

*(SHE = Safety, Health & Environment)

1. Introduction

We hope that this new format of quarterly SHE Risk Management reporting will provide a clear picture of the company's performance as far as occupational health & safety is concerned.

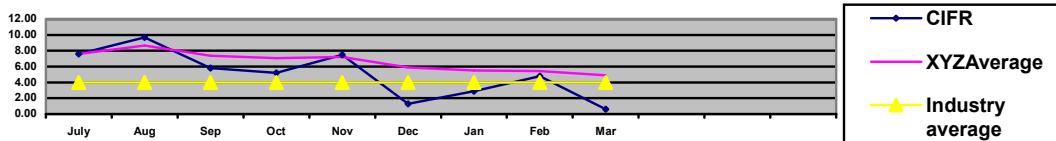
The first quarter of 2002 generally reflected an improvement in injury experience and shows a decline in the number of injuries. Although Building was the only division where there was an increase in compensation claims, figures are still well down from the average 2001 figures. A sub-contractor experienced one fatality.

All divisions are eagerly awaiting the final implementation in May of the new electronic SHE Management system that will make the tools to implement the SHE programme available to all management and supervisory staff.

2. Incident Statistics

Compensation Incident Frequency Rate (CIFR)

$$\text{CIFR} = \frac{\text{Total No. of Claims against the Workmen's Compensation Fund} \times 200\,000}{\text{Man-hours worked}}$$



2.

2. Disabling Injury Incidence Rate (DIIR)

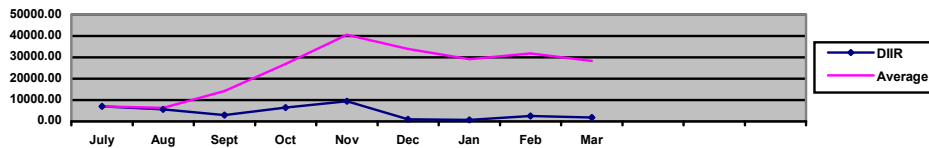
$$\text{DIIR} = \frac{\text{No. Disabling Injuries} \times 200\,000}{\text{Manhours worked}}$$

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2.3. Other Major Incidents

Three other major incidents were experienced in the period under review:

- 2.3.1. A major trench collapsed at Job. 00123: XYZ Head Office, Bochum: No personnel injured, extensive damage to foundations: 3 days delay.
- 2.3.2. A concrete dumper ran away when its brakes failed. It smashed into the glass façade of the building on Job 00332: McDonalds, Polokwane. The driver jumped off and was not injured. Cost of damage to façade: R45 000.
- 2.3.3. A storage hut on Job 00567: BP Petrol Station, Swartruggens was demolished by fire when the night watchman made a fire inside the storage hut which contained concrete vibrators and levelling machines. Cost of replacing the hut and machines: R30 000

3. RISK AREAS

The following items of concern need priority consideration by management:

- 3.1. New employees must undergo pre-employment medical examinations to:
 - protect XYZ from claims at a later stage
 - ensure that only healthy persons are employed
 - prevent injuries and illness in the workplace
 - enhance XYZ image
- 3.2. Vehicle drivers and plant operators must be instructed to inspect their vehicles daily before start-up using the prescribed checklists to ensure that these are safe to operate and in good condition.

4. AUDITS

Three SHE audits were conducted in February and March:

- 4.1. Job 00432: Gillooly's Mall Compliance: 56%(*)
 Job 00786: Cullinan Head Office Compliance: 83%(***)
 Job 00589: Cleveland Station Compliance: 76%(***)

4.2. TRAINING

One hundred and forty two employees, representing 7% of employees, attended nine training courses. *
 Our objective is to train 5,5% of employees quarterly.

Month	No. of Employees Trained	Course	Source
January	26	Induction	Internal

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	15 3	OH&S Reps Crane Drivers	Consultant External
February	23 17	Induction OH&S Reps	Internal Consultant
March	43 9 3 3	Induction OH&S Reps Bomag Rollers First Aiders	Internal Consultant Supplier St. John's

6. LEGAL ISSUES

- 6.1. An inspector of the Department of Labour issued an improvement notice on Job 00987: Gillooly's Mall. The notice requires that all scaffolding comply with the SABS standards for the Erection and Maintenance of Access Scaffolding (SABS 085). This is currently being attended to and the inspector will return on 15 April 2002 to ascertain if the notice has been complied with.

8. OCCUPATIONAL AND OTHER HEALTH MATTERS

8.1. HIV Aids

The proposed SAFCEC clinic will soon be operational and we will then be able to send our employees who have tested positive to the clinic for counselling and eventual treatment when necessary

The mobile clinic saw and tested fifty employee volunteers at 3 sites this month. Eighteen of them tested positive.

8.2. Tuberculosis

The mobile clinic will be calling at Gillooly's Mall and Cleveland Station on 15 and 16 October respectively to screen employees for TB.

8.3. Noise

All suspected noise pollution areas have been tested and the results are awaited. Employees working in areas testing over 85dBa will be issued with suitable hearing protectors.

9. ENVIRONMENTAL MEASURES

- Inspectors from the Mpumalanga Department of the Environment visited Siyabuswa and inspected the site and yard. They gave it a "clean bill of health" and advised that we should increase the dust control measures by spraying roads three times per day instead of the present twice per day.

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ANNEXURE 3: LIST OF RISK ASSESSMENTS

- * Clearing & Grubbing of the Area/Site
- * Site Establishment including:
 - Office/s
 - Secure/safe storage for materials, plant & equipment
 - Ablutions
 - Sheltered eating area
 - Maintenance workshop
 - Vehicle access to the site
- * Dealing with existing structures
- * Location of existing services
- * Installation and maintenance of temporary construction electrical supply, lighting and equipment
- * Adjacent land uses/surrounding property exposures
- * Boundary and access control/Public Liability Exposures (NB: the Employer is also responsible for the OH&S of non-employees affected by his/her work activities.)
- * Health risks arising from neighbouring as well as own activities and from the environment e.g. threats by dogs, bees, snakes, lightning etc.
- * Exposure to noise
- * Exposure to vibration
- * Protection against dehydration and heat exhaustion
- * Protection from wet & cold conditions
- * Dealing with HIV/Aids and other diseases
- * Use of Portable Electrical Equipment including
 - Angle grinder
 - Electrical drilling machine
 - Skill saw
- * Excavations including
 - Ground/soil conditions
 - Trenching
 - Shoring
 - Drainage of trench
- * Welding including
 - Arc Welding
 - Gas welding
 - Flame cutting
 - Use of LP gas torches and appliances
- * Loading & offloading of trucks
- * Aggregate/sand and other materials delivery
- * Manual and mechanical handling
- * Lifting and lowering operations
- * Driving & operation of construction vehicles and mobile plant including
 - Trenching machine
 - Excavator
 - Bomag roller
 - Plate compactor
 - Front end loader
 - Mobile cranes and the ancillary lifting tackle
 - Parking of vehicles & mobile plant
 - Towing of vehicles & mobile plant

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- * Use and storage of flammable liquids and other hazardous substances
- * Layering and bedding
- * Installation of pipes in trenches
- * Pressure testing of pipelines
- * Backfilling of trenches
- * Protection against flooding
- * Gabion work
- * Use of explosives
- * Protection from overhead power lines
- * As discovered by the Principal Contractor's hazard identification exercise
- * As discovered from any inspections and audits conducted by the Client or by the Principal Contractor or any other Contractor on site
- * As discovered from any accident/incident investigation.

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C3.4.3.2

ENVIRONMENTAL MANAGEMENT PLAN

CONTENTS

C3.4.3.2.1	SCOPE
C3.4.3.2.2	DEFINITIONS
C3.4.3.2.3	IDENTIFICATION OF ENVIRONMENTAL ASPECTS AND IMPACTS
C3.4.3.2.4	LEGAL REQUIREMENTS
C3.4.3.2.5	ADMINISTRATION OF ENVIRONMENTAL OBLIGATIONS
C3.4.3.2.6	TRAINING
C3.4.3.2.7	ACTIVITIES/ASPECTS CAUSING IMPACTS
C3.4.3.2.8	ENVIRONMENTAL MANAGEMENT OF CONSTRUCTION ACTIVITIES
C3.4.3.2.9	RECORD KEEPING
C3.4.3.2.10	COMPLIANCE AND PENALTIES
C3.4.3.2.11	MEASUREMENT AND PAYMENT

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C3.4.3.2.1. SCOPE

This environmental management programme (EMP) sets out 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 General Conditions of Contract, and the project specifications, 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. In the event that any conflict occurs between the terms of the EMP and the project specifications or Record of Decision, the terms herein shall be subordinate.

The EMP is a dynamic document subject to similar influences and changes as are brought by variations to the provisions of the project specification. Any substantial changes shall be submitted to the Roads Agency Limpopo in writing for approval.

The EMP identifies the following:

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.

Actions that shall be taken in the event of non-compliance.

C3.4.3.2.2. DEFINITIONS

Alien Vegetation: alien vegetation is defined as undesirable plant growth which shall include, but not be limited to, all declared category 1 and 2 listed invader species as set out in the Conservation of Agricultural Resources Act (CARA) regulations. Other vegetation deemed to be alien shall be 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: a construction activity is any action taken by the contractor, his subcontractors, suppliers or personnel during the construction process as defined in the South African National Roads Agency Limited and National Roads Act, 1998 (Act No. 7, 1998)

Environment: environment means the surroundings within which humans exist and that could be made up of -

- the land, water and atmosphere of the earth;
- micro-organisms, plant and animal life;
- any part or combination of (i) and (ii) and the interrelationships among and between them; and
- the physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and well-being.

Environmental Aspect: an environmental aspect is any component of a contractor's construction activity that is likely to interact with the environment.

Environmental Impact: an impact or environmental impact is the 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.

Record of Decision: a record of decision is a written statement from the Limpopo Department of Economic Development, Environment and Tourism that records its approval of a planned undertaking to improve, upgrade

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or rehabilitate a section of road and the mitigating measures required to prevent or reduce the effects of environmental impacts during the life of a contract.

Road Reserve: the road reserve is a corridor of land, defined by co-ordinates and proclamation, within which the road, including access intersections or interchanges, is situated. A road reserve may, or may not, be bounded by a fence.

Road Width: for the purposes of the EMP, the road width is defined as the area within the road reserve i.e. fence line to fence line, but also includes all areas beyond the road reserve that are affected by the continuous presence of the road, e.g. a reach of a water course.

C3.4.3.2.3. IDENTIFICATION OF ENVIRONMENTAL ASPECTS AND IMPACTS

The contractor shall identify likely aspects before commencing with any construction activity. Examples of environment aspects include:

- waste generation
- stormwater discharge
- emission of pollutants into the atmosphere
- chemical use operations
- energy use operations
- water use operations
- use of natural resources
- noise generation

Thereafter 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. If prevention is not practicable, or in the event of mishap or misapplication, the contractor shall provide plans and measures for the engineer's approval, which will limit and contain the magnitude, duration and intensity of the impact. The contractor shall demonstrate that he/she is capable of carrying out any repair and reinstatement of the damaged environment. These requirements shall be concurrent with the time constraints to produce an approved construction programme according to subclause 8.3 as amended by Particular Condition of the general conditions of contract and clause B1204 of these project specifications.

Listed below are some environmental impacts that could adversely alter an aspect of the environment through usual construction activities:

Pollution of atmosphere, soil or water

Destruction or removal of fauna and flora and effect on biological diversity

Deformation of the landscape

Soil erosion

Destruction of historical/heritage sites

Effect on the built environment

Effect on agricultural land and wetlands

General good construction practice will play an important role in avoiding the occurrence of an Impact. The contractor's attention is drawn, in this regard, to C1008. Environmental Management of Construction Activities

C3.4.3.2.4. LEGAL REQUIREMENTS

a) General

Construction will 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 environmental statutory legislation and in terms of the additional conditions to the general conditions of contract that pertain to this project. In the event that any rights and obligations contained in this document 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 conversant with all legislation pertaining to the environment, including provincial and local government ordinances, which may be applicable to the contract.

C3.4.3.2.5. ADMINISTRATION OF ENVIRONMENTAL OBLIGATIONS

a) Appointment of a Designated Environmental Officer (DEO)

For the purposes of implementing the conditions contained herein, the contractor shall submit to the engineer for approval the appointment of a nominated representative of the contractor as the DEO for the contract. The request shall be given, in writing, at least fourteen days before the start of any work clearly setting out reasons for the nomination, and with sufficient detail to enable the engineer to make a decision. The engineer will, within seven days of receiving the request, approve, reject or call for more information on the nomination. Once a nominated representative of the contractor has been approved he/she shall be the DEO and shall be the responsible person for ensuring that the provisions of the EMP are complied with during the life of the contract. The engineer will be responsible for issuing instructions to the contractor where environmental considerations call for action to be taken. The DEO shall submit regular written reports to the engineer, but not less frequently than once a month.

The engineer shall have the authority to instruct the contractor to replace the DEO if, in the engineer's opinion, the appointed officer is not fulfilling his/her duties in terms of the requirements of the EMP or this specification. Such instruction will be in writing and shall clearly set out the reasons why a replacement is required.

There shall be an approved DEO on the site at all times.

b) Administration

Before the contractor begins each construction activity the DEO shall give to the engineer a written statement setting out the following:

The type of construction activity.

Locality where the activity will take place.

Identification of the environmental aspects and impacts that might result from the activity.

Methodology for impact prevention for each activity or aspect.

Methodology for impact containment for each activity or aspect.

Emergency/disaster incident and reaction procedures.

Treatment and continued maintenance of impacted environment.

The contractor may provide such information in advance of any or all construction activities provided that new submissions shall be given to the engineer whenever there is a change or variation to the original.

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The 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.

c) Good Housekeeping

The Contractor shall undertake "good housekeeping" practices during construction as stated in clause 1217 of the COLTO Standard Specifications for Roads and Bridges and subclauses 4.18 and 11.11 of the General Conditions of Contract. This will help avoid disputes on responsibility and allow for the smooth running of the contract as a whole. Good housekeeping extends beyond the wise practice of construction methods that leaves production in a safe state from the ravages of weather to include the care for and preservation of the environment within which the site is situated.

C3.4.3.2.6. TRAINING

The designated environmental officer (DEO) must be conversant with all legislation pertaining to the environment applicable to this contract and must be appropriately trained in environmental management and must 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. The environmental training should, as a minimum, include the following:

- The importance of conformance with all environmental policies
- The environmental impacts, actual or potential, of their work activities;
- The environmental benefits of improved personal performance;
- Their roles and responsibilities in achieving conformance with the environmental policy and procedures and with the requirement of the Agency's environmental management systems, including emergency preparedness and response requirements;
- The potential consequences of departure from specified operating procedures;
- The mitigation measures required to be implemented when carrying out their work activities.

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/she intends concluding his environmental training obligations.

C3.4.3.2.7. ACTIVITIES/ASPECTS CAUSING IMPACTS

A list of possible causes of environmental impacts that occur during construction activities is given in Table 7/1: Aspects or Activities that Cause Environmental Impacts during Construction Activities, which is to be found at the end of this part. This list is not exhaustive, and shall be used for guideline purposes only.

C3.4.3.2.8 ENVIRONMENTAL MANAGEMENT OF CONSTRUCTION ACTIVITIES

a) Site Establishment

i) Site Plan

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 construction can begin, the contractor shall submit 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 treatment facilities for litter, kitchen refuse, sewage and workshop-derived effluents. The site offices should not be sited in

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close proximity to steep areas, as this will increase soil erosion. Preferred locations would be flat areas along the route. If the route traverses water courses, streams and rivers, it is recommended that the offices, and in particular the ablution facilities, aggregate stockpiles, spoil areas and hazardous material stockpiles are located as far away as possible from any water course as possible. Regardless of the chosen site, the contractor's intended mitigation measures shall be indicated on the plan. The site plan shall be submitted not later than the first site meeting. Detailed, electronic colour photographs shall be taken of the proposed site before any clearing may commence. These records are to be kept by the engineer for consultation during rehabilitation of the site. Read with COLTO Specification 1302(a), 1402 (e).

