

MAKHADO MUNICIPALITY



TENDER NO: 79 OF 2021

CIDB GRADING: 5CE or HIGHER

CONSTRUCTION OF MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3 (REGRAVELLING) AT MAKHADO MUNICIPALITY WITHIN VHEMBE DISTRICT OF LIMPOPO PROVINCE

TENDER DOCUMENT

OCTOBER 2021

NAME OF TENDERER:

TENDER SUM:

Prepared for:



**Municipal Manager
Makhado Municipality
Private Bag X2596
LOUIS TRICHARDT
0920
Tel: (015) 519 3000
Fax: (015) 516 6145**

Prepared by:



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EXPANDED PUBLIC WORKS PROGRAMME
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THE TENDER

PART T1: TENDERING PROCEDURES

PART T2: RETURNABLE DOCUMENTS



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PART T1: TENDERING PROCEDURES

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T1.1. TENDER NOTICE AND INVITATION TO TENDER

Tenders are hereby invited from qualified Contractors for the Construction of Makhado Landfill Site and recycling centre phase 3 (regravelling) at Makhado Municipality within Vhembe District of Limpopo Province.

Qualified Contractors are only those that have a **CIDB Grading of 5CE or Higher**, with added advantage on Skills Programme for NQF Level 2, NQF Level 4 and NQF Level 5 for Labour Intensive.

The employer is **Makhado Municipality**.

Tender documents are obtainable from Procurement Office No. B043 Ground Floor, Civic Centre, 83 Krogh Street, Makhado, Telephone (015) 519 3129 upon receipt of non-refundable cash payment of R 600.00 per set.

Tender documents are obtainable during the following times: 09:00 to 15:00 (Monday to Friday) as from Thursday, 28th October 2021.

Procurement queries related to these documents may be addressed to Mr. N A Mathivha, Tel No. (015) 519 3044, Fax No. 015 516 6145 whilst Technical queries can be addressed to Mr. George Raleshuku or Mrs. L Thulare Tel No. (015) 519 3000, Fax No. (015) 516 6145.

There will be no compulsory clarification meeting for this bid but the site is located from the T-Junction of Tshikota and Vivo Road (R522) to Makhado Landfill Site. **The Coordinates are: 23°02'36.40"S and 29°52'12.09" E**

The closing time for receipt of tender is not later than 12:00 on Friday, 12th November 2021 at Makhado Municipality Tender Box (at the foyer of the main entrance of the Civic Centre). Telegraphic, telephonic, telex, facsimile and late tenders will not be accepted. All tenders received will be opened in public in the Council Committee Chamber, Ground Floor, Civic Centre, No.83 Krogh Street, Makhado.

Tenders, completed as prescribed, shall be sealed in an envelope marked

"Tender No. 79 of 2021: Construction of Makhado Landfill Site and recycling centre phase 3 (regravelling) at Makhado Municipality within Vhembe District of Limpopo Province, at Makhado Municipal Office.

Tenders shall expire 12th February 2022

Tenderers should have appropriate CIDB grading.
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T.1.2. TENDER DATA

The conditions of tender are the Standard Conditions of Tender as contained in Annexure F of SANS 294:2004.

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

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

Subclause	Data
F.1.1	The employer is Makhado Municipality
F.1.2	<p>The Project Document issued by the employer consists of the following:</p> <p>THE TENDER</p> <p>Part T1: Tendering procedures:</p> <p style="padding-left: 40px;">T1.1 Tender notice and invitation to tender</p> <p style="padding-left: 40px;">T1.2 Tender Data</p> <p>Part T2: Returnable documents</p> <p style="padding-left: 40px;">T2.1 Other Documents required for Tender Evaluation</p> <p style="padding-left: 40px;">T2.2 MBD Forms and Returnable Schedules required for Tender Evaluation</p> <p style="padding-left: 40px;">T2.3 Returnable Schedules that will be incorporated into the Contract</p> <p style="padding-left: 40px;">T2.4 Other Schedules and Documents that will be Incorporated into the Contract</p> <p>THE CONTRACT</p> <p>Part C1: Agreements and contract data</p> <p style="padding-left: 40px;">C1.1 Form of Offer and Acceptance</p> <p style="padding-left: 40px;">C1.1. A. Agreement in Terms of the Occupational Health & Safety Act</p> <p style="padding-left: 40px;">C1.1.B Guarantee</p> <p style="padding-left: 40px;">C1.1.C. Form Agreement in Terms of the Mine Health and Safety Act</p> <p style="padding-left: 40px;">C1.1.D. Appointment in Terms of Section 4 of the Mine Health and Safety Act</p> <p style="padding-left: 40px;">C1.1.E. Mine Health and Safety Act No 29</p> <p style="padding-left: 40px;">C1.1.F. Agreement in Terms of the Mine Health and Safety Act</p> <p style="padding-left: 40px;">C 1.2 Contract Data</p>



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Subclause	Data
	<p>Part C2: Pricing data</p> <p>C2.1 Pricing instructions</p> <p>C2.2 Bills of quantities</p> <p>C2.3 Summary of Bills of Quantities</p> <p>C 2.4 Calculation of Tender Sum</p> <p>Part C3: Scope of work</p> <p>C3.1 Description of Works</p> <p>C3.2 Engineering</p> <p>C3.3 Procurement</p> <p>C3.4 Construction</p> <p>C3.5 Management</p> <p>Part C4: Site information</p> <p>C4.1 Site Information</p> <p>C4.2 Locality Plan</p> <p>Part 5: Annexures</p> <p>5.1 : Proforma Documents</p> <p>5.2 : Guidelines for the Implementation of Labour Intensive Infrastructure Projects under the Expanded Public Works Programme (EPWP)</p> <p>5.3 : Contract Drawings</p>
F.1.4	<p>The employer's agent is:</p> <p>Name: Victory Development Project</p> <p>Address: 14 Paul Kruger Street, Polokwane, 0699</p> <p>Tel: (015) 291 3892/0727180817 Fax: (086) 664 6282</p> <p>E-mail: victoryce9@gmail.com/admin@victorydevelopment.co.za</p>
F.1.5	The Employer may accept or reject
F.2.1	<p>Only those tenderers who are registered with the CIDB, or can provide proof of having applied for registration, in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a single class grading for construction work, or by a contractor who is registered as a potentially emerging enterprise in terms of these Regulations at a contractor grading designation, one level lower than the contractor's registered grading designation, provided that the client</p> <p>(a) is satisfied that such a contractor has the potential to develop and qualify to be registered in that higher grade; and</p> <p>(b) ensures that financial, management or other support is provided to that contractor to enable the contractor to successfully execute that contract are eligible to submit tenders.</p> <p>Joint ventures are eligible to submit tenders provided that:</p>



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Subclause	Data
	<p>1. every member of the joint venture is registered with the CIDB or can provide proof of having registered;</p> <p>2. The lead partner has a contractor grading designation in the appropriate 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 appropriate class of construction work are eligible to submit tenders.</p>
F.2.7	<p>There will be no compulsory site inspection and clarification meeting for this bid. Location: From the T-Junction of Tshikota and Vivo Road (R522) to Makhado Landfill Site. Coordinate are: 23°02'36.40"S and 29°52'12.09" E Name: Mr Alpheus Matshimbe Tel: (015) 291 3892/ Fax: (086) 664 6282 E-mail: victoryce9@gmail.com/admin@victorydevelopment.co.za</p>
F.2.12	<p>If tenderer wishes to submit an alternative tender offer, the only criteria permitted for such alternative tender offer is that it demonstrably satisfies the employer's standards and requirements, the details of which may be obtained from the employer's Agent. Calculations, drawings and all other pertinent technical information and characteristics as well as modified or proposed Pricing Data must be submitted with the alternative tender offer to enable the employer to evaluate the efficiency of the alternative and its principal elements, to take a view on the degree to which the alternative complies with the employer's standards and requirements and to evaluate the acceptability of the pricing proposals. Calculations must be set out in a clear and logical sequence and must clearly reflect all design assumptions. Pricing Data must reflect all assumptions in the development of the pricing proposal.</p> <p>Acceptance of an alternative tender offer will mean acceptance in principle of the offer. It will be an obligation of the contract for the tenderer, in the event that the alternative is accepted, to accept full responsibility and liability that the alternative offer complies in all respects with the employer's standards and requirements.</p> <p>The modified Pricing Data must include an amount equal to 5% of the amount tendered for the alternative offer to cover the employer's costs of confirming the acceptability of the detailed design before it is constructed.</p>
F.2.13.5	<p>The employer's address for delivery of tender offers and identification details to be shown on each tender offer package are:</p> <p>Location of tender box: at Makhado Municipality Tender no: 79 of 2021: Construction of Makhado Landfill Site and recycling centre phase 3 (regravelling) at Makhado Municipality within Vhembe District of Limpopo Province,</p>
F.2.13. & F.3.5	<p>A two-envelope procedure will not be followed.</p>



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Subclause	Data
F.2.15	Closing time for submission of tender offers is: 12H00 on Friday, 12th November 2021.
F.2.15	Telephonic, telegraphic, telex facsimile or e-mailed tender offers and postal tenders will not be accepted.
F.2.16	The tender offer validity period is 90 days .
F.2.1.7	The tendered lump sums and rates shall be final and binding irrespective of the total tender price (See C2.1.11).
F.2.23	The tenderer is required to submit with his tenders an original Tax Clearance Certificate from the South African Revenue Services ("SARS") certifying that the tenderer's taxes are in order or that suitable arrangements have been made with SARS and proof of SARS TCS pin.
F.3.4	The time and location for opening of tender offers: Time: 12 hours on Friday, 12th November 2021. Location: Makhado Municipality Tender Box
F.3.11	<p>The procedure for evaluation of responsive tenders is the 80/20 preference point system as contained in the procurement policy clause C3.3.</p> <p>The financial offer will be scored using the following:</p> $Ps = W_1 \left(1 - \frac{P_t - P_{min}}{P_{min}} \right)$ <p>Where</p> <p>Ps = Points scored for functionality and price of the bid/proposal</p> <p>W₁ = (1) 80 where the financial value inclusive of VAT of all responsive tenders received have a value in excess of up to R50 000 000.00</p> <p>P_t = Rand value of tender under consideration</p> <p>P_{min} = Rand value of the lowest acceptable tender</p> <p>Up to 100 minus W₁ tender evaluation points will be awarded to tenderers who complete the preferencing schedule and who are found to be eligible for the preference claimed.</p>
F3.13.	<p>Tender offers will only be accepted on condition that:</p> <ul style="list-style-type: none"> a) the tenderer is registered with the Construction Industry Development Board in an appropriate contractor grading designation; c) the tenderer or any of its directors is not listed in the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector; and e) the tenderer has not over the last five years failed to satisfactorily perform a contract for the employer and has been issued with a written notice to this effect.