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 felled or 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.

The project specification for the rehabilitation of the grass cover shall be strictly adhered to. Any proclaimed weed or alien species that propagates during the contract period shall be cleared by hand before seeding. (Read in conjunction with COLTO Specification 5801(b), 5802(b), (c), (d) and (e), 5804, 5805, 5806 and 5807). Fires shall only be allowed in facilities or equipment specially constructed for this purpose. A firebreak shall be cleared and maintained around the perimeter of the camp and office sites.

iii) Rehabilitation

The area where the site offices were erected will 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.

iv) Water for human consumption

Water for human consumption shall be available at the site offices and at other convenient locations on site.

All effluent water from the camp / office sites shall be disposed of in a properly designed and constructed system, situated so as not to adversely affect water sources (streams, rivers, pans dams etc). Only domestic type wastewater shall be allowed to enter this drain.

v) 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 treatment

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Particular reference in the site establishment plan shall be given to the treatment of sewage generated at the site offices, site laboratory and staff accommodation and at all localities on the site where there will be a concentration of labour. Sanitary arrangements should be to the satisfaction of project management, the local authorities and legal requirements.

Safe and effective sewage treatment 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 subcontractor. The type of sewage treatment 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 serviced on a regular basis. The positioning of the chemical toilets shall be done in consultation with the engineer. Read with COLTO Specifications 1402(g) and 1404(a).

Toilets and latrines shall be easily accessible and shall be positioned within walking distance from wherever employees are employed on the works. 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 blowing 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 engineer.

c) Waste Management

The contractor's intended methods for waste management and waste minimisation shall be implemented at the outset of the contract. 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 for collection and disposal. A refuse control system shall be established for the collection and removal of refuse to the satisfaction of the engineer. Disposal of solid waste shall be at a Department of Water Affairs and Forestry (DWAF) licensed landfill site or at a site approved by DWAF in the event that an existing operating landfill site is not within reasonable distance from the site offices and staff accommodation. No waste shall be burned or buried at or near the site offices, or anywhere else on the site, including the approved solid waste disposal site. Read with COLTO Specification 1404(a).

ii) Litter

No littering by construction workers shall be allowed. During the construction period, the facilities shall be maintained in a neat and tidy condition and the site shall be kept free of litter. Measures shall be taken to reduce the potential for litter and negligent behaviour with regard to the disposal of all refuse. At all places of work the contractor shall provide litter collection facilities for later safe disposal at approved sites. (Read with COLTO Specification 1302(b)).

iii) Hazardous waste

Hazardous waste such as bitumen, tar, oils etc. shall be disposed of in a Department of Water Affairs and Forestry approved landfill site. Special care shall be taken to avoid spillage of tar or bitumen products such as binders or pre-coating fluid to avoid water-soluble phenols from entering the ground or contaminating water.

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Under no circumstances shall the spoiling of tar or bituminous products on the site, over embankments, in borrow pits or any burying, be allowed. Unused or rejected tar or bituminous products shall be returned to the supplier's production plant. Any spillage of tar or bituminous products shall be attended to immediately and affected areas shall be promptly reinstated to the satisfaction of the engineer.

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 whether it is serviced on the site (i.e. at the place of construction activity or at a formalised workshop).

i) Safety

All the necessary handling and safety equipment required for the safe use of petrochemicals and oils shall be provided by the contractor to, and used or worn by, the staff whose duty it is to manage and maintain the contractor's and his subcontractor's and supplier's plant, machinery and equipment.

ii) Hazardous Material Storage

Petrochemicals, oils and identified hazardous substances shall only be stored under controlled conditions. All hazardous materials e.g. tar or bitumen binders shall be stored in a secured, appointed area that is fenced and has restricted entry. Storage of tar or bituminous products shall only take place using suitable containers to the approval of 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 engineer with details of the preventative measures he proposes to install in order to mitigate against 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 in the event of misuse or spillage that will negatively affect an individual or the environment.

iii) Fuel and Gas Storage

Fuel shall be stored in a secure area in a steel tank 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 spillage or overflow 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.

iv) 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. Water and oil should be separated in an oil trap. Oils collected in this manner, shall be retained in a safe holding tank and removed from site by a specialist oil recycling company for disposal at approved waste disposal sites for

toxic/hazardous materials. Oil collected by a mobile servicing unit shall be stored in the service unit's sludge tank and discharged into the safe holding tank for collection by the specialist oil 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. Soils contaminated by oils and lubricants shall be collected and disposed of at a facility designated by the local authority to accept contaminated materials.

e) 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 plan of action shall first be submitted to the engineer for his approval.

The plan 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 subsequent inspections. The contractor shall be responsible for the re-establishment of grass within the road reserve boundaries for all areas disturbed during road construction. This includes, for example, service roads, stockpile areas, stop/go facilities, windrows and wherever material generated for, or from, road construction has to be stored temporarily or otherwise within the road reserve, or at designated or instructed areas outside the road reserve. This responsibility shall extend until expiry of the defects notification period.

f) Soil Management

i) Topsoil

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. The areas to be cleared of topsoil shall include the storage areas. All topsoil stockpiles and windrows shall be maintained throughout the contract period in a weed-free condition. Weeds appearing on the stockpiled or windrowed topsoil shall be removed by hand. Soils contaminated by hazardous substances shall be disposed of at an approved Department of Water Affairs and Forestry waste disposal site. (Read with COLTO Specifications 3104(a), 5802(a), (g), 5804(a), (b) and (c)). The topsoil stockpiles shall be stored, shaped and sited in such a way that they do not interfere with the flow of water to cause damming or erosion, or itself be eroded by the action of water. Stockpiles of topsoil shall not exceed a height of 2m, and if they are to be left for longer than 6 months, shall be analysed, and if necessary, upgraded before replacement. Stockpiles shall be protected against infestation by weeds.

The contractor shall ensure that no topsoil is lost due to erosion – either by wind or water. Areas to be topsoiled and grassed shall be done so systematically to allow for quick cover and reduction in the chance of heavy topsoil losses due to unusual weather patterns. The contractor's programme shall clearly show the proposed rate of progress of the application of topsoil and grassing. The contractor shall be held responsible for the replacement, at his own cost, for any unnecessary loss of topsoil due to his failure to work according to the progress plan approved by the engineer. The contractor's responsibility shall also extend to the clearing of drainage or water systems within and beyond the boundaries of the road reserve that may have been affected by such negligence.

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ii) Subsoil

The subsoil is the layer of soil immediately beneath the topsoil. It shall be removed, to a depth instructed by the engineer, and stored separately from the topsoil if not used for road building. This soil shall be replaced in the excavation in the original order it was removed for rehabilitation purposes.

g) Drainage

The quality, quantity and flow direction of any surface water runoff shall be established prior to disturbing any area for construction purposes. Cognisance shall be taken of these aspects and incorporated into the planning of all construction activities. Before a site is developed or expanded, it shall be established how this development or expansion will affect the drainage pattern. Recognised water users / receivers shall not be adversely affected by the expansion or re-development. No water source shall be polluted in any way due to proposed changes.

Streams, rivers, pans, wetlands, dams, and their catchments shall be protected from erosion and 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 or tar products.

The contractor shall submit to the engineer his proposals for prevention, containment and rehabilitation measures against environmental damage of the identified water and drainage systems that occur on the site. Consideration shall be given to the placement of sedimentation ponds or barriers where the soils are of a dispersive nature or where toxic fluids are used in the construction process. The sedimentation ponds must be large enough to contain runoff so that they function properly under heavy rain conditions.

h) Earthworks and Layerworks

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 sections C1008 (e) and C1008 (g). 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 Minerals and Energy that before entry into any quarry or borrow pit, an EMP 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 the approved EMP or a copy thereof, prior to entry into the quarry or borrow pit. The conditions imposed by the relevant EMP 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 EMP 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 Bill of Quantities. (Read with COLTO Specification 3100 and 3200).

ii) Excavation, hauling and placement

The contractor shall provide 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,

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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. (Read with COLTO Standard Specification clauses 1217 and 3309)

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 engineer for his approval. The location of these spoil sites shall have signed approval from the affected landowner before submission to 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.

Spoil sites will be shaped to fit the natural topography. These sites shall receive a minimum of 75mm topsoil and be grassed with the recommended seed mixture. Slopes shall not exceed a vertical: horizontal ratio of 1:3. Only under exceptional circumstances will approval be given to exceed this ratio. Appropriate grassing measures to minimise soil erosion shall be undertaken by the contractor. This will 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 (Read with COLTO standard Specifications clause 1214). The contractor's costs incurred in obtaining the necessary certification for opening and closing of spoil sites shall be deemed to be included in the Tendered rates for spoiling.

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 direct to and placed at the point where it is to be used. However, should temporary stockpiling become necessary, the areas for the stockpiling of excavated and imported material shall be indicated and demarcated on the site plan submitted in writing to the engineer for his approval, together with the contractor's proposed measures for prevention, containment and rehabilitation against environmental damage.

The areas chosen shall have no naturally occurring 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 at all times ensure that they are:

- Positioned and sloped to create the least visual impact;
- Constructed and maintained so as to avoid erosion of the material and contamination of surrounding environment; and
- Kept free from all alien/undesirable vegetation.

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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 landscaped, top soiled, grassed and maintained at the contractor's cost until clearance from the engineer and the relevant Authority 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 condition 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 drawing or under instruction from the engineer. In all cases, the engineer shall approve the areas for stockpiling and disposal of construction rubble before any operation commences and shall approve their clause only when they have been satisfactorily rehabilitated. (Read with COLTO Specification 3203 and 4306).

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 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 all details of the dwellings/structures/services including existing positions, lengths and widths 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 manner in which he intends to advertise to the adjacent communities and/or road users the times and delays to be expected for each individual blast.

i) Batching sites

Asphalt plants are considered scheduled processes listed in the second schedule to the Atmospheric Pollution Prevention Act, 1965 (Act No. 45 of 1965). Should the use of an asphalt plant be considered on site, the contractor shall be responsible to obtain the necessary permit from the Department of Environmental Affairs and Tourism, regardless of where they are sited.

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 Department of Minerals and Energy legislation as well as the applicable industrial 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. In addition, the selection, entry onto, operation, maintenance, closure and rehabilitation of such sites shall be the same as for those under section C1008(h)(iii), with the exception that the contractor shall provide additional measures to prevent, contain and rehabilitate against environmental damage from toxic/hazardous substances. In this regard the contractor shall provide plans that take into account such additional measures as concrete floors, bunded storage facilities, linings to drainage channels and settlement dams. Ultimate approval of these measures shall be from the relevant national authority, as shall approval of closure. The engineer will assist the contractor in his submissions to the relevant authority.

Effluent from concrete batch plants and crusher plants shall be 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.

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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

j) Spillages

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 tar or 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 treatment lies with the contractor. The individual responsible for, or who discovers a hazardous waste spill must report the incident to his/her DEO or to the engineer. The Designated Environmental Officer 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

Should water downstream of the spill be polluted, and fauna and flora show signs of deterioration or death, specialist hydrological or ecological advice will be sought for appropriate treatment and remedial procedures to be followed. 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.

k) Areas of Specific Importance

Any area, as determined and identified within the project document as sensitive or of special interest within the site shall be treated according to the express instructions contained in these specifications or the approved EMP. 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. However, the overriding principle is that such defined areas requiring protection shall not be changed. Every effort to identify such areas within the site will have been made prior to the project going out to tender. The discovery of other sites with archaeological or historical interest that have not been identified shall require ad hoc treatment.

i) Archaeological Sites

If an artefact on site is uncovered, work in the immediate 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 Research Agency (SAHRA) is to be contacted who will appoint an archaeological consultant. Work may only resume once clearance is given in writing by the archaeologist. (Read with COLTO General Condition of Contract Subclause 4.24 as amended by Particular Condition).

ii) Graves and middens

If a grave or midden is uncovered on site, or discovered before the commencement of work, then all work in the immediate vicinity of the graves/middens shall be stopped and the engineer informed of the discovery. The South African Heritage Research Agency (SAHRA) should be contacted and in the case of graves, arrangements made for an undertaker to carry out exhumation and reburial. The employer will be responsible for attempts to contact family of the deceased and for the site where the exhumed remains can be re-interred. (Read with COLTO General Conditions of Contract Subclause 4.24 as amended by Particular Condition).

l) Noise Control

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The contractor shall endeavour to keep noise generating activities to a minimum. Noises that could cause a major disturbance, for instance blasting and crushing activities, should only be carried out during daylight hours. Compliance with the appropriate legislation with respect to noise shall be mandatory. Should noise generating activities have to occur at night the people in the vicinity of the drilling shall be warned about the noise well in advance and the activities kept to a minimum.

m) Dust Control

Dust caused by strong winds shall be controlled by means of water spray vehicles. Dust omission from batching plants shall be subject to the relevant legislation and shall be the subject of inspection by the relevant office of the Department of Minerals and Energy.

n) Alien Vegetation

The contractor shall be held responsible for the removal of alien vegetation within the road reserve disturbed during road construction. 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 or otherwise within the road reserve. This responsibility shall extend for the duration of the defects notification period.

C3.4.3.2.9. RECORD KEEPING

The engineer and the DEO will continuously monitor the contractor's adherence to the approved impact prevention procedures and the engineer shall issue to the contractor a notice of non-compliance whenever transgressions are observed. The DEO should document the nature and magnitude of the non-compliance in a designated register, the action taken to discontinue the non-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.

Copies of any record of decision or EMP's 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 or relevant environmental departments.

C3.4.3.2.10. COMPLIANCE AND PENALTIES

The contractor shall act immediately when such 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 a verbal report given at the monthly site meetings. Any avoidable non-compliance with the above-mentioned measures shall be considered sufficient ground for the imposition of a penalty

THE FOLLOWING PENALTIES SHALL APPLY FOR ENVIRONMENTAL VIOLATIONS:

A) UNNECESSARY REMOVAL OR DAMAGE TO TREES

- | | |
|---|--------------------|
| • 2600MM GIRTH OR LESS | : R 5 000 PER TREE |
| • GREATER THAN 2600MM, BUT LESS THAN 6180MM GIRTH | : R10 000 PER TREE |
| • GREATER THAN 6180MM GIRTH | : R30 000 PER TREE |

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B) Serious violations:

- Hazardous chemical/oil spill and/or dumping in Non-approved sites. : R10 000 per incident
- General damage to sensitive environments. : R 5 000 per incident
- Damage to cultural and historical sites. : R 5 000 per incident
- Uncontrolled/unmanaged erosion (plus rehabilitation at contractor's cost). : R 1 000 to R5 000 per incident
- Unauthorised blasting activities. : R 5 000 per incident
- Pollution of water sources. : R10 000 per incident

The engineer's decision with regard to what is considered a violation, its seriousness and the penalty imposed shall be final.

C) Less serious violations:

- Littering on site. : R1 000 per incident
- Lighting of illegal fires on site. : R1 000 per incident
- Persistent or un-repaired fuel and oil leaks. : R1 000 per incident
- Excess dust or excess noise emanating from site. : R1 000 per incident
- Dumping of milled material in side drains or on grassed Areas : R1 000 per incident
- Possession or use of intoxicating substances on site. : R 500 per incident
- Any vehicles being driven in excess of designated speed limits. : R 500 per incident
- Removal and/or damage to flora or cultural or heritage objects on site, and/or killing of wildlife : R2 000 per incident
- Illegal hunting. : R2 000 per incident
- Urination and defecation anywhere except in designated areas. : R 500 per incident

The engineer's decision with regard to what is considered a violation, its seriousness and the penalty imposed shall be final. The calculation shall include allied construction activities in the same way as the calculation of reduced payments under section 8200. The imposition of such a penalty shall not preclude the relevant provincial or national authority from applying an additional penalty in accordance with its statutory powers. Any non-compliance with the agreed procedures of the EMP is a transgression of the various statutes and laws that define the manner by which the environment is managed. Failure to redress the cause shall be reported to the relevant authority for them to deal with the transgression, as it deems fit.