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Subclause	Data
F.3.17	The number of paper copies of signed contract to be provided by the Engineer is the Original Contract plus three (3) signed copies.
	Labour Content: The minimum Labour content for this project shall be 35%
	Eligibility requirements A contract will only be entered into with a tenderer who has in his employment management and supervisory staff satisfying the requirements of the scope of work for labour intensive competencies for supervisory and management staff .
	Tender Qualification: Machinery and Labour Intensive Contracts combined (a) The Contractor will have to provide His/Her Administrative, Technically and Supervisory Team with a knowledge, experience and minimum qualifications for executing this type of Conventional plus Labour Intensive Project. Staff that have participated in and graduated with fully satisfactory results from the training organized under EPWP (or other similar project under EPWP) are welcomed for the execution of the works. (b) Proper Cash Flow will be the requirement in this regard for at least two full working months; (c) Proposals for timely acquisition (own, lease, hire, etc.) of the following essential minimum equipment; For earthworks and pavement layers: one small or medium-size roller (hand, sit-on or tractor-drawn) one service truck or tipper truck or tractor-trailer combination one water bowser (towed or truck-mounted) or Watercart grader 140H roller excavator TLB For Building Works: Concrete Mixer (d) The contractor will carry out the works using both Labour Based and Conventional Approach as described in the Conditions of Contract.



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PART T2: LIST OF RETURNABLE DOCUMENTS

The tenderer must complete the following returnable documents:

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SOUTH AFRICAN REVENUE SERVICES	Tender No:
Closing Date:	
DECLARATION OF GOOD STANDING REGARDING TAX PARTICULARS	
1. Name of Taxpayer/Tenderer:	
2. Trade Name:
3. Identification Number: (If applicable)	<table border="1" style="width: 100%; height: 20px; border-collapse: collapse;"></table>
4. Company / Close Corporation registration number:	<table border="1" style="width: 100%; height: 20px; border-collapse: collapse;"></table>
5. Income Tax reference number:	<table border="1" style="width: 100%; height: 20px; border-collapse: collapse;"></table>
6. VAT registration number: (If applicable)	<table border="1" style="width: 100%; height: 20px; border-collapse: collapse;"></table>
7. PAYE employer's registration number: (If applicable)	<table border="1" style="width: 100%; height: 20px; border-collapse: collapse;"></table>
8. Monetary value of tender:	<table border="1" style="width: 100%; height: 30px; border-collapse: collapse;"></table>
DECLARATION	
<p>I, the undersigned, the above taxpayer/tenderer, hereby declare that my Income Tax, Pay-As-You-Earn (PAYE) and Value-Added-Tax (VAT) obligations of the above-mentioned taxpayer, which include the rendition of returns and payment of the relevant taxes:</p> <p>(i) Have been satisfied in terms of the relevant Acts; or</p> <p>(ii) That suitable arrangements have been made with the Receiver of Revenue, to satisfy them.</p>	
SIGNATURE	CAPACITY
DATE	
PLEASE NOTE:* The declaration (ii) cannot be made unless formal arrangements have been made with the Receiver of Revenue with regard to any outstanding revenue/outstanding tax returns.	

(TENDERER TO SUBMIT AN ORIGINAL VALID TAX CLEARENCE CERTIFICATE AND PROOF OF SARS TCS PIN)



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T2.1. B. FINANCIAL DETAILS, STATEMENTS, CSD REPORT AND BANK REFERENCES

1. FINANCIAL STATEMENTS

I/We agree to furnish a copy of Audited Annual financial statement for 3 (Three) years for consideration by the Municipality.

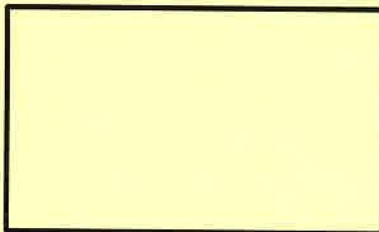
2. CSD REPORT

I/We furnish the following information as a requirement to this Tender by the Municipality

3. DETAILS OF CONTRACTOR'S BANK ACCOUNT

I/We furnish the following information:

- a) Account Holder Name:
- b) Name of Bank:.....
- c) Branch of Bank:.....
- d) Town/city/suburb where bank is situated:.....
- e) Contact Person at the Bank:
- f) Telephone number of Bank: Code:.....Number: ...
- G) Account Number:.....
- h) Bank rating (include confirmation from bank or financial institution):.....
- i). Bank Stamp to be provided:



I/We hereby authorise the Employer to approach the above Bank for a reference.

SIGNED ON BEHALF OF THE TENDERER

DATE:



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T2.1. C. CONSTRUCTION INDUSTRIES DEVELOPMENT BOARD REGISTRATION

The tenderer is to affix or submit to this page either:

- i) Written proof of his/her registration with the CIDB as a Category 5CE or Higher
- Or
- ii) Written proof of his/her application to the CIDB for registration as a contractor in the Category listed above.

Note:

1. Failure to affix such documentation or request will be made by the Client within 48 hours as prescribed to this page shall result in this tender not being further considered for the award of the contract.
2. Should this tender 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 by the time of award of the contract, then this tender will no longer be considered for the award of the contract.
3. The Client/his Representative will confirm all the CIDB Categories through the Website.
4. In case of Joint Ventures, Grading Calculator will be used.



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T2.1. D. COMPANY REGISTRATION CERTIFICATE

The tenderer is to affix or submit to this page either:

- i) Written proof of his/her Company registration Certificate
- ii) Certified Copy of Company Registration certificate

Note:

1. Failure to affix or submit such documentation, a request will be made by the Client within 48 hours as prescribed to this page shall result in this tender not being further considered for the award of the contract.
2. In case of Joint Ventures, both Certified Company Registration should be attached or submitted.



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T2.1. E CERTIFIED COMPANY OWNERS IDENTITY BOOK

The tenderer is to affix or submit to this page :

- i) Certified Copy/Copies of Company Owners Identity Document

Note:

1. Failure to affix or submit such documentation, a request will be made by the Client within 48 hours as prescribed to this page shall result in this tender not being further considered for the award of the contract.
2. In the case of Joint Ventures, both Certified Owners Identity Document should be attached or submitted.



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**T2.1. F PROOF OF COMPANY MUNICIPAL ACCOUNT/LEASE AGREEMENT OR PROOF OF
RESIDENTIAL ADDRESS BY TRADITIONAL AUTHORITY, NOT OLDER THAN 3 MONTHS**

The tenderer is to affix or submit to this page:

- i) Copy of Municipal Accounts, Proof of Residential Address by Traditional Authority or Lease Agreement.

Note:

1. Failure to affix or submit such documentation, a request will be made by the Client within 48 hours as prescribed to this page shall result in this tender not being further considered for the award of the contract.
2. In case of Joint Ventures, copies for both companies for Municipal Accounts, Proof of Residential Address by Traditional Authority or Lease Agreement should be attached or submitted.



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MAKHADO MUNICIPALITY

TENDER NO: 79 OF 2021

**CONSTRUCTION OF MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3
(REGRAVELLING) AT MAKHADO MUNICIPALITY WITHIN VHEMBE DISTRICT OF
LIMPOPO PROVINCE**

T2.2.A MBD FORMS

MBD 4	:	DECLARATION OF INTEREST
MBD 5	:	DECLARATION FOR PROCUREMENT ABOVE R10 MILLION (ALL APPLICABLE TAXES INCLUDED)
MBD 6.1	:	PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2011
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MBD 6.9	:	PREFERENCE POINTS CLAIM FORM INTERMS OF THE PREFERENTIAL PROCUMENT REGULATIONS 2001(PROMOTION OF ENTERPRISE LOCATED IN LIMPOPO PROVINCE
MBD 8	:	DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES
MBD 9	:	CERTIFICATE OF INDEPENDENT BID DETERMINATION

MBD 4

DECLARATION OF INTEREST

1. No bid will be accepted from persons in the service of the state¹.
2. Any person, having a kinship with persons in the service of the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid. In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to persons in service of the state, it is required that the bidder or their authorised representative declare their position in relation to the evaluating/adjudicating authority.
- 3 **In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.**

3.1 Full Name of bidder or his or her representative:.....

3.2 Identity Number:

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

3.4 Company Registration Number:

3.5 Tax Reference Number:.....

3.6 VAT Registration Number:

3.7 The names of all directors / trustees / shareholders members, their individual identity numbers and state employee numbers must be indicated in paragraph 4 below.

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

3.8.1 If yes, furnish particulars.

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

(a) a member of –

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

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

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

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

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

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

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

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

3.9.1 If yes, furnish particulars.....
.....

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

3.10.1 If yes, furnish particulars.
.....
.....

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

3.11.1 If yes, furnish particulars
.....
.....

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

3.12.1 If yes, furnish particulars.
.....
.....

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

3.13.1 If yes, furnish particulars.
.....
.....

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

3.14.1 If yes, furnish particulars:
.....
.....

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

Full Name	Identity Number	State Employee Number

.....
Signature

.....
Date

.....
Capacity

.....
Name of Bidder

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

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

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

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

***YES / NO**

.....

.....

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

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

2.2 If yes, provide particulars.

.....

.....

.....

.....

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?

* Delete if not applicable

***YES / NO**

3.1 If yes, furnish particulars

.....
.....

***YES / NO**

4. Will any portion of goods or services be sourced from outside the Republic, and, if so, what portion and whether any portion of payment from the municipality / municipal entity is expected to be transferred out of the Republic?

***YES / NO**

4.1 If yes, furnish particulars

.....
.....

CERTIFICATION

I, THE UNDERSIGNED (NAME)

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

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

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

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

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

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

1. GENERAL CONDITIONS

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

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

1.2

- a) The value of this bid is estimated to **exceed/not exceed** R50 000 000 (all applicable taxes included) and therefore the preference point system shall be applicable; or
- b) Either the 80/20 or 90/10 preference point system will be applicable to this tender (*delete whichever is not applicable for this tender*).

1.3 Points for this bid shall be awarded for:

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

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

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

- 1.5 Failure on the part of a bidder to submit proof of B-BBEE Status level of contributor together with the bid, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.
- 1.6 The purchaser reserves the right to require of a bidder, either before a bid is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the purchaser.

B-BBEE Status Level of Contributor	Number of points (90/10 system)	Number of points (80/20 system)
1	10	20
2	9	18
3	6	14
4	5	12
5	4	8
6	3	6
7	2	4
8	1	2
Non-compliant contributor	0	0

5. BID DECLARATION

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

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

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

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

7. SUB-CONTRACTING

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

(Tick applicable box)

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

- 7.1.1 If yes, indicate:

- What percentage of the contract will be subcontracted.....%
- The name of the sub-contractor.....
- The B-BBEE status level of the sub-contractor.....
- Whether the sub-contractor is an EME or QSE

(Tick applicable box)

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

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

Designated Group: An EME or QSE which is at least 51% owned by:	EME √	QSE √
Black people	<input type="checkbox"/>	<input type="checkbox"/>
Black people who are youth	<input type="checkbox"/>	<input type="checkbox"/>
Black people who are women	<input type="checkbox"/>	<input type="checkbox"/>

Black people with disabilities		
Black people living in rural or underdeveloped areas or townships		
Cooperative owned by black people		
Black people who are military veterans		
OR		
Any EME		
Any QSE		

8. DECLARATION WITH REGARD TO COMPANY/FIRM

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

8.2 VAT _____ registration
number:.....

8.3 Company _____ registration
number:.....

8.4 TYPE OF COMPANY/ FIRM

Partnership/Joint Venture / Consortium

One person business/sole propriety

Close corporation

Company

(Pty) Limited

[TICK APPLICABLE BOX]

8.5 DESCRIBE PRINCIPAL BUSINESS ACTIVITIES

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

8.6 COMPANY CLASSIFICATION

Manufacturer

Supplier

Professional service provider

Other service providers, e.g. transporter, etc.

[TICK APPLICABLE BOX]

8.7 MUNICIPAL INFORMATION

Municipality where business is situated:

.....

Registered Account Number:

Stand Number:.....

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

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

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

WITNESSES

1.

2.

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

DATE:

ADDRESS

.....

.....

**PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT
REGULATIONS 2001
PROMOTION OF SMALL BUSINESSES**

NB: BEFORE COMPLETING THIS FORM, BIDDERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES SPECIFIED IN CLAIM FORM MBD 6.1 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2001

1. Regulation 17 (3) (c) of the Preferential Procurement Regulations makes provision for the promotion of small businesses within the preference point systems.

2. **SPECIFIC GOAL** **POINTS ALLOCATED**

The promotion of small businesses as defined in the National Small Business Act, 1996 (Act 102 of 1996).

5.00

3. **BID DECLARATION**

Bidders who wish to claim points in respect of this goal must complete paragraph 5 below.

4. **POINTS CLAIMED**

Indicate whether the points allocated for this goal is claimed.

Yes / No

5. **INFORMATION FURNISHED WITH REGARD TO THE PROMOTION OF SMALL BUSINESSES**

5.1 Indicate whether the company is a small, medium or micro enterprise as defined by the National Small Business Act, 1996 (Act 102 of 1996).

Yes / No

5.1.1 If the response to paragraph 5.1 is yes, the following must be completed:

5.1.1.1 Sector or sub-sector in accordance with the Standard Industrial Classification

5.1.1.2 Size or class

5.1.1.3 Total full-time equivalent of paid employees

5.1.1.4 Total annual turnover

5.1.1.5 Total gross asset value (fixed property excluded)

5.1.1.6 Points claimed hereunder must be based on value added, excluding profit and overheads but including and not limited to local manufacture, packaging and distribution to this specific bid.

5.1.1.7 The purchaser shall indicate the different categories of percentage value added as well as the points allocated for each category. These categories may vary from industry to industry. The bidder is compelled to indicate for which category he/she is bidding and the relevant preference points claimed.

Percentage Value Added	Points Allocated	Points Claimed

5.1.1.8 Please furnish details of value added:

.....

.....

5.1.1.9 If required, the information supplied above must be substantiated by an external auditors certificate and the relevant documentation.

5.2 Indicate whether the company is actively involved in the promotion of small businesses, as defined in the National Small Business Act, 1996 (Act 102 of 1996), by subcontracting/outsourcing any of the business functions of the company to local small businesses *inter alia* manufacturing, packaging, distribution etc. Yes / No

5.2.1 If the response in paragraph 5.2 is yes, paragraphs 5.1.1.1 to 5.1.1.5 as well as the following must be completed:

5.2.1.1 Specific business function(s) subcontracted/outsourced

5.2.1.2 Name of small business

5.2.1.3 Address and telephone number of small business as well as contact person

.....

.....

5.2.1.4 Points claimed hereunder must be based on outsourced business to small businesses as a percentage of annual turnover for the previous financial year(s).

Percentage of Turnover	Points Allocated	Points Claimed

5.2.1.5 If required information supplied above must be substantiated by an external auditors certificate and the relevant documentation.

5.3 Total points claimed under par. 5.1.1.6 and 5.2.1.4 will not exceed the maximum of points allocated for this specific goal.

6. BID DECLARATION

I/we, the undersigned, who warrants that he/she is duly authorised to do so on behalf of the firm declare that points claimed, based on promotion of small, medium or micro enterprises, qualifies the firm for the point(s) shown and I / we acknowledge that:

- (i) The information furnished is true and correct.
- (ii) In the event of a contract being awarded as a result of points claimed, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct.
- (iii) If the claims are found to be incorrect, the purchaser may, in addition to any other remedy it may have -
 - (a) recover all costs, losses or damages it has incurred or suffered as a result of that person's conduct; and
 - (b) 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;

WITNESSES:

1.

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

2.

DATE:

**PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS
2001**

PROMOTION OF ENTERPRISES LOCATED IN LIMPOPO PROVINCE

NB: BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES SPECIFIED IN CLAIM FORM PT.6 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2001.

1. Regulation 17(3) (f) of the Preferential Procurement Regulations makes provision for the promotion of enterprises located in a specific region for work to be done or services to be rendered in that region.
2. The promotion of this goal can be achieved by acquiring goods and services from enterprises located within the Limpopo Province. This includes an enterprise whose head office may be situated in elsewhere, but has established a fully-fledged branch within this Region. Enterprises located outside the borders of Limpopo Province and who only appoint agents and/or commission warehouses in this Province are expressly excluded from claiming points for this goal.

SPECIFIC GOAL

POINTS ALLOCATED

The stimulation of the Provincial economy by procuring locally

02

3. Preference points may only be claimed by enterprises located within the borders of Limpopo Province. (See paragraph 2 above).

4. TENDER DECLARATION

Tenderers who wish to claim points in respect of this specific goal must complete the declaration part of this form.

5. POINTS CLAIMED

Tenderer to indicate whether the point(s) allocated for enterprises situated within the .. Region is/are claimed.

☐ Yes / ☐ No

6. DECLARATION WITH REGARD TO LOCALITY

State full particulars of locality of enterprise as well as that of Head Office:

Address of local enterprise: Physical:

Postal:

Telephone:

Fax:

Address of Head Office: Physical:

Postal:

Telephone:

Fax:

I/we, the undersigned, who warrants that he/she is duly authorised to do so on behalf of the enterprise certify that the enterprise is entitled to the points allocated in paragraph 2 of this form and I / we acknowledge that:

- (i) The information furnished is true and correct.
- (ii) In the event of a contract being awarded as a result of points claimed, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claim is correct.
- (iii) If the claim is found to be incorrect, the purchaser may, in addition to any other remedy it may have-
 - (a) recover all costs, losses or damages it has incurred or suffered as a result of wrong information furnished;
 - (b) 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;
 - (c) impose a financial penalty more severe than the theoretical financial preference associated with the claim which was made in the tender; and

WITNESSES:

1.

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

2.

DATE:

DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

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

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

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

CERTIFICATION

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

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

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

Js367bW

CERTIFICATE OF INDEPENDENT BID DETERMINATION

- 1 This Municipal Bidding Document (MBD) must form part of all bids¹ invited.

- 2 Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).² Collusive bidding is a *pe se* prohibition meaning that it cannot be justified under any grounds.

- 3 Municipal Supply Regulation 38 (1) prescribes that a supply chain management policy must provide measures for the combating of abuse of the supply chain management system, and must enable the accounting officer, among others, to:
 - a. take all reasonable steps to prevent such abuse;
 - b. reject the bid of any bidder if that bidder or any of its directors has abused the supply chain management system of the municipality or municipal entity or has committed any improper conduct in relation to such system; and
 - c. cancel a contract awarded to a person if the person committed any corrupt or fraudulent act during the bidding process or the execution of the contract.

- 4 This MBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.

- 5 In order to give effect to the above, the attached Certificate of Bid Determination (MBD 9) must be completed and submitted with the bid:

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

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

CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:

(Bid Number and Description)

in response to the invitation for the bid made by:

(Name of Municipality / Municipal Entity)

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

I certify, on behalf of: _____ that:

(Name of Bidder)

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

MBD 9

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

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.

MBD 9

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

Js9141w 4



MAKHADO MUNICIPALITY

TENDER NO: 79 OF 2021

CONSTRUCTION OF MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3 (REGRAVELLING) AT MAKHADO MUNICIPALITY WITHIN VHEMBE DISTRICT OF LIMPOPO PROVINCE

T2.2. B.EVALUATION CRITERIA

The bids will be evaluated in two stages. The first stage will check whether the bidders have submitted all documents as requested on the advert. Although functionality does not form part of the final tender points scoring for award purpose, tenderer will be assessed for responsiveness and functionality first and if the tender is not responsive or meet the minimum functionality score, the tenderer will be eliminated and not considered further for second stage of evaluation.

The second stage of the evaluation will be based on Price (80) and preference points for B-BBEE status level of contribution (20).

First(1) Stage – Compliance with the Administrative Requirements

Bidders must comply with the following administrative requirements and non-complying bidders will be considered as nonresponsive and will be disqualified for further evaluation.

- **Original valid Tax Clearance Certificate with a SARS PIN**
- **Company Registration Certificate**
- **Certified Copies of Company Owners' ID Book(s) not older than 3 months**
- **Proof of company municipal account / lease agreement or proof of residential address by Traditional Authority, not older than 3 months**
- **Relevant CIDB Grading as mentioned above**
- **Certified copy of BBBEE Certificate or Sworn affidavit**
- **Audited Annual Financial Statements for 3 years**
- **Attach CSD Report**
- **Attendance of Compulsory Briefing Session**
- **Authority for Signatory**
- **Completion of Form of Offer**
- **Completion and Compliance with Addendum (if applicable)**
- **Joint Venture Agreement**
- **Receipt / Proof of Purchase of Bid Document**
- **Completion of Schedule of Quantities**
- **Insurance Statement**
- **Completion of MBD Documents**
- **Price Alterations without Signature or using Tippex**



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- Completion of Bid Document using Pencil
- Late Submission of Tender Document
- Submission by telegraph, facsimile, emailing

Second (2) Stage of the evaluation will be based on Functionality .

Goals at which points should be allocated:

Bidders must score a minimum of 70% or 70points for functionality to qualify for further evaluation.

TABLE B1: REPUTATION AND REFERENCES

TARGET GOALS Name reference with contact details (Previous 3 years, successfully completed projects of similar nature)		MAX POINTS TO BE SCORED	POINTS CLAIMS BY TENDERER	ALLOCATED POINTS
1.		8		
2.		8		
3.		8		
4.		8		
5.		8		
SUB-TOTAL TABLE 1 : REPUTATION AND REFERENCES		40		

NOTE: The tender should attach appointment letters and completion certificates as a proof for having completed such project. Points for each project will be allocated as follows:



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TABLE B2: FINANCIAL CAPACITY

TARGET GOALS		Tendered Goal	Points Claimed by Tenderer	Allocated Points
1.	Tenderer submitted banking details proof attached	2		
2.	Bank rating of "C" or better	5		
3.	Registered financial Institution's full details as guarantor in the amount of 10% as specified for surety purpose shall be submitted	3		
SUB-TOTAL 2: FINANCIAL CAPACITY		10		

TABLE B3: EXPERIENCE AND QUALIFICATION OF KEY STAFF

Table B3.1 Experience

TARGETED GOALS		Points Allocation	Points Claimed by Tenderer	Allocated Points
1	Contract Manager: 10 years in Road Projects	>10 yrs=5 6-9 yrs=3 3-5 yrs=2 1-2yrs=1		
2	Site Agent: 8 years in Road Projects	>8 yrs=5 5-7 yrs=3 3-4 yrs=2 1-2yrs=1		
3	Foreman 5 years in Road Projects	>5 yrs=3 4 yrs=1.5 3 yrs=1 1-2yrs=0.5		
4	Health and Safety Officer 5 years of experience as OHS in Civil Engineering Construction	>5 yrs=2 4 yrs=1 3 yrs=0.5 1-2yrs=0.25		
Sub-Total: Experience		15		



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NOTE: Project organogram should be attached. Curriculum vitae with detailed experience and contact details should be attached to the tender document for verification by the consultants.