C3.4.3.2.11. MEASUREMENT AND PAYMENT

"The cost of complying with this specification shall be deemed to be included in the rates tendered for this contract."

Item

Unit

C100.01 Penalty for unnecessary removal or damage to trees for the following diameter sizes

- | | | |
|-----|---|-------------|
| (a) | 2600mm girth or less | number (No) |
| (b) | Greater than 2600mm, but less than 6180mm girth | number (No) |
| (c) | Greater than 6180mm girth | number (No) |

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The unit of measurement shall be the number of trees by diameter size removed unnecessary or damaged. The penalty rates applied shall be those stated in clause C3.5.2.10.

Item

		Unit
C100.02	Penalty for serious violations	
(a)	Hazardous chemical/oil spill and/or dumping in non-approved sites	number (No)
(b)	General damage to sensitive environments	
(c)	Damage to cultural and historical sites	number (No)
(d)	Pollution of water sources	number (No)
(e)	Unauthorised blasting activities	number (No)
(f)	Uncontrolled/unmanaged erosion per incident, depending on environment impacts, plus rehabilitation at contractor's cost)	number (No)

The unit of measurement for C100.02 (a) to (f) shall be the number of serious violation incidents. The penalty rates to be applied shall be those stated in clause C3.5.2.10.

Item

	Unit
C100.03	Penalty for less serious violations
•	Littering on site
•	Lighting of illegal fires on site
•	Persistent or un-repaired fuel and oil leaks
•	Excess dust or excess noise emanating from site
•	Dumping of milled material in side drains or on grassed areas
•	Possession or use of intoxicating substances on site
•	Any vehicles being driven in excess of designated speed limits
•	Removal and/or damage to flora or cultural or heritage objects on site, and/or killing of wildlife
•	Illegal hunting
•	Urination and defecation anywhere except in designated areas

The unit of measurement shall be the number of less serious violation incidents. The penalty rates applied shall be those stated in clause C3.5.2.10.

The engineer's decision with regard to what is considered a violation, its seriousness and the penalty imposed shall be final. The calculation shall include allied construction activities in the same way as the calculation of reduced payments under section 8200. The imposition of such a penalty shall not preclude the relevant provincial or national authority from applying an additional penalty in accordance with its statutory powers. Any non-compliance with the agreed procedures of the EMP is a transgression of the various statutes and laws that define the manner by which the environment is managed.

Failure to redress the cause shall be reported to the relevant authority for them to deal with the transgression, as it deems fit.

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Table 1: Mechanisms that Cause Environmental Impacts during Construction Activities

SECTION	CONTENTS	ENVIRONMENTAL IMPACTS				
		POLLUTION TYPE	DEFORMATION OF LANDSCAPE	SOIL EROSION	ALIEN VEGETATION	SENSITIVE AREAS (to be completed by compiler)
1300	Camp Establishment	Waste treatment Hazardous waste Water supply Spillage Storage	Selection of site Preserve indigenous vegetation Preserve topsoil	Selection of site Preserve indigenous vegetation Preserve topsoil	Preserve indigenous vegetation Preserve topsoil Management of weeds	
1400	Housing, Offices and laboratories	Waste treatment Hazardous waste Water supply Spillage Storage Noise/lights	Selection of site Preserve indigenous vegetation Preserve topsoil Demarcate sensitive areas	Selection of site Preserve indigenous vegetation Preserve topsoil	Preserve indigenous vegetation Preserve topsoil Management of weeds	
1500	Accommodation of Traffic	Waste treatment Hazardous waste Water supply Spillage Storage Noise/lights Dust control	Selection of site Preserve indigenous vegetation Preserve topsoil Demarcate sensitive areas Maintenance of windrows	Selection of site Preserve indigenous vegetation Preserve topsoil	Preserve indigenous vegetation Preserve topsoil Management of weeds	
1600	Overhaul	Spillage Storage Noise/lights Dust control Exhaust fumes	Turning circles Parking areas	Restrict access to sensitive areas	Protection of indigenous vegetation Preserve topsoil	

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SECTION	CONTENTS	ENVIRONMENTAL IMPACTS				
		POLLUTION TYPE	DEFORMATION OF LANDSCAPE	SOIL EROSION	ALIEN VEGETATION	SENSITIVE AREAS (to be completed by compiler)
		Washing waste				
1700	Clearing and grubbing	Waste treatment Hazardous waste Water supply Noise /lights Dust control	Selection of site Preserve indigenous vegetation Preserve topsoil	Selection of site Preserve indigenous vegetation Preserve topsoil	Protection of indigenous vegetation Preserve topsoil	
2100 - 2400	Drainage	Waste treatment Hazardous waste Water supply Spillage Storage	Selection of site Preserve indigenous vegetation Preserve topsoil	Selection of site Preserve indigenous vegetation Preserve topsoil	Preserve indigenous vegetation Preserve topsoil Management of weeds	
3100	Borrow pits	Waste treatment Hazardous waste Water supply Spillage Storage	Selection of site Preserve indigenous vegetation Preserve topsoil	Selection of site Preserve indigenous vegetation Preserve topsoil	Preserve indigenous vegetation Preserve topsoil Management of weeds	
3200	Stockpiling	Waste treatment Hazardous waste Water supply Spillage Storage	Selection of site Preserve indigenous vegetation Preserve topsoil	Selection of site Preserve indigenous vegetation Preserve topsoil	Preserve indigenous vegetation Preserve topsoil Management of weeds	
3300	Mass Earthworks	Waste treatment Hazardous waste	Selection of site Preserve indigenous	Selection of site Preserve indigenous	Preserve indigenous vegetation	

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SECTION	CONTENTS	ENVIRONMENTAL IMPACTS				
		POLLUTION TYPE	DEFORMATION OF LANDSCAPE	SOIL EROSION	ALIEN VEGETATION	SENSITIVE AREAS (to be completed by compiler)
		Water supply Spillage Storage	vegetation Preserve topsoil	vegetation Preserve topsoil	Preserve topsoil Management of weeds	
3400 - 3900	Pavement layers	Waste treatment Hazardous waste Water supply Spillage Storage Noise / lights Dust control	Selection of site Preserve indigenous vegetation Preserve topsoil Demarcate sensitive areas Maintenance of windrows	Selection of site Preserve indigenous vegetation Preserve topsoil	Preserve indigenous vegetation Preserve topsoil Management of weeds	
4100	Asphalt works / sealing operations	Waste treatment Hazardous waste Water supply Spillage Storage Noise / lights Dust control Smoke control Storage of materials	Selection of site Preserve indigenous vegetation Preserve topsoil Turning circles Parking areas	Selection of site Preserve indigenous vegetation Preserve topsoil	Preserve indigenous vegetation Preserve topsoil	
5000	Ancillary roadworks	Waste treatment Hazardous waste Water supply Spillage Storage	Selection of site Preserve indigenous vegetation Preserve topsoil	Selection of site Preserve indigenous vegetation Preserve topsoil	Preserve indigenous vegetation Preserve topsoil Management of weeds	
6000	Structures	Waste treatment	Selection of site	Selection of site	Preserve indigenous	

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SECTION	CONTENTS	ENVIRONMENTAL IMPACTS				
		POLLUTION TYPE	DEFORMATION OF LANDSCAPE	SOIL EROSION	ALIEN VEGETATION	SENSITIVE AREAS (to be completed by compiler)
		Hazardous waste Water supply Spillage Storage	Preserve indigenous vegetation Preserve topsoil	Preserve indigenous vegetation Preserve topsoil	vegetation Preserve topsoil Management of weeds	
7000	Concrete pavements etc	Waste treatment Hazardous waste Water supply Spillage Storage	Selection of site Preserve indigenous vegetation Preserve topsoil	Selection of site Preserve indigenous vegetation Preserve topsoil	Preserve indigenous vegetation Preserve topsoil Management of weeds	

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C3.4.3.3 PROVISION OF STRUCTURED TRAINING

CONTENTS

- C3.4.3.3.1 SCOPE
- C3.4.3.3.2 GENERIC TRAINING
- C3.4.3.3.3 ENTREPRENEURIAL SKILLS TRAINING
- C3.4.3.3.4 MEASUREMENT AND PAYMENT

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C3.4.3.3 PROVISION OF STRUCTURED TRAINING

C3.4.3.3.1 SCOPE

This specification covers the requirements for the provision of structured training to be arranged by the contractor over the period of this contract.

C3.4.3.3.2 GENERIC TRAINING

C3.4.3.3.2.1 The contractor shall, from the commencement of the contract, implement a structured Progressive training programme.

C3.4.3.3.2.2 The generic training will inter alia comprise, but not be limited to the following subjects:

COURSE DESCRIPTION		ESTIMATED No. OF TRAINEES	ESTIMATEDDU RATION (DAYS)
1	ROAD SAFETY FOR CONSTRUCTION WORKERS		
2	FLAGMEN		
3	CONCRETE HANDLING, PLACING AND FINISHING		
4	GUARDRAILS		
5	BITUMINOUS ROAD SURFACING		

C3.4.3.3.2.3 Training shall be at or by an approved accredited organisation and shall be delivered by suitably qualified and experienced trainers.

C3.4.3.3.2.4 The tenderer shall provide with his tender full details of the structured training programme he intends to implement, which details shall include the following:

- (a) The name of the training institution and programme
- (b) The manner in which the training is to be delivered.
- (c) The numbers and details of the trainers

Such details shall be entered on or attached to Form RDP 6 (E) included herein.

C3.4.3.3.2.5 The contractor shall be responsible for the provision of everything necessary for the delivery of the generic training programme, including the following:

- (a) A suitable venue with sufficient furniture, lighting and power
- (b) All necessary stationery consumables and study material
- (c) Transport of the students (as necessary)

C3.4.3.3.2.6 Generic training courses shall commence within one month of possession of site and be completed before the end of the contract period.

C3.4.3.3.2.7 The contractor's training programme shall be subject to the approval of the engineer, and the contractor shall if so instructed by the engineer alter or amend the programme and course content if a need is identified once the contract commences.

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- C3.4.3.3.2.8 The contractor shall keep comprehensive records of the training given to each student and whenever required shall provide copies of such records to the engineer. At the successful completion of each course each student shall be issued with a certificate indicating the course contents as proof of attendance and completion.

In addition to the above, a monthly return shall be submitted by the contractor. An example of the form is illustrated in Part C5 of this document (form RDP 10 (E))

C3.4.3.3.3 ENTREPRENEURIAL SKILLS TRAINING

- C3.4.3.3.3.1 Small contractors, subcontractors and the Project Steering Committee (PSC) will be entitled to receive a structured training programme, which will comprise both management skills as well as business development skills.
- C3.4.3.3.3.2 The contractor shall closely monitor the performance of all small subcontractors in the execution of their contracts and shall identify all such subcontractors who, in his opinion, display the potential to benefit from structured training as may be provided for in the contract and where required by the engineer, shall make recommendations in this regard. The final list of candidates will be decided between the contractor and the engineer.
- C3.4.3.3.3.3 The training will be delivered by trainers who are accredited by the Civil Engineering Training Scheme (CEITS) or other institutions recognised by the Department of Labour. Accredited training refers to both the trainers as well as to the training material.
- C3.4.3.3.3.4 The contractor shall facilitate in the delivery thereof, by instructing and motivating the subcontractor regarding attendance and participation therein.
- C3.4.3.3.3.5 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.
- C3.4.3.3.3.6 The structured training will comprise out of the following as decided by the Employer:

COURSE DESCRIPTION	ESTIMATED DURATION (DAYS)
1. BASIC BUSINESS PRINCIPLES	To be determined
2. BASIC SUPERVISION	To be determined
3. RUNNING A BUSINESS	To be determined
4. LEGAL PRINCIPLES	To be determined
5. ACHIEVING STANDARDS	To be determined

- C3.4.3.3.3.7 The contractor shall provide with his tender, full details of the structured training programme, which he intends to implement, which details shall include the following:
- (a) The name of the training institution and programme
 - (b) The various aspects of each type of training comprised in the programme
 - (c) The manner in which the training is to be delivered
 - (d) The numbers and details of the trainers to be utilised.

Bidder:

Initial: Authorised signatory/ies: 1.

2.

DR. JSMLM:

Initial: DR. JSMLM.....

Witness:

Such details of the proposed entrepreneurial training programme shall be entered on or attached to form RDP 7 (E) of the forms to be completed by the tenderer.

C3.4.3.3.8 The contractor shall be responsible for the provision of everything necessary for the delivery of the entrepreneurial training programme, including the following:

- (a) A suitably furnished venue (if required) with lighting and power.
- (b) All necessary consumables, stationery and study material
- (c) Transport of the subcontractors (as necessary)

C3.4.3.3.9 All entrepreneurial training shall take place within normal working hours.

C3.4.3.3.10 The contractor's training programme shall be subject to the approval of the engineer, and the contractor shall if so instructed by the engineer alter or amend the programme and course content if a need is identified once the contract commences.

C3.4.3.3.11 The contractor shall keep comprehensive records of the training given to each subcontractor 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.

- I n addition to the above, a monthly return shall be submitted by the contractor. An example of the form to be used is illustrated in Part C5 of this document, (form RDP 11 (E)).

C3.4.3.3.4 MEASUREMENT AND PAYMENT

ITEM	UNIT
BE12.05 Provision for accredited training	
(a) Generic skills	Provisional sum
(b) Entrepreneurial skills	Provisional sum
(c) Handling cost and profit in respect of sub-item E12.05(a) and (b) above	percentage (%)
(d) Training venue (only if required)	lump sum

The prime cost sums are provided to cover the actual costs (including wages) for attendance of accredited training courses as agreed with the engineer and shall be expended in accordance with the provisions of sub-clause 48(2) of the general conditions of contract. The tendered percentage in sub-item E4.1(c) is a percentage of the amount actually spent under sub-items E4.1(a) and (b) which shall include full compensation for the contractor's handling cost, profit, mentoring, record keeping, reporting and all other costs in connection therewith.

The lump sum tendered for E4.1(d) shall include full compensation for the provision of the training venue, for all necessary lighting, power, furniture, stationery, consumables and study material and for transportation of the students to and from the training venue. Payment of the lump sum will be made in two installments as follows:

- (i) The first installment, 75% of the lump sum, will be paid after the contractor has met all his obligations regarding the provision of the training venue as specified.
- (ii) The second and final installment, 25% of the lump sum, will be paid after the provision of all the accredited training as specified in the document.

Bidder:

Initial: Authorised signatory/ies: 1.

2.

Witness:

DR. JSMLM:

Initial: DR. JSMLM.....