TABLE B3.2 QUALIFICATIONS

TARGETED GOALS		Tendered Goal	Points Claimed by Tenderer	Allocated Points
1	Contract Manager: Civil Engineering or construction management	BSc = 5 B-Tech /PrCPM = 5 ND = 3 N6 = 2 Any Cert= 1		
2	Site Agent: Civil Engineering or construction management or project management (Must have at least NQF 5)	BSc/B-Tech = 5 ND = 4 NQF 5/7 = 3 N6 = 2 Any Cert= 1		
3	Foreman	ND = 3 NQF 7 =2 N6 = 2 N3= 1.5 NQF5= 1.5 NQF 4= 1 NQF 3= 0.5		
4	Health and Safety Officer 5 years of experience as OHS in Road projects	ND = 2 Cert = 0.5		
Sub-Total: Qualifications		15		

CV's and Certified Qualifications should be attached.



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TABLE B4: PLANT AND EQUIPMENT

TARGETED GOALS	Tendered Goal	Points Claimed by Tenderer	Allocated Points
1. Grader (2 no)	4		
2. TLB (2 no)	1		
3. Excavators (2 no)	2		
4. Water Cart (2 no) (10 000 litre)	2		
5. 10 m ³ Tipper Trucks (8 no)	8		
6. Vibratory Roller 12 ton(1 no)	1		
7. Pad Foot Roller 8 ton (1 no)	1		
8. LDV (2 no)	1		
Sub-Total: Plant and Equipment	20		

Note: Tenderers should attach certified proof of ownership certificate for the plant mentioned above if they own such plant. In case of hired plant, tenderers will be required to attach a letter of undertaking by the hiring firm indicating that they will provide the tenderer with such plant should the tenderer becomes a successful bidder. The hiring company should also provide proof of ownership for such plants.

TABLE B5: SUMMARY

DESCRIPTION	Maximum Points to be Allocated	Points Claimed by Tenderer	Allocated Points
REPUTATION AND REFERENCE OF THE FIRM: TABLE B1	40		
FINANCIAL REFERENCES: TABLE B2	10		
EXPERIENCE OF KEY STAFF: TABLE B.1	15		
QUALIFICATION OF KEY STAFF: TABLE B3.2	15		
PLANT AND EQUIPMENT: TABLE B4	20		
TOTAL	100		

Minimum functionality requirements of seventy percent (70%) or 70 points required for further evaluation.

The 80/20-point scoring system will be used on second stage of evaluation.



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The Third (3) Stage of the evaluation will be based on Price (80) and Preference points for B-BBEE Status Level of Contribution (20).

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

BBBEE status level of contribution: =(maximum of 20 points)

(points claimed in respect to the above paragraph must be in accordance with the table reflected above 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).



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SUPPLY CHAIN POLICY USING 80/20 PREFERENCE POINTS SYSTEM

		MAXIMUM POINTS TO BE ALLOCATED	POINTS CLAIMED BY TENDERED	ALLOCATED POINTS
PRICE	PRICE	80		
	SUB-TOTAL	80		
B-BBEE LEVEL	1	20		
	2	18		
	3	16		
	4	10		
	5	8		
	6	6		
	7	4		
	8	2		
	SUB-TOTAL	20		
	TOTAL	100		



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T2.2 C. CERTIFICATE OF AUTHORITY

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

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

A. Certificate for company

I,....., chairperson of the board of directors of hereby confirm that by resolution of the board (copy attached) taken on20...., Mr/Mrs..... acting in the capacity of....., was authorised to sign all documents in connection with this tender and any contract resulting from it on behalf of the company.

As witness

1.....

.....
Chairman

2.....

.....
Date

B. Certificate of partnership

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

hereby authorise Mr/Mrs....., acting in the capacity of..... to sign all documents in connection with the tender for Contract..... and any contract resulting from it on our behalf.

NAME	ADDRESS	SIGNATURE	DATE

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



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C. Certificate for Joint Venture

We, the undersigned, are submitting this tender offer in Joint Venture and hereby authorise Mr/Mrs....., authorised signatory of the companyacting in the capacity of lead partner, to sign all documents in connection with the tender offer for Contract.....and any other contract resulting from it on our behalf.

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

NAME OF FIRM	ADDRESS	AUTHORISING SIGNATURE, NAME & CAPACITY
Lead partner		

D. Certificate for sole proprietor

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

As Witness:

1.....

Signature: Sole owner

2.....

Date



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E. Certificate for Close Corporation

We, the undersigned, being the key members in the business trading
as.....hereby authorise Mr/Mrs.....

Acting in the capacity of....., to sign all documents in
connection with the tender for Contract.....and any contract
resulting from it on our behalf.

NAME	ADDRESS	SIGNATURE	DATE

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



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T2.2 D. CERTIFICATE OF ATTENDANCE AT CLARIFICATION MEETING

This is to certify that

..... (Tenderer)
of

..... (address)
.....

was represented by the person(s) named below at the compulsory meeting held for all tenderers
at.....(location), on.....(date), starting
at.....

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

Particulars of person(s) attending the meeting:

Name Signature.....

Capacity.....

Name..... Signature.....

Capacity.....

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

Name..... Signature.....

Capacity..... Date & Time.....



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T2.2 E. SCHEDULE OF PROPOSED SUBCONTRACTORS

We notify you that it is our intention to employ the following subcontractors for work in this contract.

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

	Name and address of proposed Subcontractor	Company Registration Number & CIDB Classification	Description of Work to be executed by Subcontractor
1.			
2.			
3.			
4.			
5.			

Signed..... Date.....

Name..... Position.....

Tenderer.....



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SUB-CONTRACTING UNDERTAKING**

LETTER OF UNDERTAKING TO PERFORM AS A SUB-CONTRACTOR

(Copy as many as necessary)

Contract Number:

From: (Name and address of Sub-contractor)

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

To: (Name and address of Contractor)

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

The undersigned undertakes to *perform work/provide services/supply goods in connection with the above Contract as a *close corporation/sole proprietor/partnership/company and is prepared to perform in connection with the above-named Contract as Sub-contractor to the Contractor, the following *work/provide the following services/supply the following goods:

*(delete that which is not applicable)

.....
.....

for an estimated amount of R..... excluding VAT, subject to the terms of any agreement made between us for the purpose of the Contract which agreement shall include the General Conditions of Contract and relevant Special Conditions that govern this Contract.

Signature:.....

Name:

Designation:.....

Date:.....

who duly warrants that he/she is authorised to sign this letter.



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T2.2 F. SCHEDULE OF PLANT AND EQUIPMENT

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

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

Quantity	Description, size, capacity, etc.

Attach additional pages if more space is required.

NB: Proof of Ownership of Plant to be submitted with tender.



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

Quantity	Description, size, capacity, etc.

Attach additional pages if more space is required

NB: A letter from the Plant Hire confirming the Pre-Agreement with your firm regarding supply of the above mentioned machinery should be attached.

Signed..... Date.....
Name..... Position.....
Tenderer.....



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T2.2 G. SCHEDULE OF THE TENDERER'S EXPERIENCE

The following is a statement of similar work successfully executed by myself/ourselves in the last five (5) years:

Employer, contact person and telephone number	Description of contract	Value of work Inclusive of VAT (Rand)	CIDB Classification	Date Completed

Signed..... Date

Name..... Position.....

Tenderer.....



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T2.2. H RECORD OF ADDENDA TO TENDER DOCUMENTS

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

	Date	Title of Details
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

Attach additional pages if more space is required.

Signed..... Date

Name..... Position.....

Tenderer.....



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T2.2. I DEVIATIONS OR QUALIFICATIONS BY THE TENDERER

Note: Tenderers will be declared to be non-responsive should any proposed deviation or qualification, save for where alternative tender offers are permitted in terms of the Tender Data, in the employer's opinion:

- a) Detrimentially 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.

PAGE	DESCRIPTION

SIGNED ON BEHALF OF TENDERER:



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T2.2. J. CONTRACTOR'S ESTABLISHMENT ON SITE

Should the combined, extended total tendered for Item 13.01 The contractor's general obligations:

- (a) Fixed obligations
- (b) Value-related obligations
- (c) Time-related obligations

Exceed a maximum of 15 % of the tender sum (excluding VAT), the tenderer shall clearly set out his reasons for tendering in this manner in a letter attached to this page.

Total tendered for Item B13.01 expressed as a percentage of the tender sum (excluding VAT):
% (insert percentage).

ESTABLISHMENT OVER AND ABOVE ITEM 13.01 (see item B13.01)		
ITEM	PORTION OF RATE OR SUM (R)	VALUE (RANDS)
TOTAL VALUE		

SIGNED ON BEHALF OF TENDERER:

Note to Tenderer:

If the tenderer should require additional compensation for his obligations under section 1300 (over and above the total tendered for item 13.01) by including such additional compensation in the tendered rates and/or lump sum of items in the bill of quantities, these items and the value of such additional compensation shall also be set out in a letter attached to this form.



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T2.2. K CERTIFICATE OF NON-COLLUSIVE TENDER

1 IN THE CASE OF A SINGLE CONSTRUCTION CONCERN:

I/We certify that this is a bona fide tender.

I/We also certify that I/We have not done and I/We undertake not to do any of the following at any time before the hour and date specified for the closure of submission of tenders for this contract.

- a) Fix or adjust the amount of this tender by or under or in accordance with any agreement or arrangement with any other person;
- b) communicate to a person other than the person calling for these tenders the amount or approximate amount of the proposed tender, except when the confidential disclosure of the approximate amount of the tender is necessary to obtain the insurance-premium quotations required for preparation of the tender;
- c) Cause or induce any other person to communicate to me/us the amount or approximate amount of any rival tender for this contract;
- d) enter into any agreement or arrangement with any other person to induce him to refrain from tendering for this contract, or to influence the amount of any tender or the conditions of any tender to be submitted, nor cause or induce any other person to enter into any such agreement or arrangement;
- e) offer or pay or give or agree to pay or to give any sum of money or valuable consideration directly or indirectly to any person for doing or having done or causing or having caused to be done in relation to any tender or proposed tender for this contract, any action similar to those described above.

In this certificate the term "person" includes any persons, body of persons or association, whether corporate or not, and the term "agreement or arrangement" includes any agreement or arrangement, whether formal or informal and whether legally binding or not.

SIGNED ON BEHALF OF TENDERER:



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CERTIFICATE OF NON-COLLUSIVE TENDER (continued)

2 IN THE CASE OF A CONSORTIUM OF CONSTRUCTION CONCERNS:

We certify that this is a bona fide tender.

We also certify that we have not done and we undertake not to do any of the following at any time before the hour and date specified for the closure of submission of tenders for this contract:

- a) Fix or adjust the amount of this tender by or under or in accordance with any agreement or arrangement with any person outside this consortium;
- b) communicate to a person outside this consortium other than the person calling for these tenders, the amount or approximate amount of the proposed tender, except when the confidential disclosure of the approximate amount of the tender is necessary to obtain insurance premium quotations required for preparation of the tender;
- c) Cause or induce any person outside this consortium to communicate to us the amount or approximate amount of any rival tender for this contract.
- d) enter into any agreement or arrangement with any person outside this consortium to induce him to refrain from tendering for this contract, or to influence the amount of any tender or the conditions of any tender to be submitted, nor cause or induce any person outside this consortium to enter into any such agreement or arrangement;
- e) offer or pay or give or agree to give any sum of money or valuable consideration directly or indirectly to any person outside this consortium for doing or having done or causing or having caused to be done in relation to any tender or proposed tender for this contract, any action similar to those described above.

In this certificate the term "person" includes any persons, body of persons or association, whether corporate or not, the term "agreement or arrangement" includes any agreement or arrangement, whether formal or informal and whether legally binding or not, and the term "person outside this consortium" means, when the consortium is a partnership, a person other than a partner or an employee of a partner or the partnership, or when the consortium is a company, a person other than a person or company holdings shares in the consortium, or any employee of such a person, company or the consortium.

SIGNED ON BEHALF OF TENDERER:



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T2.2.L. JOINT VENTURE DISCLOSURE FORM

- NOTE 1 This form need only be completed in the event of a Joint Venture submitting this bid.
- NOTE 2 Fill in all the information requested in the spaces provided. Attach additional sheets if required.
- NOTE 3 Provide a copy of the Joint Venture agreement. Demonstrate that the partners to the Joint Venture share in the ownership, control, management responsibilities, risks and profits of the Joint Venture. The Joint Venture agreement shall include specific details relating to:
- a) The Contributions of capital and equipment;
 - b) Portions of the Contract to be performed by the partner's own resources; and
 - c) Portions of the Contract to be performed under the supervision of each Partner.
- NOTE 4 Provide copies of all written agreements between partners concerning the Joint Venture, including those that relate to ownership options and to restrictions/limits regarding ownership and control.



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2.2.1 Joint Venture Particulars

Name

Postal Address

.....

.....

Physical Address

.....

Telephone

Fax

Name of authorized representative

2.2.2 Identity of Partner No. 1

Name

Postal Address

.....

Physical Address

.....

Telephone

Fax

Contact Person



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2.2.3 Identity of Partner No. 2

Name

Postal Address

Physical Address

Telephone

Fax

Contact Person

2.2.4 Identity of Partner No. 3

Name

Postal Address

Physical Address

Telephone

Fax

Contact Person

2.2.5 Description of the role of the partners in the joint venture

Partner No. 1:

Partner No. 2:

Partner No. 3:



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2.2.6 Ownership of the joint venture

- (i) Ownership percentage(s)
- | | | |
|---------------|-------|---|
| Partner No. 1 | | % |
| Partner No. 2 | | % |
| Partner No. 3 | ..... | % |
- (ii) Partner percentage in respect of:
- a) Profit and loss sharing:
- | | | |
|---------------|-------|---|
| Partner No. 1 | ..... | % |
| Partner No. 2 | ..... | % |
| Partner No. 3 | ..... | % |
- b) Initial capital contribution
- | | |
|---------------|--------|
| Partner No. 1 | R..... |
| Partner No. 2 | R..... |
| Partner No. 3 | R..... |
- (iii) Anticipated on-going capital contributions:
- | | |
|---------------|--------|
| Partner No. 1 | R..... |
| Partner No. 2 | R..... |
| Partner No. 3 | R..... |
- (iv) Contributions of equipment (specify types, quality and quantities of equipment) to be
- Provided by each partner:
- Partner No. 1
-
- Partner No. 2
-
- Partner No. 3
-



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**2.2.7 Recent contracts performed by partners in their own right or as partners in
other joint ventures**

a) Partner No. 1

- (i)
- (ii)
- (iii)
- (iv)
- (v)

b) Partner No. 2

- (i)
- (ii)
- (iii)
- (iv)
- (v)

c) Partner No. 3

- (i)
- (ii)
- (iii)
- (iv)
- (v)



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2.2.8 Control and participation in the joint venture

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

a) Joint Venture cheque signing

.....

.....

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

.....

.....

c) Signing, co-signing or collateralizing of loans

.....

.....

d) Acquisition of lines of credit

.....

.....

e) Acquisition of demand bonds

.....

.....

f) Negotiating and signing of labour agreements

.....

.....



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2.2.9 Management of the performance of the Contract

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

a) Supervision of field operations

.....

b) Major purchasing

.....

c) Estimating

.....

d) Technical management.....

.....

2.2.10 Management and control of the joint venture

a) Identify the managing partner

.....

.....

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

Partner No. 1:

.....

Partner No.2:

.....

Partner No. 3:.....

.....



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- c) Describe the management structure for the joint venture's work under this Contract:

Management Function/Designation	Name	Partner

2.2.11 Personnel

- a) State the approximate number of operative personnel (by trade/function/discipline) needed to execute the Joint Venture contract.

Trade/function/discipline	Number



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- b) State the number of operative personnel to be employed on the Contract who are currently in the employ of partners:

.....

- c) State the number of operative personnel who are not currently in the employ of the respective partners and shall be engaged on the project by the Joint Venture:

.....

- d) State the name of the individual who shall be responsible for hiring Joint Venture employees:

.....

- e) State the name of the partner who shall be responsible for the preparation of Joint Venture payrolls:

.....

2.2.12 Services

List the firms who provide the following services:

Service	Name	Contact Person	Tel. No.
Accounting			
Auditing			
Banking			
Insurance			
Legal			



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2.2.13 Control and structure of the Joint Venture

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

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

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

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

Duly authorized to sign on behalf of:

.....
..... (the Joint Venture)

Signature:.....Print Name:

Name:.....

Address:.....
.....

Telephone:.....

Date:.....



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Duly authorized to sign on behalf of:

.....

..... **(Partner No. 1)**

Signature:..... Print Name:.....

Name:

Address:.....

.....

Telephone:.....

Date:.....

Duly authorized to sign on behalf of:

.....

..... **(Partner No. 2)**

Signature:..... Print Name:.....

Name:

Address:

.....

Telephone:.....

Date:.....



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Duly authorized to sign on behalf of:

.....

..... (Partner No. 3)

Signature:

Print Name:

Name:

Address:

.....

Telephone:

Date:



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T2.2. M COMPLIANCE WITH OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 AND CONSTRUCTION REGULATIONS, 2003

The tenderer shall attach to this Form evidence that he is registered and in Good Standing with a compensation insurer who is approved by Department of Labour in terms of section 1010 of the Compensation for Injury and Disease Act (CIDA) (Act 130 of 1993).

The works will also be carried out using the Construction Regulations Act(Act 85 of 2003

The tenderer is required to disclose, by also attaching documentary evidence to this form, all inspections, investigations and their outcomes conducted by the Department of Labour into the conduct of the tenderer at any time during the 36 months preceding the date of this tender.

SIGNED ON BEHALF OF THE TENDERER:

Note to tenderer:

Discovery that the tenderer has failed to make proper disclosure may result in the Municipality Terminating a Contract that flows from this tender on the ground that it has been rendered invalid by the tenderer's Misrepresentation.



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T2.2. N REQUIREMENTS IN TERMS OF GOVERNMENT'S RECONSTRUCTION AND DEVELOPMENT PROGRAMME

N1 General

The employer requires the active participation of the Contractor in this aspect of the contract.

Forms RDP 1 (E) to RDP 4 (E) apply to this section and must be completed and submitted with the tender.

The tenderer's submissions under this item will be taken into consideration when evaluating tenders received.

N2 Definitions

N2.1 Contract Participation Goal (CPG)

The value of goods, services and works, excluding VAT, for which the contractor proposes to engage labour or ABEs, EME (Exempted Micro Enterprise) or QSE (Quality Small Enterprise)

N.2.2 Affirmable Business Enterprise (ABE), EME, QSE

A business which adheres to statutory labour practices, is a legal entity, registered with the South African Revenue Service and a continuing and independent enterprise for profit, providing a commercially useful function and

- a) which is at least 51 % Owned by one or more Previously Disadvantaged Individuals (PDI) or in the case of a company, at least 51 % of the shares are owned by one or more Previously Disadvantaged Individuals (PDI) and
- b) whose management and daily business operations are under the control of one or more of the Previously Disadvantaged Individuals (PDI) who effectively own it provided, however, that, during the period for which the business has been operating or the previous three financial years, whichever period is the lesser, the average annual turnover of the business (excluding VAT and any turnover generated in respect of work performed by other parties in a joint venture or a consortium) does not exceed:
 - 1) R10 million in respects of Contractors who mainly perform Civil Engineering Services.



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- 2) R2,5 million in respect of labour-only subcontractors
- 3) R10 million in respect of Manufacturers
- 4) R15 million in respect of Suppliers
- 5) R2,5 million, exclusive of any turnover generated in respect of out-sourced activities which the enterprise does not have the in-house competence and expertise to perform, in respect of professional service providers, and
- 6) R2,5 million in respect of other service providers, e.g., transport; and that the sum of the average annual turnovers over the same period of all the business concerns which are under the control of Previously Disadvantaged Individuals (PDI) within the business entity and Affiliated Entities does not exceed one and a half (1,5) times the maximum allowable annual average turnover for the particular category of enterprise as set out in (b) above, seeking ABE status.

N.2.3 "Historically Disadvantaged Individuals (HDIs)" means all South African Citizens

1. who had no franchise in national elections prior to the introduction of the 1983 and 1993 constitutions;
2. women,

Persons who obtained South African Citizenship after the first democratic election in April 1994, cannot qualify for preference as an HDI.

N2.4 Target values

- (a) The values of the following items (excluding VAT) expressed as percentages of the Tender Sum, (excluding VAT) as proposed by the tenderer in his tender. The monetary total of these values shall be the CPG.

In this contract the minimum target values shall be as follows:

Labour Maximisation	: 35%
ABE/EME or QSE support	: 30%
HDI = Staff	: 50%

- (b) The value of the following item expressed as a percentage of the total number of supervisory staff employed on the contract, as proposed by the tenderer in his tender. In this contract the minimum target value shall be:

HDI Supervisory Staff: 10%



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The tender of a tenderer whose proposed target values are below the minimum set by the employer may be disqualified.

The maximum target values for each category will be the highest of all values submitted in the tenders short-listed for detailed evaluation.

N3 Preferential Procurement Point System Policy

The Municipality Procurement Policy is included under section C3.3 Procurement.