C3.4.3.5 HIV/AIDS REQUIREMENTS

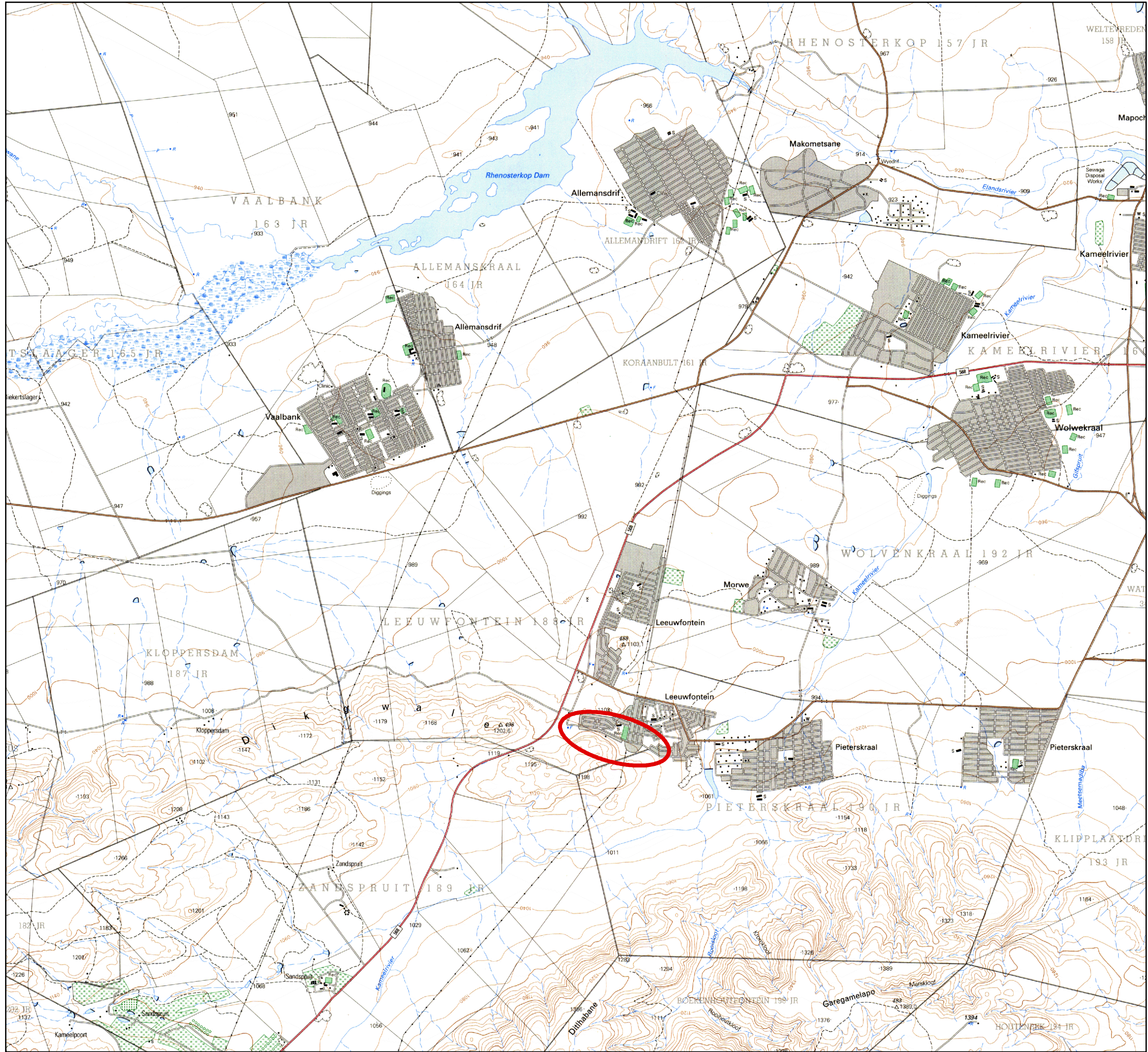
CONTENTS

SH 01	SCOPE
SH 02	DEFINITIONS AND ABBREVIATIONS
SH 03	HIV/AIDS EDUCATION AND TRAINING
SH 04	PROVIDING WORKERS WITH ACCESS TO CONDOMS
SH 05	ENSURING ACCESS TO HIV/AIDS TESTING AND COUNCILLING
SH 06	MONITORING

Bidder:
Initial: Authorised signatory/ies: 1.
2.

DR. JSMLM:
Initial: DR. JSMLM.....

Witness:



KEY PLAN

DRAWING NUMBER

DESCRIPTION

100-KP-001	KEY PLAN AND DRAWING LIST
100-RD-001	ROAD LAYOUT PLAN
100-RD-002	LONG SECTION
100-RD-003	LONG SECTION
100-RD-004	CROSS SECTION
100-RD-005	ROAD DETAILS
100-RD-006	ROAD MARKING DETAILS
100-RD-007	TRAFFIC ACCOMMODATION PLAN
100-SW-001	STORMWATER LAYOUT PLAN
100-SW-002	STORMWATER CHANNEL LONG SECTION
100-TD-001	INFORMATION BOARD

AMENDMENTS				
REV	DATE	APPROVED	DESCRIPTION	BY
A	29-06-2021	T.SIBUYI	ISSUED FOR CLIENT APPROVAL	T.S

CONSULTANT:



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SIYABUSWA,
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INFRASTRUCTURE PLANNING AND MANAGEMENT
PROJECT ENGINEER
DESIGN
DRAWING CHECKED

DIKGWALE BUS & TAXI ROUTE

KEY PLAN AND DRAWING LIST

INFORMATION MANAGEMENT



DESIGNED
M.B SEMANE

DRAWN
T.S NKOSI

CHECKED
T.SIBUYI

DATE
2021/06/17

SCALE
AS SHOWN

SHEET NO:
1 OF 1

CONSULTANT PROJECT NO:

REV: A DISC: CIVIL DWG SIZE: A1

DRAWING NUMBER
100-KP-001

VOTE NUMBER:



GENERAL NOTES

- 1. DO NOT SCALE THIS DRAWING, WORK IN FIGURED DIMENSIONS ONLY
- 2. ANY DISCREPANCIES ON THE DRAWING TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO IMPLEMENTATION OF ANY WORKS
- 3. ALL MATERIALS AND WORKMANSHIP TO COMPLY WITH RELEVANT SPECIFICATIONS: **SANS 1200**
- 4. COORDINATE SYSTEM : **WGS 84 Lo 29**

ROAD / EARTHWORKS NOTES

IN ADVANCE OF CONSTRUCTION

- 1. THE POSITION AND DEPTH OF EXISTING SERVICES ARE TO BE CONFIRMED AND THE ENGINEER NOTIFIED IMMEDIATELY SHOULD THERE BE ANY CONFLICT.
- 2. PRIOR TO EXCAVATING IN THE PROXIMITY OF TELECOMMUNICATION, ELECTRICITY, WATER OR GAS SERVICES ETC, THE RELEVANT AUTHORITY MUST BE NOTIFIED.

PROTECTION OF SERVICE DURING CONSTRUCTION

- 1. ALL EXISTING SERVICES ARE TO BE PROTECTED WHERE THEY INTERSECT WITH PROPOSED WORKS WITH LESS THAN 300MM CLEARANCE.

MATERIALS

- 1. ALL KERBING TO SANS 927
- 2. CONSTRUCTION OF KERBING TO COMPLY WITH SANS 1200 MK CLAUSE 3 & 5. SAMPLES OF UNITS WILL BE SUBMITTED TO THE ENGINEER TO APPROVAL AS PER SANS 1200 A. SANS 1200 AA SUBCLAUSE 3.1
- 3. ALL RADII NOTED ON LAYOUT PLANS
- 4. ALL ROAD LEVELS RELATE TO FINISHED/FINAL ROAD SURFACE LEVEL
- 5. ALL SIDEWALKS TO BE FINISHED OFF IN ACCORDANCE WITH SANS 1200 DM CLAUSE 5 (REFER TO TYPICAL DETAILS)

SETTING OUT DATA-Road 01					
NAME	CH	X	Y	DETAILS	
BR	00.000	-9799.906	-2 788 475.000	L 11.026m	
BCC	11.026	-9 810.539	-2 788 472.082	R 200.000m	
PI		-9 817.751	-2 788 470.103	DA 4°17'00"	
ECC	25.977	-9 825.091	-2 788 468.668	TL 7.479m	
				AL 14.951m	
BCC	300.673	-10 094.684	-2 788 415.961	R 100.000m	
PI		-10 108.640	-2 788 413.232	DA 16°11'120"	
ECC	328.926	-10 121.283	-2 788 406.721	TL 14.221m	
				AL 28.253m	
ER	500.000	-10 273.371	-2 788 328.391	L 171.074m	

SETTING OUT DATA-ROAD 02					
NAME	CH	X	Y	LENGTH (m)	
BR	0.000	-9 833.788	-2 788 466.968	20.000	
ER	20.000	-9 829.944	-2 788 447.341		

SETTING OUT DATA-ROAD 03					
NAME	CH	X	Y	LENGTH (m)	
BR	0.000	-9 909.355	-2 788 452.194	53.203	
ER	53.203	-9 919.894	-2 788 504.342		

SETTING OUT DATA-ROAD 04					
NAME	CH	X	Y	LENGTH (m)	
BR	0.000	-9 909.355	-2 788 452.194	40.720	
ER	40.720	-9 901.542	-2 788 412.231		

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NAME	CH	X	Y	LENGTH (m)	
BR	0.000	-9 985.227	-2 788 437.360	42.576	
ER	42.576	-9 977.058	-2 788 395.576		

AMENDMENTS				
REV	DATE	APPROVED	DESCRIPTION	BY
A	29-06-2021	T.SIBUYI	ISSUED FOR CLIENT APPROVAL	T.S

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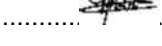
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INFRASTRUCTURE PLANNING AND MANAGEMENT
PROJECT ENGINEER
DESIGN
DRAWING CHECKED

DIKGWALE BUS & TAXI ROUTE

LAYOUT PLAN

INFORMATION MANAGEMENT



DESIGNED
M.B SEMANE

DRAWN
T.S NKOSI

CHECKED
T.SIBUYI

DATE
2021/06/17

SCALE
AS SHOWN

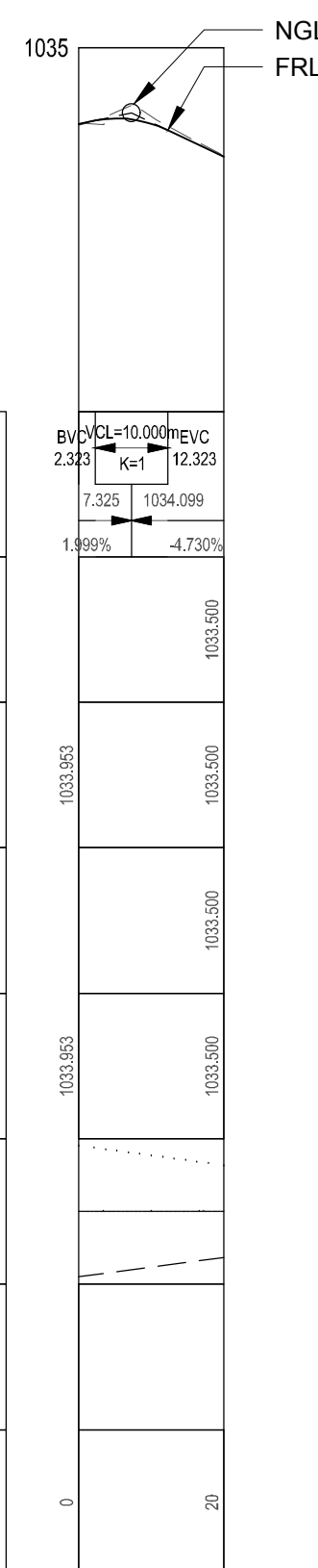
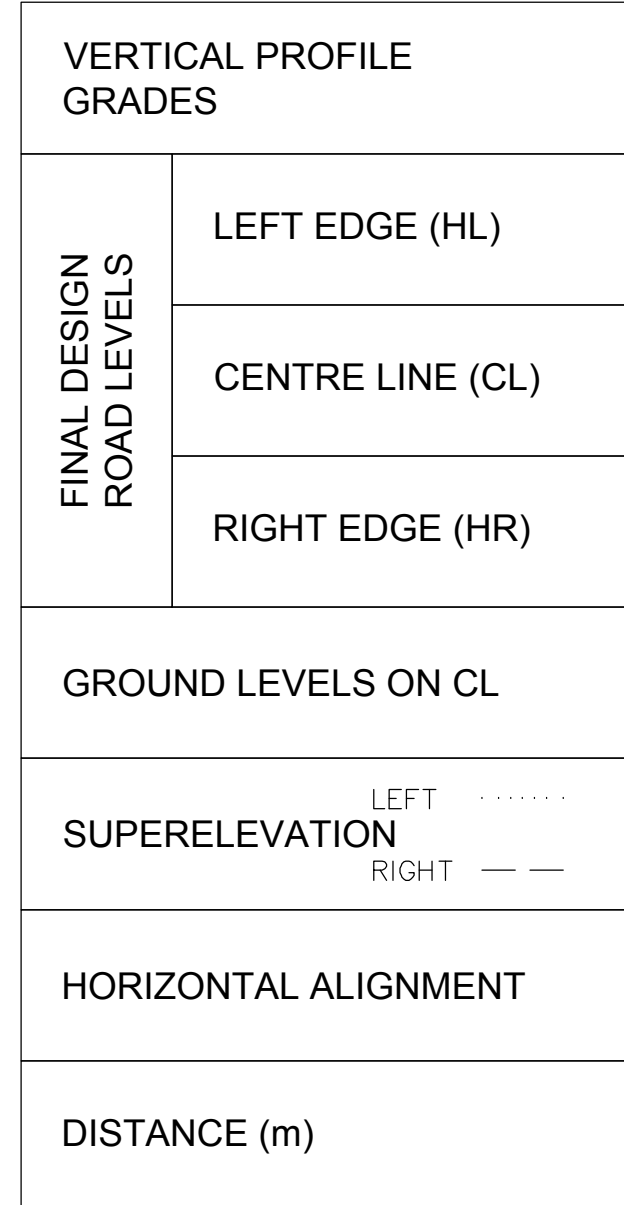
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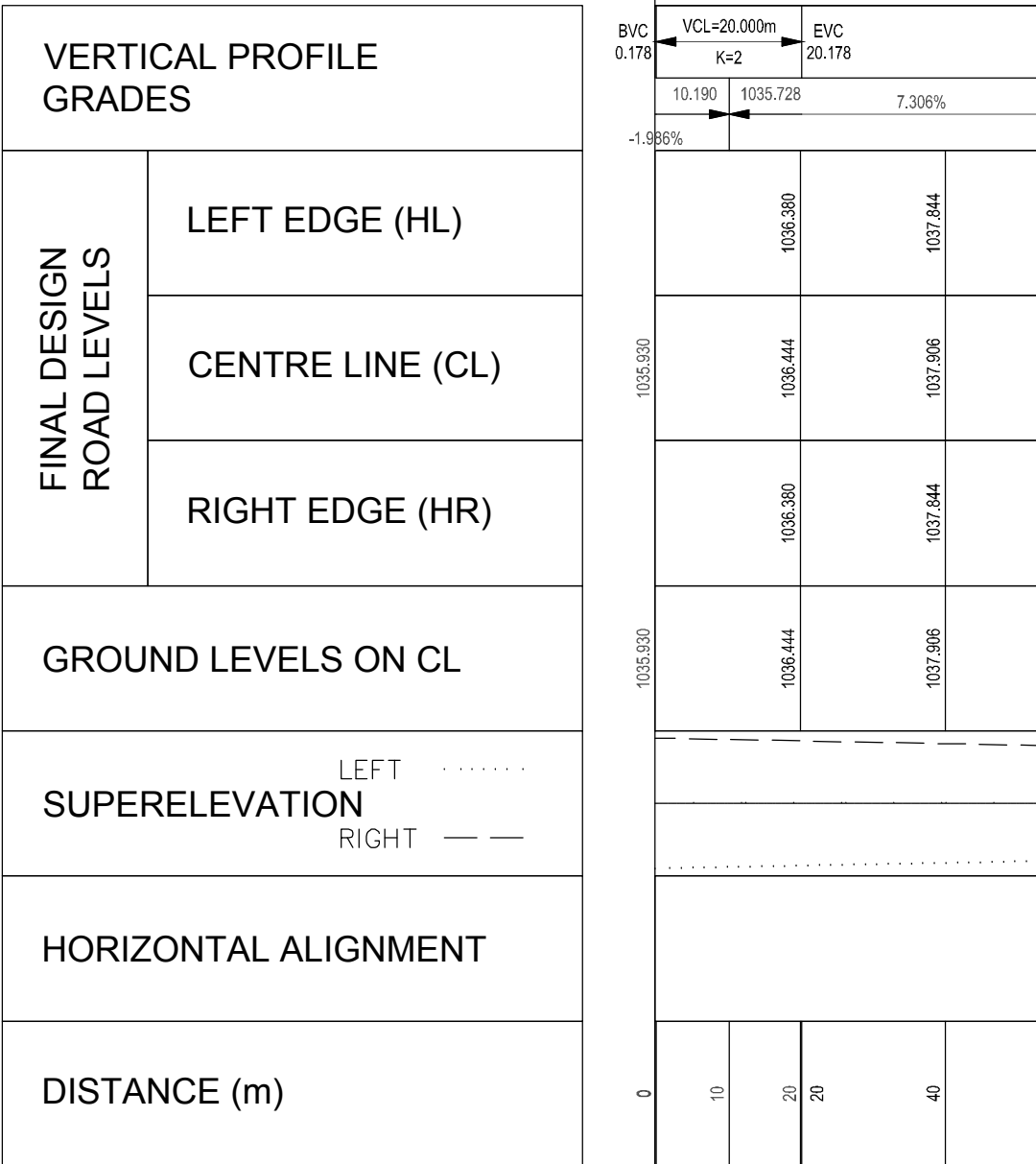
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DIKGWALE BUS & TAXI ROUTE			
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	CHECKED		DISC: CIVIL
	T.SIBUYI		DWG SIZE A1
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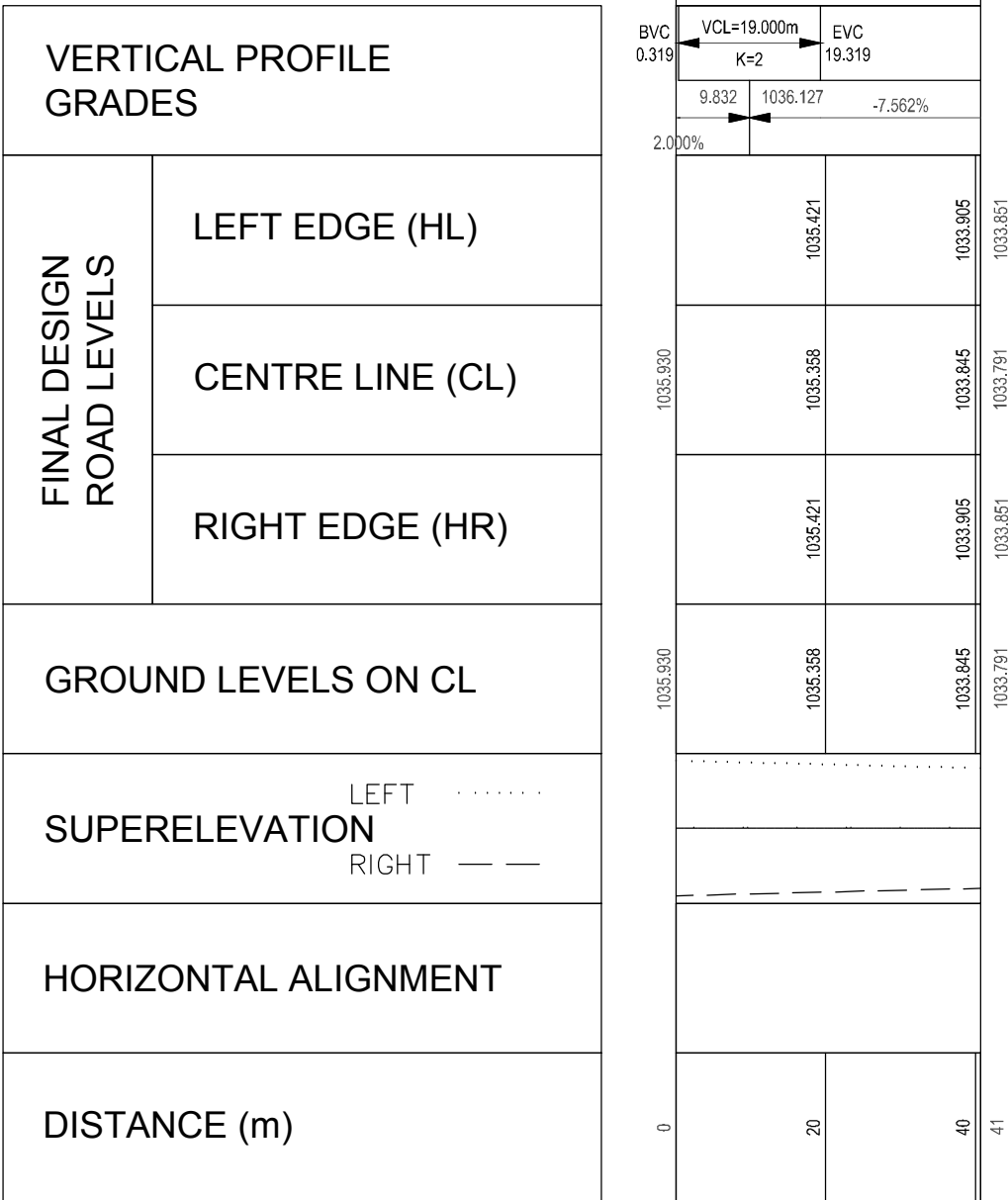


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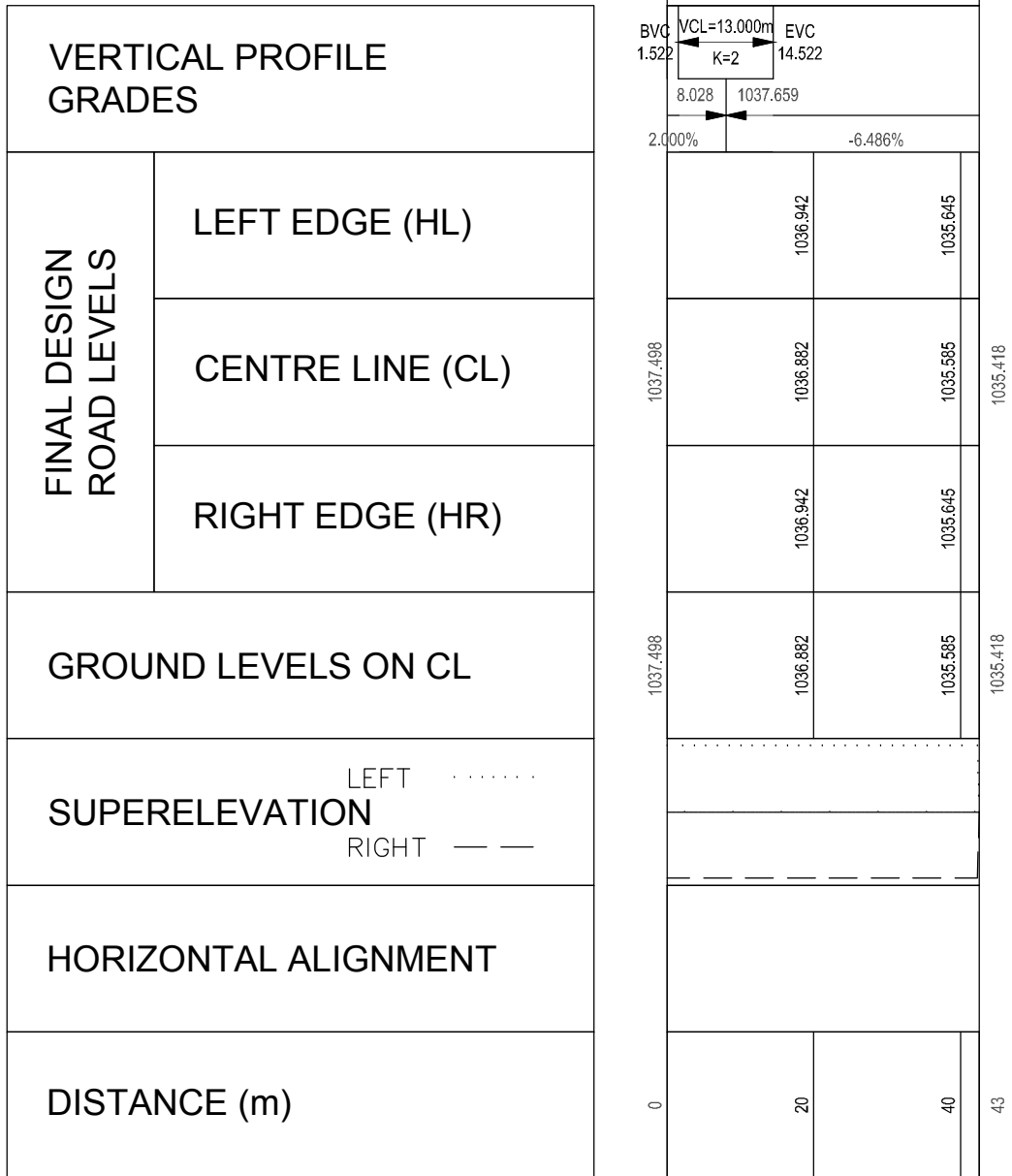


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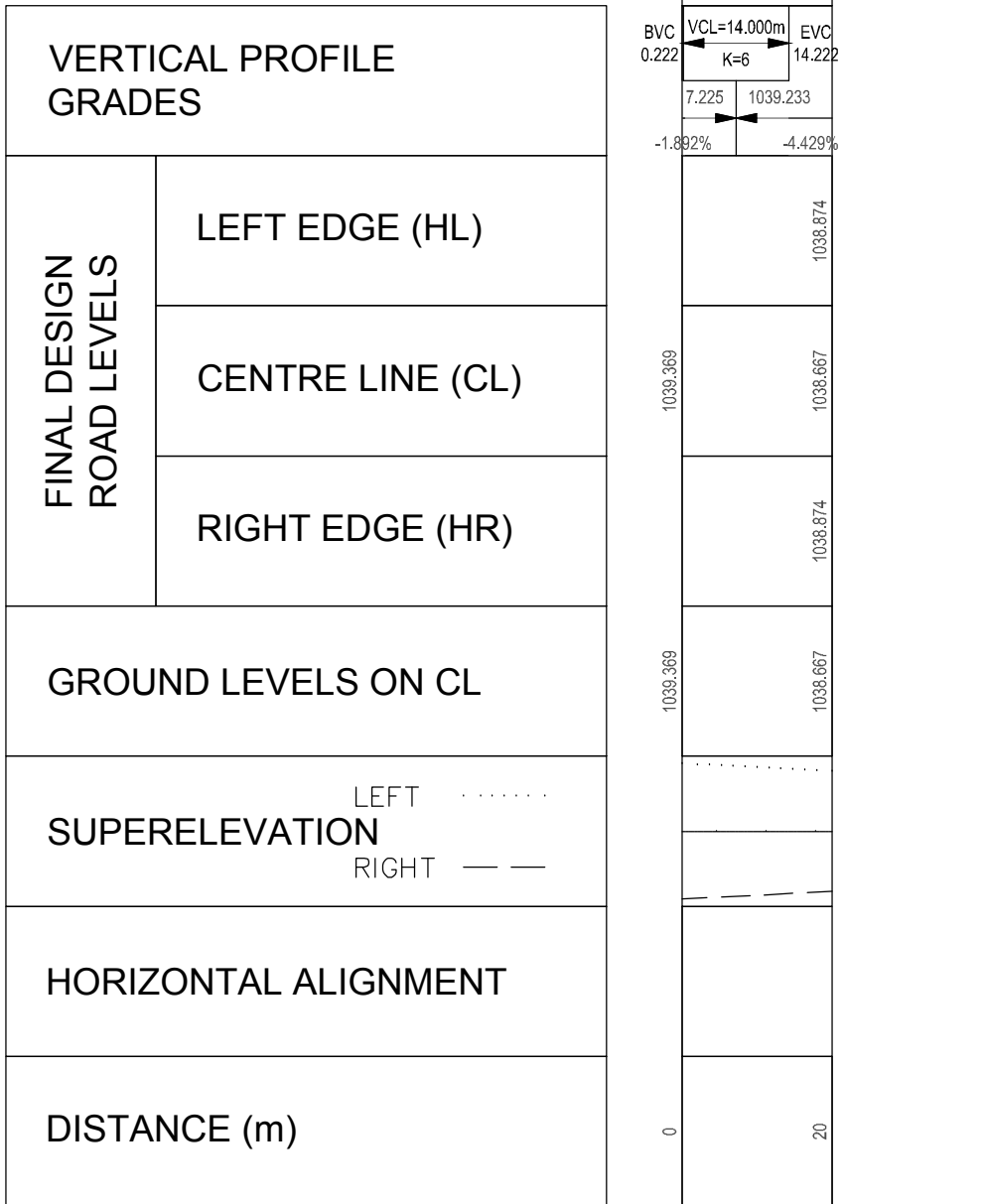


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NGL -----
ROAD -----

SCALES:
Horizontal 1:1000
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DATUM 1035.000



LONGSECTION ROAD 06
FROM 0.000 TO 20.000

AMENDMENTS				
REV	DATE	APPROVED	DESCRIPTION	BY
A	29-06-2021	T.SIBUYI	ISSUED FOR CLIENT APPROVAL	T.S

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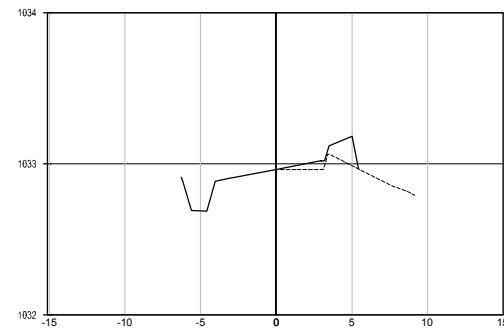
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INFRASTRUCTURE PLANNING AND MANAGEMENT
PROJECT ENGINEER
DESIGN
DRAWING CHECKED