N4 Contract Participation Performance (CPP)

N4.1 The Contractor's Participation Performance will be measured monthly in order to monitor the extent to which he is striving to reach the Contract Participation Goal (CPG) he proposed in his tender. Failure to reach the CPG will make him liable for a penalty as prescribed in Section C3.3.1.5 of the Preferential Procurement Point System Policy.

N4.2 Monitoring of CPG

Regular returns will be required from the contractor, to be submitted with each payment certificate. No payment will be done if these forms are not submitted with the payment certificate.

Examples of the forms to be used are illustrated under Annexure C5.1 of this document.

N5 Training

Provision is made in the PROJECT SPECIFICATIONS for structured training to be provided by the contractor to PDI'S and ABE'S.



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T2.2. O QUALITY ASSURANCE PROGRAMME

Bidder to submit details here below of his Quality Assurance Policy whereby he shall demonstrate that he has the following:

- (a) An Operating Quality Management System based on SABS/ISO 9001: 2000 international standards, if not, state alternative.
- (b) Proof of Quality Assurance Co-ordination.
- (c) Proven technical capabilities and resources to ensure Quality Management.
- (d) A recent assessment/audit report on his Quality Management and Quality Control System(s).

Contractor's details with respect to items a), b), c) and d):

SIGNATURE OF BIDDER DATE



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T2.2. P: INSURANCE STATEMENT

BIDDER'S DECLARATION OF INSURANCES

I/We hereby declare that the insurances enumerated below have been affected by me/us.

I/We further declare that all premiums in respect of the insurances are fully paid up to date.

Cover Effectuated	Insurer and Policy Number	Expiry Date	Limits of Indemnity / Sums Insured	Deductibles
Contractor's All Risks				
Occupational Injuries and Diseases				
Unemployment Insurance				
Motor Vehicle Insurance				
Other:				



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We submit herewith a letter of good standing from the Workman's Compensation Commissioner in respect of Occupational Injuries and Diseases Insurance.

Bidder:

.....

Signature of Bidder

.....

Print Name of Signatory

.....

Capacity



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RDP1(E) SCHEDULE OF LABOUR CONTENT

The Tenderer must complete the table below to reflect the labour force anticipated to be employed on this contract, including labour employed by sub-contractors.
The specified target value is 35%, Note: A minimum value of 50% of this 35% target value should be obtained from Local Labour content.

Type of Labour	Man-days	Minimum Wage Rate per Unit	Total Wage Cost (Excl VAT)
Temporary Labour			
SMME/HDI's Labour			
TOTAL			
PERCENTAGE			

Notes to Tenderer:

- (1) Labour is defined as hourly paid personnel or personnel paid per task.
- (2) The penalty for non-compliance during the contract or for fraudulent disclosure

SIGNED ON BEHALF OF THE TENDERER:



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Target values of work to be executed by and goods & services to be procured from the above mentioned shall be **30%**.

Schedule Item No	Name of ABE, EME or QSE	Item Description/ Goods & Services to be provided	Value	
			Rands (Excl VAT)	% of Tender Sum (Excl VAT)
TOTAL				

1. Regardless whether the tenderer fits the classification of an SMME/PDI, as defined On the specification, the tenderer nevertheless retains the obligation to commit to the target values prescribed.
2. Tenderers shall insert “unknown” if an SMME/PDI has not been selected prior to tender closing date.
3. The penalty for non-compliance during the contract or for fraudulent disclosure.
4. The tenderer should list activities or items He/she wishes to Subcontract to the value of 30% of the Contract amount excluding Contingencies and VAT (15%)

SIGNED ON BEHALF ON THE TENDERER



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RDP3(E) HDI EQUITY IN PROJECT

The tenderer shall complete the table below

Company Name (In Case of Joint Venture, all JV Partner Names)	Other HDI Equity Share %	Female Equity Share %	Total HDI Equity Share %

Notes to tenderer:

The tenderer may be required to provide audited proof of equity distribution. In the case of public listed companies the ratios of equity shareholding are to be replaced by the ratio of HDI and female representative at directorship level.

SIGNED ON BEHALF OF THE TENDERER



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RDP4(E) HDI SUPERVISORY STAFF

The minimum value of HDI supervisory staff expressed as a percentage of the total number of staff be 10%.

It is proposed to employ the following salaried personnel on this contract as supervisory staff:

(Note: The Curriculum Vitae of each staff member proposed to be attached at 2.3A with relevant qualifications and traceable experience)

Staff Category	Number per Category	HDI Status (Yes or No)
TOTALS		

HDIs as percentage of total %

Notes to tenderer:

1. If personnel are hourly paid they cannot be classified as supervisory staff, regardless the nature of their duties.
2. The tenderer may be required to provide audited proof that the stated personnel are salaried members of staff or contracted on a monthly fee.
3. Examples of relevant personnel are: Site agent, assistant site agent, senior materials technician, senior surveyors and clerks.

SIGNED ON BEHALF OF THE TENDERER



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RDP5(E) ABE (AFFIRMABLE BUSINESS ENTERPRISE) DECLARATION AFFIDAVIT

It is understood and agreed that should this contract be awarded to me an ABE Declaration Affidavit will be completed by each and every ABE, EME OR QSE employed by me on this contract and will be submitted to the Employer immediately upon demand by the Employer.

SIGNED ON BEHALF OF THE TENDERER

An example of the SMME/PDI Declaration Affidavit is given.



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RDP6(E) GENERIC TRAINING

Name of Training Institution:

Name of Programme:

Trainer's Name	Qualification	Subject

Notes to tenderer:

Provide details here, or attach hereto, the subjects to be covered and the manner in which the training is to be delivered.

SIGNED ON BEHALF OF THE TENDERER.....



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RDP7(E) ENTREPRENEURIAL TRAINING

Name of Training Institution:.....

Name of Programme:.....

Trainer's Name	Qualification	Subject

Notes to tenderer:

Provide details here, or attach hereto, the subjects to be covered and the manner in which the training is to be delivered.

SIGNED ON BEHALF OF THE TENDERER.....



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RDP8(E) ENGINEERING SKILLS TRAINING

Name of Training Institution:.....

Name of Programme:

Trainer's Name	Qualification	Subject

Notes to tenderer:

Provide details here, or attach hereto, the subjects to be covered and the manner in which the training is to be delivered.

SIGNED ON BEHALF OF THE TENDERER.....



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

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T2.3. A ORGANOGRAM AND CURRICULUM VITAE OF KEY PERSONNEL

Tenderer to supply the Project Team for this contract and include curriculum vitae of key personnel.

These curricula vitae shall provide evidence of relevant experience of the key staff.

The personnel included here shall be used on the project unless otherwise agreed by the engineer.

Contract Manager's qualifications should be attached and traceable experience of this personnel will be essential.

The Site Agent's qualifications should be attached and failing will lead to a project being suspended until such personnel with those qualifications is found to be part of the project. Also traceable experience of this personnel will be essential.

Foreman's qualifications should be attached and failing will lead to a project being suspended until such personnel with those qualifications is found to be part of the project. Also traceable experience of this personnel will be essential.

Safety Officer should also attach acceptable and minimum qualifications to be able to run OHS successfully in this project. Also traceable experience will be essential,



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MANAGEMENT AND KEY STAFF EXPERIENCE

1. CURRICULUM VITAE OF CONTRACT MANAGER

Name:	Date of Birth:
Profession:	Nationality:
Qualifications:	
Professional Registration Number:	
Name of Employer (Firm):	
Current Position:	Years with the firm:
Employment Record: (List in chronological order stating with earliest work experience)	



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Experience Record Pertinent to Required Service

Certification

I, the undersigned, certify that to the best of my knowledge and belief, this data correctly describes me, my qualifications and my experience.

.....
[Signature of person named in schedule]

Date:



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2. CURRICULUM VITAE OF SITE AGENT

Name:	Date of Birth:
Profession:	Nationality:
Qualifications:	
Professional Registration Number:	
Name of Employer (Firm):	
Current Position:	Years with the firm:
Employment Record: (List in chronological order stating with earliest work experience)	



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Experience Record Pertinent to Required Service

Certification

I, the undersigned, certify that to the best of my knowledge and belief, this data correctly describes me, my qualifications and my experience.

.....

[Signature of person named in schedule]

Date:



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3. CURRICULUM VITAE OF FOREMAN

Name:	Date of Birth:
Profession:	Nationality:
Qualifications:	
Professional Registration Number:	
Name of Employer (Firm):	
Current Position:	Years with the firm:
Employment Record: (List in chronological order stating with earliest work experience)	



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Experience Record Pertinent to Required Service

Certification

I, the undersigned, certify that to the best of my knowledge and belief, this data correctly describes me, my qualifications and my experience.

.....
[Signature of person named in schedule]

Date:



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4. Curriculum Vitae of Construction Safety Officer

Name:	Date of Birth:
Profession:	Nationality:
Qualifications:	
Professional Registration Number:	
Name of Employer (Firm):	
Current Position:	Years with the firm:
Employment Record: (List in chronological order stating with earliest work experience)	



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Experience Record Pertinent to Required Service in Health and Safety

Certification

I, the undersigned, certify that to the best of my knowledge and belief, this data correctly describes me, my qualifications and my experience.

.....
[Signature of person named in schedule]

Date:



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T2.3. B PROJECT PROGRAMME AND METHOD STATEMENT

Tenderer to supply project programme, using acceptable software, in sufficient detail to cover the various facets of the work.

The programme of work will only be required as soon as the project is awarded to successful Bidder.

This programme is to be supported by a method statement indicating the tenderer's proposed work plan for the construction of the works.

No Programme will be accepted if it is not informed by the amount of work on the Schedule of Quantities.

Note: For submission within 14 days after Site Handover

SIGNED ON BEHALF OF TENDERER:



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T2.3.C SCHEDULE OF ESTIMATED MONTHLY EXPENDITURE

The tenderer shall state his estimated value of the work to be completed every month, based on his preliminary programme and his tendered unit rates, in the table below. The amounts for contingencies and contract price adjustment shall not be included.

MONTH	VALUE (INCLUDING VAT)
1	R
2	R
3	R
4	R
5	R
6	R
Retention(50%)	R
Final Retention(50%)	R.....
TOTAL: R..... (EXCLUDING CONTINGENCIES AND CONTRACT PRICE ADJUSTMENT)	

SIGNED ON BEHALF OF TENDERER:.....



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T2.3. D RATES FOR SPECIAL MATERIALS

Only bitumen products will be dealt with as a special material in terms of sub-clause 6.3 of the General Conditions of Contract 2015. All products, as indicated in the contract data must be stated in the list below.

The rates and prices for the special materials shall be furnished by the contractor, which rates and prices shall exclude VAT but shall include all other obligatory taxes and levies.

BASE MONTH: November 2021

SPECIAL MATERIALS	UNIT *	RATE OR PRICE FOR THE BASE MONTH

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

When called upon to do so, the contractor shall substantiate the above rates or prices with acceptable documentary evidence.