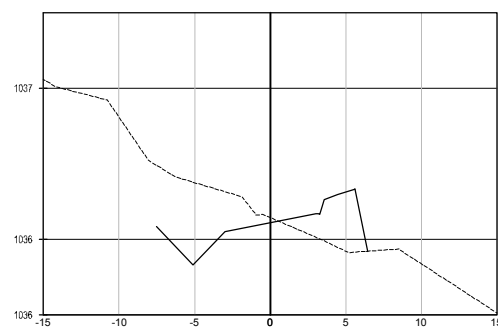
DIKGWALE BUS & TAXI ROUTE

LONG SECTION

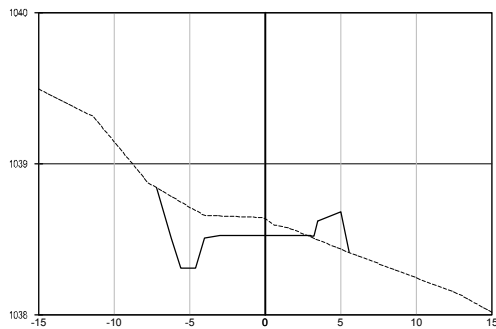
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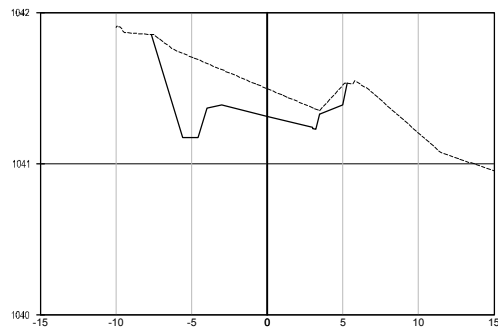
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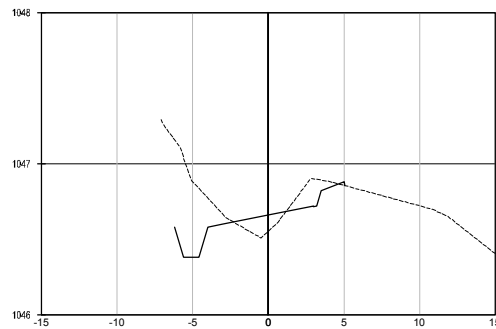
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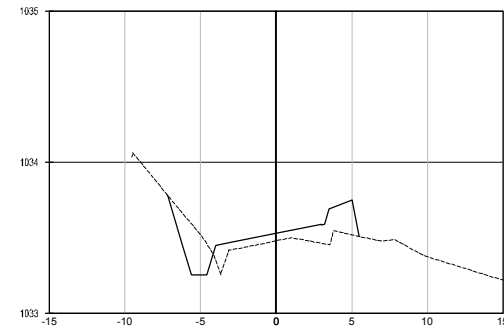
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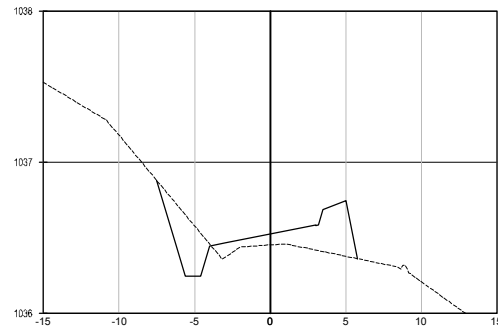
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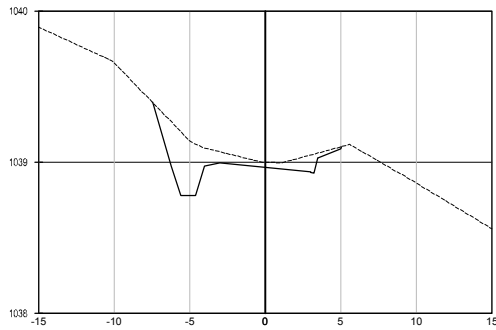
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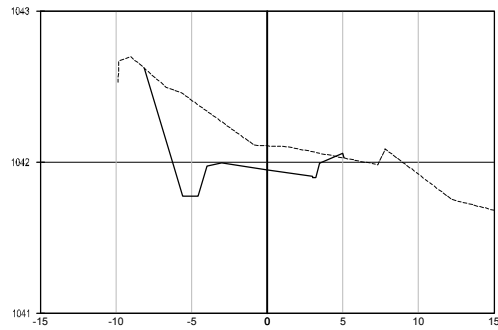
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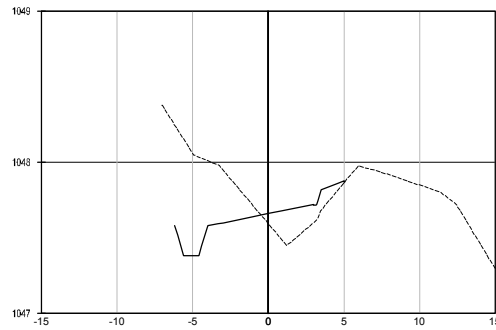
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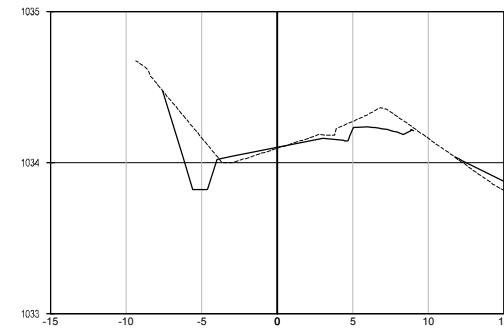
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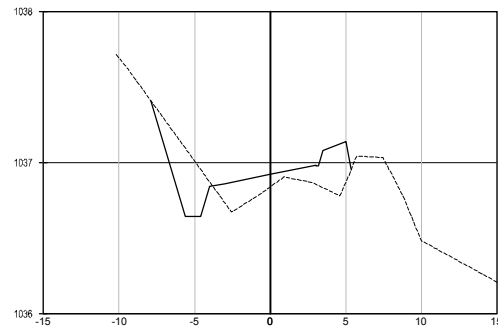
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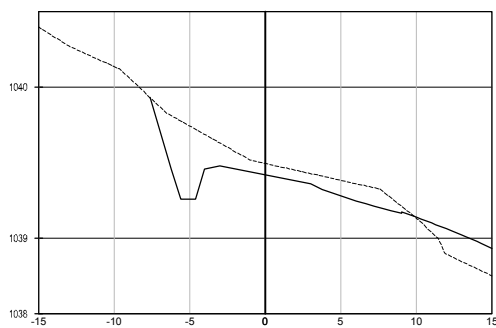
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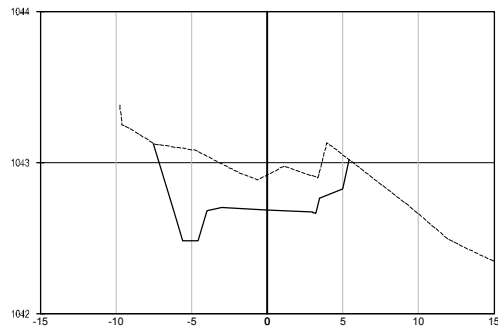
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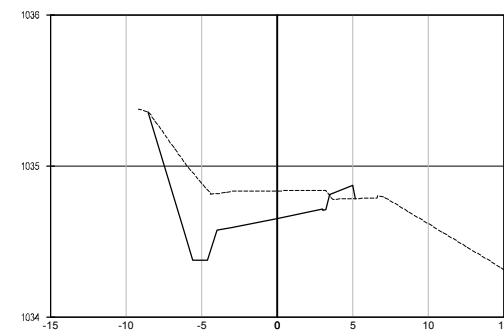
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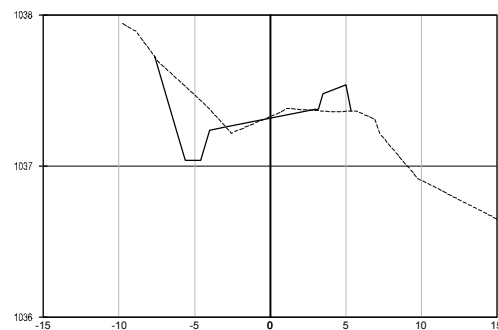
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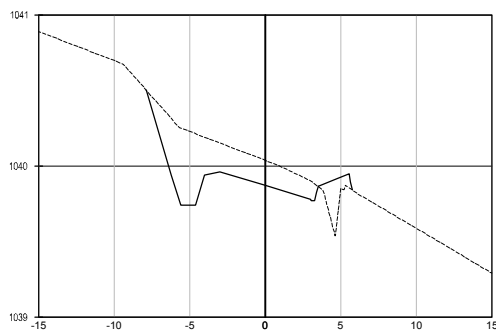
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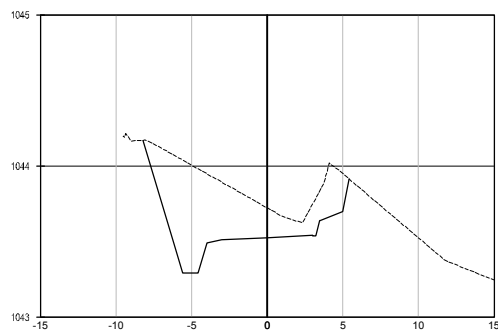
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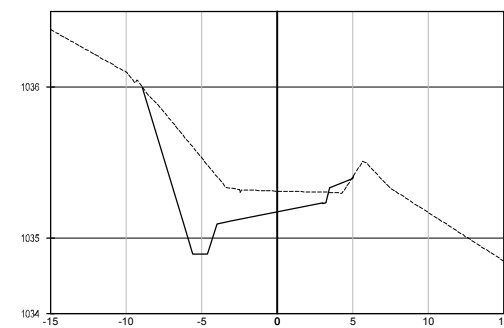
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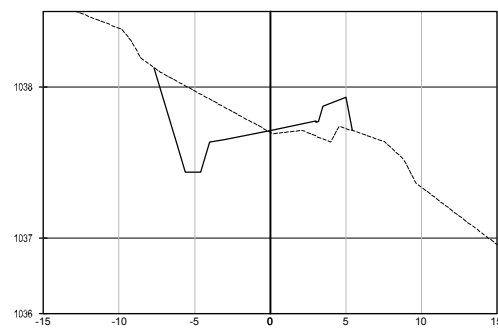
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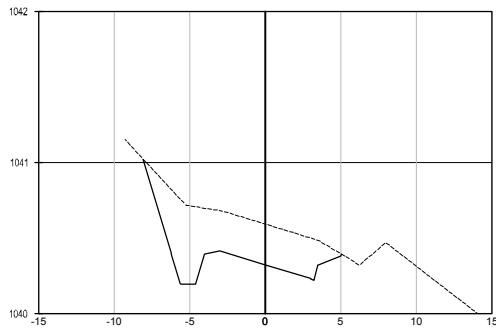
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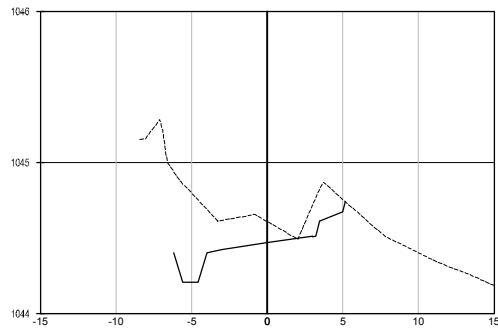
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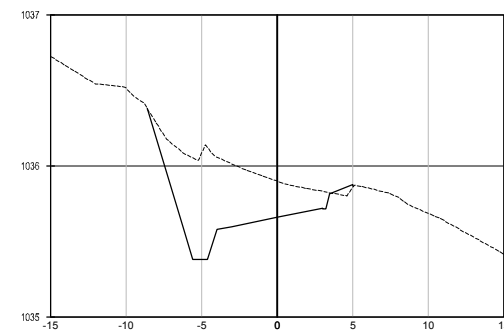
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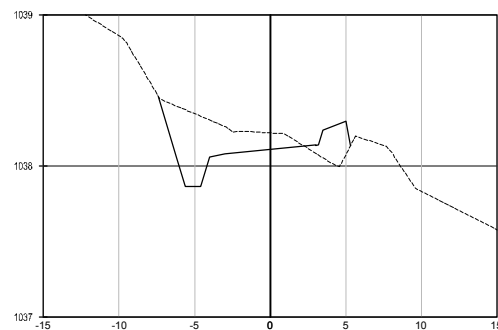
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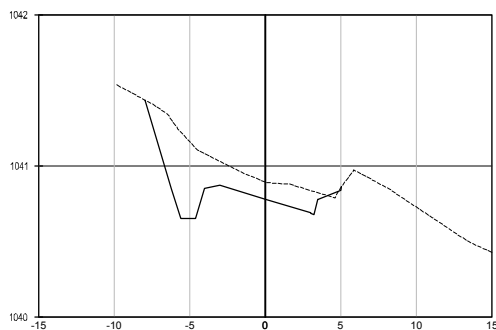
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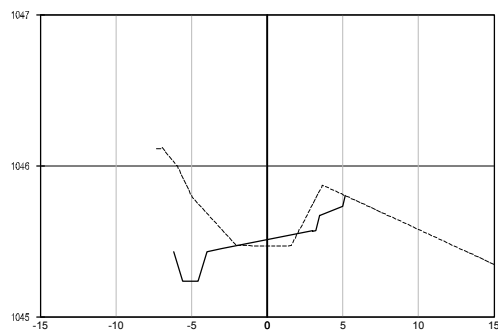
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CH 220



CH 340



CH 460

AMENDMENTS				
REV	DATE	APPROVED	DESCRIPTION	BY
A	29-06-2021	T.SIBUYI	ISSUED FOR CLIENT APPROVAL	T.S

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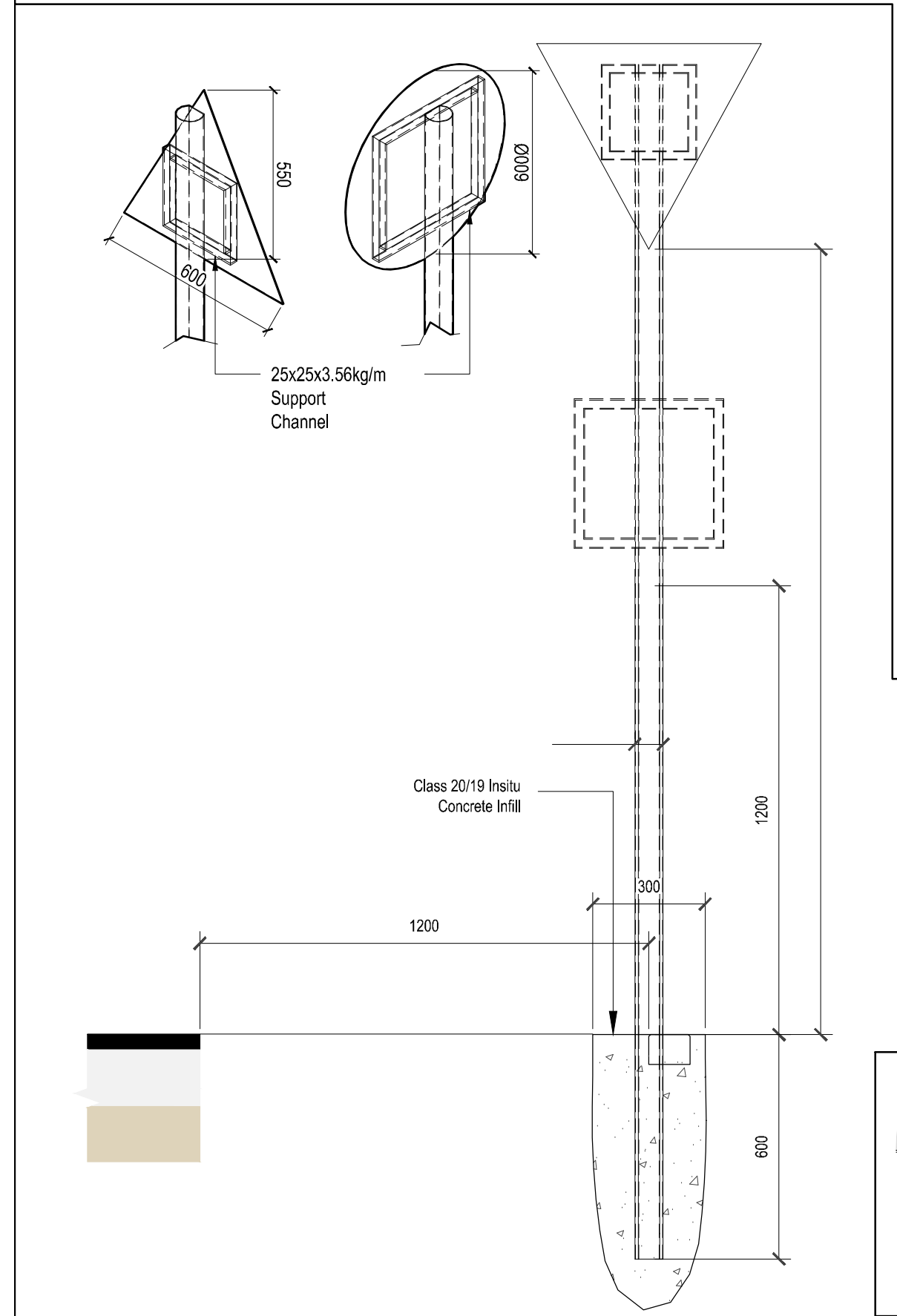
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INFRASTRUCTURE PLANNING AND MANAGEMENT
PROJECT ENGINEER
DESIGN
DRAWING CHECKED

DIKGWALE BUS & TAXI ROUTE

CROSS SECTION

INFORMATION MANAGEMENT		DATE	SCALE
		2021/06/17	AS SHOWN
SHEET NO:		4 OF 6	
CONSULTANT PROJECT NO:			
DESIGNED	M.B SEMANE	REV:	DISC:
DRAWN	T.S NKOSI	A	CIVIL
CHECKED	T.SIBUYI	DWG SIZE	A1
DRAWING NUMBER		100-RD-004	
VOTE NUMBER:			



STOP SIGN MARKING
SCALE 1:500

1. ALL DIMENSIONS ARE IN METERS UNLESS NOTED OTHERWISE
2. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE RELEVANT ARCHITECTS DRAWINGS.
3. THIS DRAWING NOT TO BE SCALED.
4. ALL CONSTRUCTION WORK SHALL BE CARRIED OUT IN STRICT ACCORDANCE WITH LOCAL COUNCIL SPECIFICATIONS AND SANS 1200
5. ALL FORMATION LEVELS FOR THE DEVELOPMENT TO BE VERIFIED ON SITE PRIOR TO CONSTRUCTION. ANY DISCREPANCY TO BE BROUGHT FORWARD TO THE ENGINEER'S ATTENTION
6. CONNECTION INTO EXISTING POTABLE WATER TO BE DONE IN CONJUNCTION WITH THE LOCAL COUNCIL.
7. PRIOR TO THE START OF CONSTRUCTION, ALL EXISTING SERVICES WHICH ARE TO BE CROSSED MUST BE EXPOSED TO CONFIRM THEIR POSITIONS AND LEVELS. ANY DISCREPANCY IS TO BE IMMEDIATELY REPORTED TO THE ENGINEER.

1. ALL ROAD MARKINGS TO BE IN ACCORDANCES WITH THE SOUTH AFRICAN ROAD TRAFFIC SIGNS MANUAL
2. INSTALLATION OF TRAFFIC SIGNALS TO BE CARRIED OUT BY SPECIALIST SUBCONTRACTOR
3. REMOVE EXISTING ROAD MARKINGS BY SANDBLASTING AS APPROPRIATE
4. PAVEMENT MARKINGS TO COMPLY WITH THE REQUIREMENTS OF THE TECHNICAL RECOMMENDATIONS FOR HIGHWAYS, GUIDELINES FOR ROAD CONSTRUCTION MATERIALS TRH14: 1985
5. PRIOR TO APPLICATION OF ANY PAINT TO THE ROAD SURFACE, PRE-MARKING IS TO BE INSPECTED BY ENGINEER TO OBTAIN GO AHEAD TO PAINT
6. ROADMARKING CONTRACTOR MUST BE IN POSSESSION OF THIS DRAWING
7. ALL TRAFFIC SIGN POLES SHALL BE D-SHAPED 76MMØ OD X 2MM WALL THICKNESS, HOT GALVANIZED POLES, CAPPED WITH 12MM DRILLED HOLE 800MM FROM THE BASE AND FOR A SLOPE OF 2%.
8. USE CONCRETE BACKFILL ON ALL POLES
9. ALL CONTROL, SIGNS AND HAZARD MARKER SIGNS SHALL BE CLASS 3 HIGH INTENSITY GRADE MATERIALS
10. ALL TRAFFIC WARNING SIGNS SHALL BE AT LEAST CLASS 1 ENGINEER'S GRADE MATERIAL (HIP)
11. ALL SPECIFICATION ON TRAFFIC SIGNS SIZES AND DIRECTION SIGNS TO BE FROM SARITM

1. DO NOT SCALE THIS DRAWING, WORK IN FIGURED DIMENSIONS ONLY
2. ANY DISCREPANCIES ON THE DRAWING TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO IMPLEMENTATION OF ANY WORKS
3. ALL MATERIALS AND WORKMANSHIP TO COMPLY WITH RELEVANT SPECIFICATIONS
4. COORDINATE SYSTEM : WGS 84 LO 29

1. ASPHALT SURFACES:
 - 1.1. 0.50/M² WITH 0.4KG/M² RETRO-REFLECTIVE BEADS APPLIED IMMEDIATELY AFTER PAINT HAS BEEN APPLIED WITH PRESSURE
 - 1.2. A SECOND COAT NEED TO BE APPLIED AFTER 3 MONTHS
 - 1.3. THERMO PLASTIC APPLICATION AT 2.4KG/M² WITH 0.4KG/M² RETRO-REFLECTIVE BEADS APPLIED IMMEDIATELY AFTER PAINT HAS BEEN APPLIED WITH PRESSURE
 - 1.4. COLD PLASTIC AT 2.0KG/M² WITH 0.4KG/M² RETRO-REFLECTIVE BEADS APPLIED IMMEDIATELY AFTER PAINT HAS BEEN APPLIED WITH PRESSURE
2. CONCRETE SURFACES:
 - 2.1. 0.50/M²
3. PAVED SURFACES:
 - 3.1. 0.50/M² WITH A SECOND COAT WITHIN 3 MONTHS

1. ASPHALT SURFACES:
 - 1.1. PAINT NEED TO BE EVALUATED AFTER 12 MONTHS AND REPAINTED IF NEEDED
2. CONCRETE SURFACES:
 - 2.1. PAINT NEED TO BE EVALUATED AFTER 6 MONTHS AND REPAINTED IF NEEDED
3. PAVED SURFACES:
 - 3.1. PAINT NEED TO BE EVALUATED AFTER 3 MONTHS AND REPAINTED IF NEEDED

CONSULTANT:



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CONSULTING
ENGINEERS

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INFRASTRUCTURE PLANNING
AND MANAGEMENT

PROJECT ENGINEER

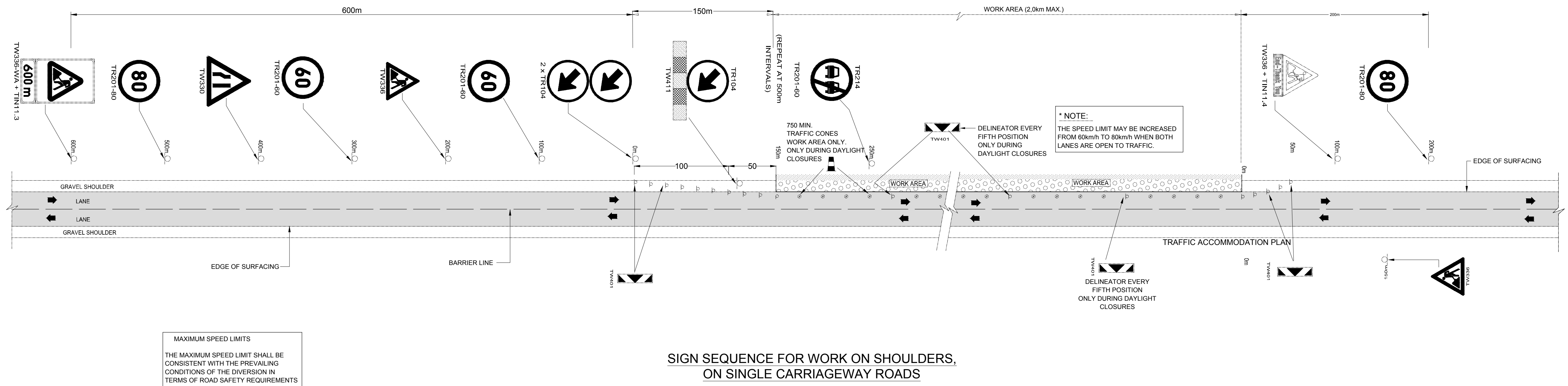
DESIGN

DRAWING CHECKED

ROAD MARKING DETAIL DRAWINGS

INFORMATION MANAGEMENT		DATE 2021/06/29		SCALE AS SHOWN	
 DESIGNED M.B SEMANE		SHEET NO: 6 OF 6			
DRAWN T.S NKOSI		CONSULTANT PROJECT NO: ...			
CHECKED T.SIBUYI		REV: A	DISC: CIVIL	DWG SIZE A1	
		DRAWING NUMBER 100-RD-006			
		VOTE NUMBER:			

- NOTE : SPACING OF DELINEATORS / CONES
1. TRANSITION AREA : 10m c/c
 2. STABILIZING AREA : 10m c/c FOR THE FIRST 50m, THEN 30m c/c ON STRAIGHT
 3. WORK AREA :
 - 3.1 ALONG RAMP : 10m c/c
 - 3.2 ALONG FREEWAY : 20m c/c
 4. TERMINATION AREA : 10m c/c
 5. TRAFFIC CONES SHALL ONLY BE USED IN THE WORK AREA WITH EVERY FIFTH POSITION TAKEN UP BY A DELINEATOR, ONLY DURING DAYLIGHT CLOSURES.



SIGN SEQUENCE FOR WORK ON SHOULDERS,
ON SINGLE CARRIAGEWAY ROADS

AMENDMENTS				
REV	DATE	APPROVED	DESCRIPTION	BY
A	29-06-2021	T.SIBUYI	ISSUED FOR CLIENT APPROVAL	T.S

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INFRASTRUCTURE PLANNING AND MANAGEMENT
PROJECT ENGINEER
DESIGN
DRAWING CHECKED

DIKGWALE BUS & TAXI ROUTE

TRAFFIC ACCOMMODATION PLAN

INFORMATION MANAGEMENT		DATE	SCALE
SHEET NO: 1 OF 1		2021/06/17	AS SHOWN
CONSULTANT PROJECT NO:		REV: A	DISC: CIVIL
DRAWING NUMBER		100-RD-007	DWG SIZE: A1
VOTE NUMBER:			



LAYOUT PLAN
SCALE 1:750

GENERAL NOTES

- DO NOT SCALE THIS DRAWING, WORK IN FIGURED DIMENSIONS ONLY
- ANY DISCREPANCIES ON THE DRAWING TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO IMPLEMENTATION OF ANY WORKS
- ALL MATERIALS AND WORKMANSHIP TO COMPLY WITH RELEVANT SPECIFICATIONS: **SANS 1200**
- COORDINATE SYSTEM : **WGS 84 Lo 29**

ROAD / EARTHWORKS NOTES

IN ADVANCE OF CONSTRUCTION

- THE POSITION AND DEPTH OF EXISTING SERVICES ARE TO BE CONFIRMED AND THE ENGINEER NOTIFIED IMMEDIATELY SHOULD THERE BE ANY CONFLICT.
- PRIOR TO EXCAVATING IN THE PROXIMITY OF TELECOMMUNICATION, ELECTRICITY, WATER OR GAS SERVICES ETC, THE RELEVANT AUTHORITY MUST BE NOTIFIED.

PROTECTION OF SERVICE DURING CONSTRUCTION

- ALL EXISTING SERVICES ARE TO BE PROTECTED WHERE THEY INTERSECT WITH PROPOSED WORKS WITH LESS THAN 300MM CLEARANCE.

MATERIALS

- ALL KERBING TO SANS 927
- CONSTRUCTION OF KERBING TO COMPLY WITH SANS 1200 MK CLAUSE 3 & 5. SAMPLES OF UNITS WILL BE SUBMITTED TO THE ENGINEER TO APPROVAL AS PER SANS 1200 A. SANS 1200 AA SUBCLAUSE 3.1
- ALL RADII NOTED ON LAYOUT PLANS
- ALL ROAD LEVELS RELATE TO FINISHED/FINAL ROAD SURFACE LEVEL
- ALL SIDEWALKS TO BE FINISHED OFF IN ACCORDANCE WITH SANS 1200 DM CLAUSE 5 (REFER TO TYPICAL DETAILS)

AMENDMENTS				
REV	DATE	APPROVED	DESCRIPTION	BY
A	29-06-2021	T.SIBUYI	ISSUED FOR CLIENT APPROVAL	T.S

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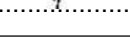
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INFRASTRUCTURE PLANNING AND MANAGEMENT
PROJECT ENGINEER
DESIGN
DRAWING CHECKED

DIKGWALE BUS & TAXI ROUTE

STORMWATER LAYOUT PLAN

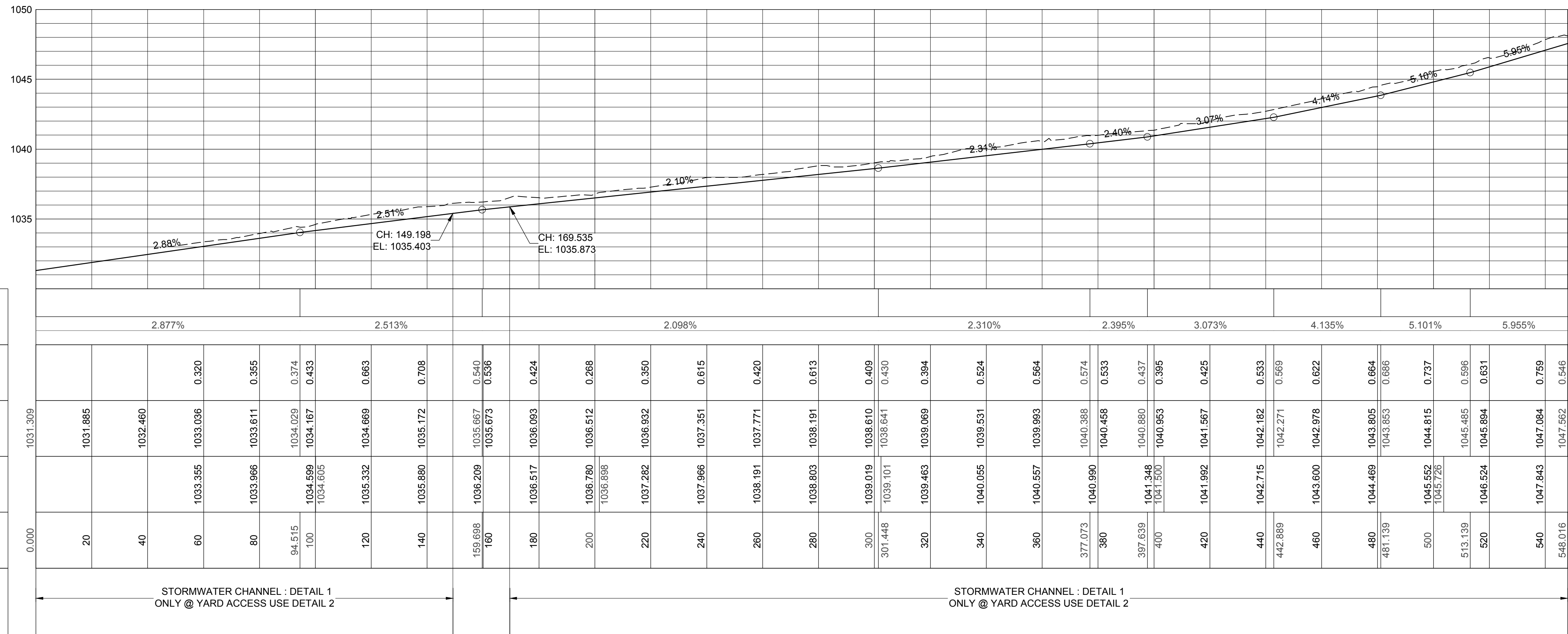
INFORMATION MANAGEMENT		DATE	SCALE
		2021/06/17	AS SHOWN
SHEET NO:		1 OF 2	
CONSULTANT PROJECT NO:			
DESIGNED	M.B SEMANE	REV:	DISC:
DRAWN	T.S NKOSI	A	CIVIL
CHECKED	T.SIBUYI	DWG SIZE	A1
DRAWING NUMBER		100-SW-001	
VOTE NUMBER:			