SIGNED ON BEHALF OF TENDERER:



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T2.3. E. RATES OF LABOUR AND MATERIALS (DAYWORK RATES)

LABOUR

The rates for labour indicated below shall be the total cost to the Employer, and shall include for all the Contractor's profits, overheads, wages, accommodation, travelling, subsistence and other costs relative to the employment by the Contractor of the personnel detailed, and for hand and portable electric or pneumatic tools and consumables normal to the trade of the respective personnel.

Contractor's labour rates are based on a normal hours/day

The application and use of these rates shall be at the sole discretion and subject to the prior approval of the Engineer.

Item No	Category	Rate per Day in Rand		
		Normal	Overtime	Sundays and PPH
1				
2				
3				
4				
5				



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MATERIALS

The Contractor shall indicate hereunder the percentage mark-up required on the net cost of materials actually used on site. Proof of cost of materials shall be furnished by invoices.

Percentage Mark-up % (Default 5%)

SIGNATURE OF BIDDER

DATE:

PRINT NAME OF SIGNATORY

ON BEHALF OF:(THE BIDDER)



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THE CONTRACT

PART C1.....AGREEMENT AND CONTRACT DATA
PART C2.....PRICING DATA
PART C3.....SCOPE OF WORKS
PART C4.....SITE INFORMATION



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PART C1: AGREEMENT AND CONTRACT DATA

C1.1. FORM OF OFFER AND ACCEPTANCE

Offer

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

Contract No: 79 of 2021

Project Name: Construction of Makhado Landfill Site and recycling centre phase 3 (regravelling) at Makhado Municipality within Vhembe District of Limpopo Province

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

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

THE OFFERED TOTAL OF THE PRICE INCLUSIVE OF VALUE ADDED TAX IS (CONTRACT PRICE)

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

(Amount in Words)

R..... (In figures)

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



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For the Tenderer:

Signature(s).....

Name(s).....

Capacity

(Name and address of organization)

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

Signature and Name of witness:

Signature

Name.....

Date.....



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Acceptance

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

The terms of the contract are contained in:

PART C1 Agreements and contract data, (which includes this agreement)

PART C2 Pricing data

PART C3 Scope of work

PART C4 Site information

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

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto as listed in the Tender Schedules as well as any changes to the terms of the offer

Agreed by the tenderer and the employer during this process of Offer and Acceptance, are contained in the Schedule of Deviations attached to and forming part of this Agreement. No amendments to or deviations from said documents are valid unless contained in this Schedule, which must be signed by the authorised representative(s) of both parties.

The tenderer shall within Three 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 at, or just after, the date this Agreement comes into effect. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

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



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For the Employer:

Signature(s).....

Name(s).....

Capacity

Name and address or organization:

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

Signature and Name of witness:

Signature:

Name:

Date :

Schedule of Deviations

Notes:

- i) The extent of deviations from the tender documents issued by the Employer prior to the tender closing date is limited to those permitted in terms of the conditions of Tender,
- j) A Tenderer's covering letter shall not be included in the final contract document. Should any matter in such, letter which constitutes a deviation as aforesaid become the subject of agreements reached during the process of , offer and acceptance, the outcome of such agreement shall be recorded here,
- k) Any other matter arising from the process of offer and acceptance either as a confirmation, clarification or change to the tender documents and which it is agreed by the parties becomes an obligation of the contract shall also be recorded here,
- l) Any change or addition to the tender documents arising from the above agreements and recorded here, shall also be incorporated into the final draft of contract,



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Item	Deviation Details

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

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

For the Tenderer:

Signature(s)

Name(s)

Capacity

Name and address of organization:

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

Signature and Name of witness

Signature:

Name:

Date:



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For the Employer:

Signature(s).....

Name(s).....

Capacity

Name and address of organization:

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

Signature and Name of witnesses:

Signature:.....

Name :.....

Date:



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CONFIRMATION OF RECEIPT

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

The.....(day) of.....(Month) 20....(year) at.....(place)

For the Contractor:

Signature

.....

Name

.....

Capacity

.....

Signature and name of witness:

Signature

.....

Name

.....



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C1 .AGREEMENT

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

THIS AGREEMENT made at..... on this, the day
of in the year..... between Makhado Municipality (hereinafter
called "the Employer") on the one part, herein represented by
.....in his capacity as
..... and delegate of the Employer
and.....
(hereinafter called "the Principal Contractor") of the other part, herein represented by
..... in his capacity as
.....

WHEREAS the Employer is desirous that certain works be constructed, as stated above in the
title description and has accepted a tender by the Principal Contractor for the construction,
completion & maintenance of such works and whereas the Employer and the Principal Contractor
have agreed to certain arrangements and procedures to be followed in order to ensure
compliance by the Principal Contractor with the provisions of the Occupational Health and Safety
Act 1993 (Act 85 of 1993 and the Construction Regulation, July 2003);

NOW THEREFORE THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. The Principal Contractor shall execute the work in accordance with the contract documents pertaining to this contract.
2. This Agreement shall hold good from its commencement date, which shall be the date of a written notice from the employer or engineer requiring him to commence the execution of the Works, to either:
 - a) the date of the final certificate issued in terms of clause 5.16 of the General Conditions of Contract for Construction Works 2010 (2nd Edition) as issued by the South African Institution of Civil Engineering (hereinafter referred to as "the GCC 2010"), as contained in the contract documents pertaining to this contract, or
 - b) the date of termination of the contract in terms of clauses 9.1,9.2 or 9.3 of the GCC 2010.
3. The Principal Contractor declares himself to be conversant with the following:-



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- 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.
 - iii) Section 37: Acts or omissions by employees or mandatory and
 - iv) Sub-section 37(2) relating to the purpose and meaning of this Agreement.
 - v) Construction Regulations 2003, and other safety regulations, as applicable.
 - b) The procedures and safety rules of the employer as pertaining to the Principal Contractor and to all his sub-contractors.
4. The Principal Contractor is responsible for the compliance with the Act by all his sub-contractors, whether or not selected and/or approved by the employer.
 5. The Principal Contractor warrants that all his and his sub-contractors' employees (permanent or temporary) are covered in terms of the Compensation for Occupational Injuries and Diseases Act 1993 which cover shall remain in force whilst any such employees are present on site. The Principal Contractor shall submit a written report to this effect at each Progress Site Meeting. A letter of good standing from the Compensation Commissioner to this effect must be produced to the Employer upon signature of the agreement.
 6. The Principal Contractor undertakes to ensure that he and/or his sub-contractors and/or their respective employees will at all times comply with the following conditions:
 - a) The Principal Contractor shall assume the responsibility in terms of Section 16.1 of the Occupational Health and Safety Act. The Principal Contractor shall not delegate any duty in terms of Section 16.2 of this Act without the prior written approval of the Employer. If the Principal Contractor obtains such approval and delegates any duty in terms of section 16.2 a copy of such written delegation shall immediately be forwarded to the Employer.
 - b) All incidents referred to in the Occupational Health and Safety Act shall be reported by the Principal Contractor to the Department of Labour as well as to the Employer. The Employer will further be provided with copies of all written documentation relating to any incident.
 - c) The Employer hereby obtains an interest in the issue of any formal enquiry conducted in terms of section 32 of the Occupational Health and Safety Act into any incident involving the Principal Contractor and/or his employees and/or his sub-contractors.



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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:.....

DATE:

WITNESS: 1..... 2

NAME

(IN CAPITALS) 1..... 2

SIGNED FOR AND ON BEHALF OF THE PRINCIPAL CONTRACTOR:.....

DATE:

WITNESS: 1..... 2

NAME

(IN CAPITALS) 1..... 2



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C1.B FORM OF INTENT TO PROVIDE A DEMAND GUARANTEE

If my/our bid is accepted, I/we will, when required and within the time stipulated, provide a guarantee of

Insurance Company (name).....

(of address).....

.....
.....

Or

Commercial Bank (Name)

(Branch)

(of address)

.....

to be approved by you, the Employer, for the amount stipulated.

I/we understand that failure to produce an acceptable Demand Guarantee within the stipulated period is a fundamental breach of Contract, entitling the Employer to:

- (i) withhold all payments which may be due to the Contractor pending compliance with the stipulated requirements to produce an acceptable Demand Guarantee.
- (ii) instruct the Contractor to cease all work pending provision of the Demand Guarantee, and
- (iii) Cancel the Contract.

Signed Date



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Print

Name

Position

Bidder

ENDORSEMENT

In all cases the Deed of Surety ship must be inscribed with the number of the guarantee of policy, as applicable.



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C1. C. FORM AGREEMENT IN TERMS OF THE MINE HEALTH AND SAFETY ACT, (ACT No. 29 OF 1996) AS AMENDED BY THE MINE HEALTH AND SAFETY AMENDMENT ACT (ACT No. 72 OF 1997)

THIS AGREEMENT made aton thisday ofin the year..... between Makhado Municipality (hereinafter) called "the Employer") of the one part, herein represented by in his capacity asand delegate of the Employer in terms of the Employer's standard powers of delegation pursuant to the provisions of Act No. 7 of 1998 andin his capacity as and being duly authorised by virtue of a resolution appended hereto as

Annexure A:

WHEREAS the Employer is desirous that certain works be constructed, (insert contract title) and has accepted a tender by the Contractor for the construction, completion and maintenance of such works and whereas the Employer and the contract have agreed to certain arrangements and procedures to be followed in order to ensure compliance by the Contractor with the provisions of the Mine Health and Safety Act (Act 29 of 1996); as amended by the Mine Health and Safety Amendment Act (Act No. 27 of 1997).

NOW THEREFORE THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. The Contractor shall himself obtain the Mining Authorisation for the sites.
2. The Contractor shall assume responsibility for the Environmental Management Programmes (EMP) in respect of the sites and shall ensure that the sites are rehabilitated at the conclusion of the Contract.
3. The Contractor shall comply with the provisions of the Act and the requirements of the Director: Mineral Development of the Department of Minerals and Energy in making the necessary financial provisions to mine optimally and safety and to rehabilitate the surface of the land concerned satisfactory and to carry out the EMP. All costs incurred in providing a guarantee or other financial provision shall be borne by the Contractor.
4. This Agreement shall hold good from the date on which the Mining Authorisation is issued until the date on which a Closure Certificate is issued in terms of the Minerals Act, 1991.
5. Nothing in this Agreement shall exonerate the Contractor from compliance with any requirements of the Engineer regarding the rehabilitation of sites prior to the issue of a Final Approval Certificate in terms of clause 5.16 of the General Conditions of Contract (2010).
6. The Contractor shall undertake all the duties and accept all the responsibilities of the owner in compliance with the requirements of the Act as amended.
7. The Contractor accepts responsibility for compliance with the Act, as amended, by all his sub-contractors whether or not selected and/or approved by the Employer.

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



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SIGNED ON BEHALF OF THE EMPLOYER

AS WITNESS:

1. 2.

NAME (Print): NAME (Print):

SIGNED ON BEHALF OF THE CONTRACTOR

AS WITNESS:

1. 2.