NGL - - - -
INVERT ———

SCALES:
Horizontal 1:1000
Vertical 1:200

DATUM 1030.000

VERTICAL PROFILE GRADES
DEPTH TO INVERT
INVERT LEVELS
GROUND LEVELS ON CL
DISTANCE (m)
CHANNEL SECTION



STORMWATER CHANNEL : DETAIL 1
ONLY @ YARD ACCESS USE DETAIL 2

STORMWATER CHANNEL : DETAIL 1
ONLY @ YARD ACCESS USE DETAIL 2

STORMWATER
CHANNEL : DETAIL 2

LONGSECTION CHANNEL
FROM 0.000 TO 548.016

AMENDMENTS				
REV	DATE	APPROVED	DESCRIPTION	BY
A	29-06-2021	T.SIBUYI	ISSUED FOR CLIENT APPROVAL	T.S

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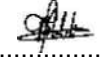


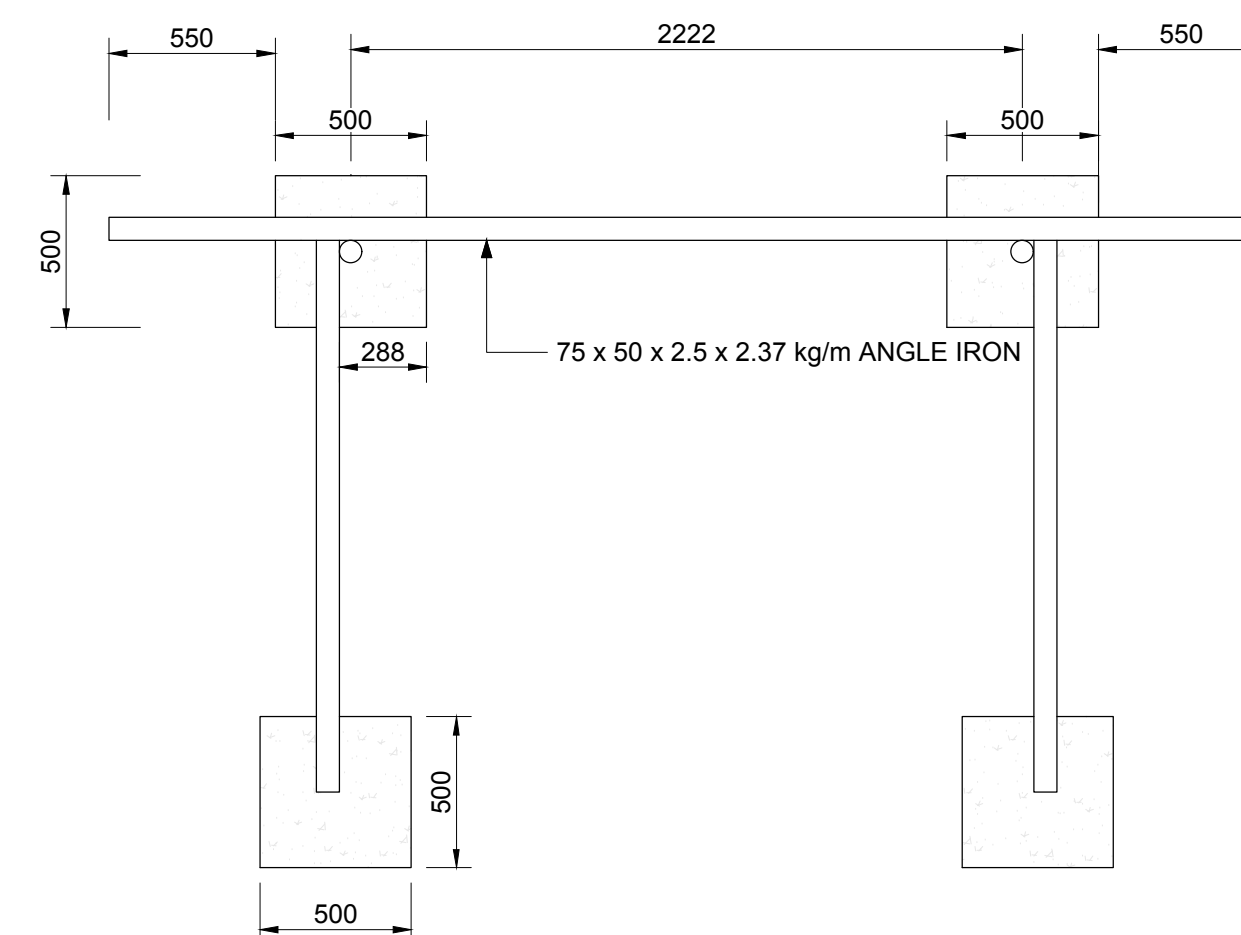
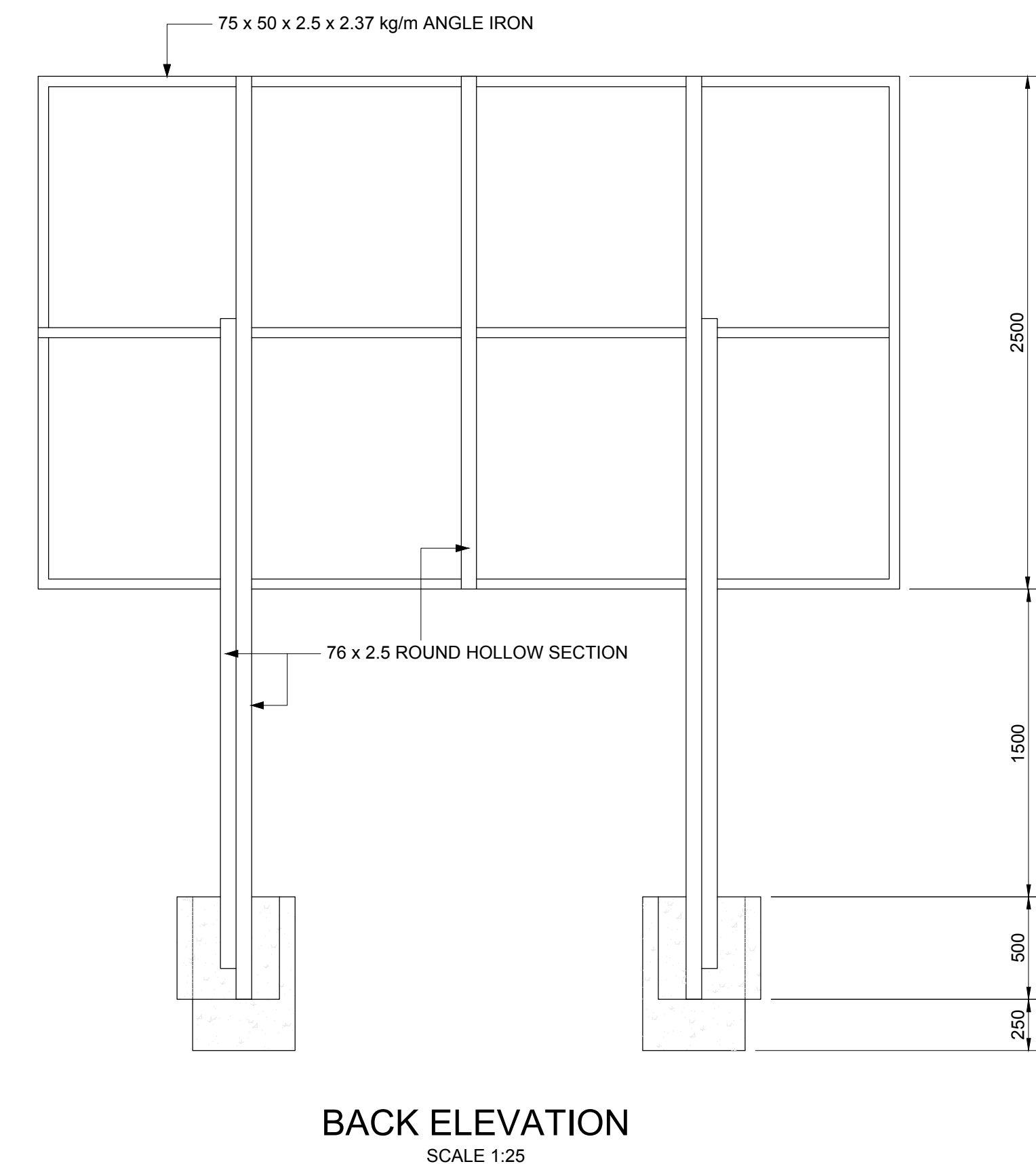
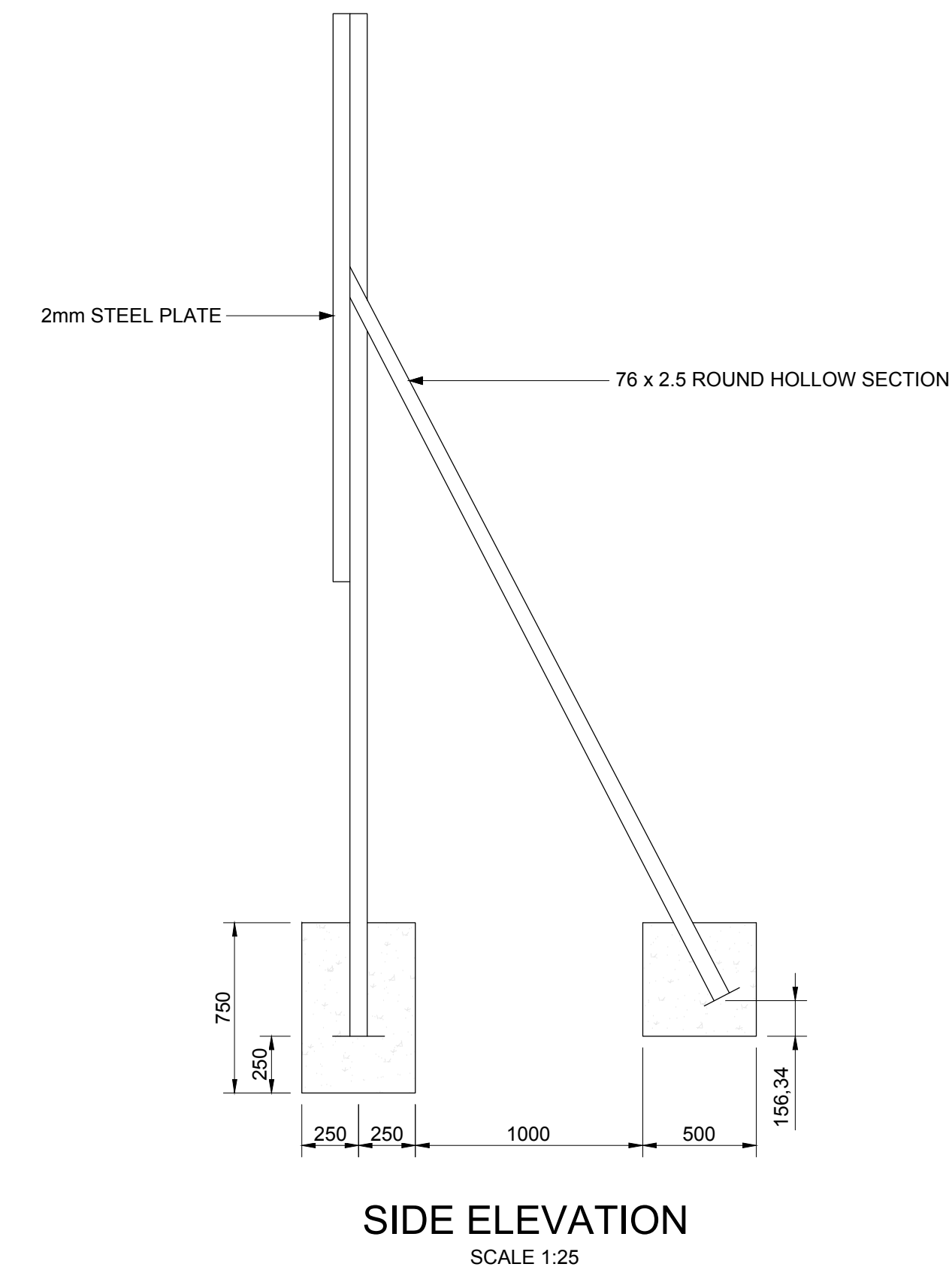
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INFRASTRUCTURE PLANNING AND MANAGEMENT
PROJECT ENGINEER
DESIGN
DRAWING CHECKED

DIKGWALE BUS & TAXI ROUTE

CHANNEL LONG SECTION

INFORMATION MANAGEMENT		DATE	SCALE
		2021/06/17	AS SHOWN
SHEET NO:		2 OF 2	
CONSULTANT PROJECT NO:			
DESIGNED		REV:	DISC:
M.B SEMANE		A	CIVIL
DRAWN		DWG SIZE	A1
T.S NKOSI			
CHECKED		DRAWING NUMBER	
T.SIBUYI		100-SW-002	
		VOTE NUMBER:	



NOTE : PAINT COLOURS ARE BASED ON PLASCON-EVANS.
WHITE VLO 1: TEQUILLA VLO 10 ("VELVAGLO"
POLYURETHANE VELVET ENAMEL)
BLACK REF. 266
MIDDLE BLUE REF. 290 (ACRYLIC ROAD SIGN
PAINTS)
ALL EMBLEMS SHOULD BE IN COLOUR

[illegible]

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INFRASTRUCTURE PLANNING AND MANAGEMENT	
PROJECT ENGINEER	
DESIGN	
DRAWING CHECKED	

DIKGWALE BUS & TAXI ROUTE																					
INFORMATION BOARD	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%; padding: 5px;"> INFORMATION MANAGEMENT </td> <td style="width: 20%; padding: 5px;"> <table style="width: 100%;"> <tr> <td style="text-align: center;">DATE</td> <td style="text-align: center;">SCALE</td> </tr> <tr> <td style="text-align: center;">2021/06/17</td> <td style="text-align: center;">AS SHOWN</td> </tr> </table> </td> </tr> <tr> <td style="padding: 5px;">DESIGNED</td> <td style="padding: 5px;">SHEET NO: 1 OF 1</td> </tr> <tr> <td style="padding: 5px;">M.B SEMANE</td> <td style="padding: 5px;">CONSULTANT PROJECT NO:</td> </tr> <tr> <td style="padding: 5px;">DRAWN</td> <td style="padding: 5px;">REV: DISC: DWG SIZE</td> </tr> <tr> <td style="padding: 5px;">T.S NKOSI</td> <td style="padding: 5px;">A CIVIL A1</td> </tr> <tr> <td style="padding: 5px;">CHECKED</td> <td style="padding: 5px;">DRAWING NUMBER</td> </tr> <tr> <td style="padding: 5px;">T.SIBUYI</td> <td style="padding: 5px;">100-TD-001</td> </tr> <tr> <td></td> <td style="padding: 5px;">VOTE NUMBER:</td> </tr> </table>	INFORMATION MANAGEMENT 	<table style="width: 100%;"> <tr> <td style="text-align: center;">DATE</td> <td style="text-align: center;">SCALE</td> </tr> <tr> <td style="text-align: center;">2021/06/17</td> <td style="text-align: center;">AS SHOWN</td> </tr> </table>	DATE	SCALE	2021/06/17	AS SHOWN	DESIGNED	SHEET NO: 1 OF 1	M.B SEMANE	CONSULTANT PROJECT NO:	DRAWN	REV: DISC: DWG SIZE	T.S NKOSI	A CIVIL A1	CHECKED	DRAWING NUMBER	T.SIBUYI	100-TD-001		VOTE NUMBER:
	INFORMATION MANAGEMENT 	<table style="width: 100%;"> <tr> <td style="text-align: center;">DATE</td> <td style="text-align: center;">SCALE</td> </tr> <tr> <td style="text-align: center;">2021/06/17</td> <td style="text-align: center;">AS SHOWN</td> </tr> </table>	DATE	SCALE	2021/06/17	AS SHOWN															
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