NAME (Print): NAME (Print):



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C1. D. APPOINTMENT IN TERMS OF SECTION 4 OF THE MINE HEALTH AND SAFETY ACT, (ACT No. 29 OF 1996) AS AMENDED BY THE MINE HEALTH AND SAFETY AMENDMENT ACT (ACT No. 72 OF 1997)

I, in my capacity as of the Employer, The Municipality who is the owner of the Mine(s) state name(s) or state "to be worked under the requirements of the above mentioned, hereby appoint in his capacity as of the Contractor to perform all functions entrusted to the Employer by Sections 2 and 3 of the Act, as amended

SIGNED:

DATE:

WITNESS: 1. 2.

NAME (Print): 1. 2.

I hereby accept the above appointment

SIGNED:

DATE:

WITNESS: 1. 2.

NAME (Print): 1. 2.

Note to tenderer:

The person appointed by the Employer in terms of Section 4 of the above Act, as amended, having accepted the appointment, is required under Section 3 of the Act as amended to appoint one or more Managers to be responsible for the day to day management and operation of the mine. The form of appointment, completed and signed, shall be submitted by the successful tenderer for the approval of the Employer before the Contract is signed.



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I,..... having been appointed in terms of Section 4 of the Act, as amended to perform all functions entrusted to the Employer by Sections 2 and 3 of the act, as amended, hereby appoint in his capacity as of the Contractor.....as Manager, who, in terms of Section 3 of the Act, as amended, will be responsible for the day to day management and operation of the mine(s).

SIGNED:.....

DATE:.....

WITNESS: 1..... 2.....

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

I hereby accept the above appointment:

SIGNED:.....

DATE:.....

WITNESS: 1..... 2.....

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



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C1. E. MINE HEALTH AND SAFETY ACT No. 29 OF 1996 AND AMENDMENT ACT No. 72 OF 1997

DEFINITIONS:

Section 102 of the Mine Health and Safety Act refers.

1. Mine means, when –

(a) “used as a noun-

(i) any borehole, or excavation, in any tailing or in the earth, including the portion of the earth that is under the sea or other water, made for the purpose of searching for or winning a mineral, whether is being worked or not, or

(ii) any other place where a mineral deposit is being exploited, including the mining area and all buildings, structures, machinery, mine dumps, access roads or objects situated on or in that area that are used or intended to be used in connection with searching, winning, exploiting or processing of a mineral, or for health and safety purposes. But, if two or more excavations, boreholes or places are being worked in conjunction with one another

(iii) a works; and

(b) Used as a verb, the making of any excavation or borehole referred to in paragraph (a) (i), or the exploitation of any mineral deposit in any other manner, for the purpose of winning a mineral including prospecting in connection with the winning of a mineral.

2. Minerals means any substance, excluding water, but excluding sand, stone, rock, gravel and clay, as well as soil, other than topsoil:

(a) Whether that substance is in solid, liquid or gaseous form;

(b) That occurs naturally in or on the earth, in or under water or in tailings, and

(c) That has been formed by or subjected to a geological process.

“Processing” means the recovering, extracting, concentrating, refining, calcimining, classifying, crushing, milling, screening, washing, reduction, smelting or gasification or any mineral, and “process” has a similar meaning

3. “Works” means any place, excluding a mine, where any person carries out-

a) The transmitting and distributing to another consumer of any form of power from mine, by the owner thereof, to the terminal point of bulk, to the power supply meter on any such other consumer’s premises, or

b) Training at any central rescue station, or

c) The making, repairing, re-opening or closing of any subterranean tunnel, or

d) Any operations necessary in connection with any of the operational listed in this paragraph.



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C1. F. AGREEMENT IN TERMS OF THE MINE HEALTH AND SAFETY ACT, (ACT No. 29 OF 1996) AS AMENDED BY THE MINE HEALTH AND SAFETY AMENDMENT ACT (ACT No. 72 OF 1997)

THIS AGREEMENT made aton theday ofin the year..... between the Municipality (hereinafter) called "the Employer") of the one part, herein represented by in his capacity as.....and delegate of the Employer in terms of the Employer's standard powers of delegation pursuant to the provisions of Act No. 7 of 1998 andin his capacity as and being duly authorised by virtue of a resolution appended hereto as a resolution appended hereto as Annexure A:

WHEREAS the Employer is desirous that certain works be constructed, (insert contract title) and has accepted a tender by the Contractor for the construction, completion and maintenance of such works and whereas the Employer and the contract have agreed to certain arrangements and procedures to be followed in order to ensure compliance by the Contractor with the provisions of the Mine Health and Safety Act (Act 29 of 1996); as amended by the Mine Health and Safety Amendment Act (Act No. 27 of 1997).

NOW THEREFORE THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. The employer shall obtain the Mining Authorisation for the particular site where mining activities, as defined in the Mine Health and Safety Act, No. 29 of 1996 as amended, are to be conducted.
2. The contractor shall assume responsibility for the Environmental Management Programme (EMPR) in respect of the site and shall ensure that the site is rehabilitated at the conclusion of the contract.
3. The contractor declares himself to be conversant with:
 - a) All the requirements, regulations and standards of the Act, together with its amendments.
 - b) The procedures and safety rules of the Employer as pertaining to the Contractor and to all his sub-contractors.



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4. The contractor is responsible for the compliance with the Act and its amendments by all his
Subcontractors, whether or not selected and/or approved by the Employer.

SIGNED ON BEHALF OF THE EMPLOYER

AS WITNESS:

1. 2.

NAME (Print): NAME (Print):

SIGNED ON BEHALF OF THE CONTRACTOR

AS WITNESS:

1. 2.

NAME (Print): NAME (Print):



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C1.2 CONTRACT DATA

C1.2.1 Contract Specific Data

The Conditions of Contract are the General Conditions of Contract for Construction Works (2010 and 2015) published by the South African Institution of Civil Engineering. (GCC).

Section 1: Data provided by the Employer

Clause	
1.1.1.13.	The defects liability period is 12(Twelve) Months
1.1.1.14	The time for achieving practical completion is 14 days
1.1.1.15	The employer is Makhado Municipality
1.1.1.26	Pricing Strategy is Re-Measurement Contract.
1.2.1.2	The employer's address for receipt of communication is: Telephone: (015) 519 3000 Facsimile: (015) 516 6145 Address: Private Bag X2596, Makhado Municipality, 0920
1.1.1.16	Name of Engineer is Mr. Alpheus Matshimbe
1.2.1.2	The address of the Engineer is : Telephone: (015) 291 3892 Facsimile: (086) 664 6282/(015) 2912821 e-mail: admin@victorydevelopment.co.za Address: 14 Paul Kruger Street, Polokwane, 0699
5.3.1	The documentation required before commencement with works execution are: Health and Safety plan (Refer to clause 4.3) Initial programme (Refers to clause 5.6) Security (Refers to clause 6.2) Insurance (Refers to clause 8.6)
5.3.2	The time to submit the documentation required before commencement with works execution is 28 days.
5.5.1	Subject to the requirement of the Contract as to the Practical Completion of any portion of the Permanent Works before Practical Completion of the whole, the whole of the Works shall be completed within the Due Completion(5 Months)



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Clause																			
5.8.1	Non-working days are Sundays, Public Holidays and Year End Break starting from 19 th December to 05 th January .(request can be made in writing)																		
5.13.1	The penalty for failing to complete the work is R2000 per working day or 2/30 x R30 000.00 per month																		
5.16.3	The latent defect is 10years.																		
6.5.1.2.3	The percentage allowance to cover overhead charges is 15% on day works																		
6.8.2	<p>The value of payment certificates is to be adjusted in accordance with the Contract Price Adjustment Schedule, where</p> <p>The value of "x" is 0,150</p> <p>The values of the co-efficient are:</p> $(1 - x) \left[\frac{aL_t}{L_o} + \frac{bE_t}{E_o} + \frac{cM_t}{M_o} + \frac{dF_t}{F_o} - 1 \right]$ <p>Fixed : Estimate less than R10 000 000 or period less than 6 months</p> <p>CPA: Estimate more than 10 000 000 or a contract period more than 6 months</p> <table><tr><td>New Road Construction</td><td>Rehabilitation</td><td>Labour Intensive</td></tr><tr><td>x = 0,150</td><td>...</td><td>...</td></tr><tr><td>a = 0,25</td><td>0,26</td><td>...</td></tr><tr><td>b = 0,30</td><td>0,30</td><td>...</td></tr><tr><td>c = 0,37</td><td>0,37</td><td>...</td></tr><tr><td>d = 0,08</td><td>0,07</td><td>...</td></tr></table> <p>"L" is the "Labour Index" and shall be the "Consumer Price Index" for the urban area specified in the Contract, as published in the Statistical Release P0141.1 in table 21 of Statistics South Africa.</p> <p>"P" is the "Plant Index" and shall be the "Civil Engineering Plant" index as published in the Statistical Release P0142.1 in table 16 of Statistics South Africa.</p> <p>"M" is the "Materials Index" and shall be the price index for "Civil Engineering (Materials)" as published in the Statistical Release P0142.1 in table 15 of Statistics South Africa.</p> <p>"F" is the "Fuel Index" and shall be the index for "Civil Engineering" as published in Statistical Release P0142.1 Table 16 of Statistics South Africa.</p> <p>The suffix "o" denotes the basic indices applicable to the base month, which shall be the month prior to the month in which the closing date for the tender falls.</p>	New Road Construction	Rehabilitation	Labour Intensive	x = 0,150	a = 0,25	0,26	...	b = 0,30	0,30	...	c = 0,37	0,37	...	d = 0,08	0,07	...
New Road Construction	Rehabilitation	Labour Intensive																	
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Clause	
	<p>The suffix "t" denotes the current indices applicable to the month in which the last day of the period falls to which the relevant payment certificate relates.</p> <p>If any index relevant to any particular certificate is not known at the time when the certificate is prepared, the Engineer shall estimate the value of such index. Any correction, which may be necessary when the correct indices become known, shall be made by the Engineer in subsequent payment certificates.</p> <p>The urban area nearest the site is Makhado Town</p> <p>The base month is November 2021 (<i>the month prior to the month in which the closing date of the tender falls</i>)</p>
6.8.3	If price adjustment for variations in the cost of special materials is provided for in the Contract Data, it shall be made in the manner set out in the Contract Price Adjustment Schedule.
6.10.1.5	The percentage advance on materials not yet built in to permanent work is 80%.
6.10.3	The limit of retention money is 10%.
6.10.4	The Engineer shall deliver to the Employer and the Contractor the payment certificate referred to in clause 6.10.1 within 7days of the receipt by the Engineer of the Contractor's said statement. Any dissatisfaction in respect of such payment certificate shall be dealt with in terms of Clause 10.2. The Employer shall pay the amount due to the Contractor within 28days of receipt by the Employer of the payment certificate signed by the Engineer. Payment shall be subject to the Contractor submitting a Tax Invoice, if required by Law, to the Employer for the amount due.
8.6.1.1.2	The value of Plant and materials supplied by the Employer to be included in the insurance sum.
8.6.1.1.3	The amount to cover Professional Fees for repairing and damage and loss to be included in the insurance sum.
8.6.1.2	The following additional and varied insurances are required: SASRIA
8.6.1.2a	The limit of the liability insurance required should not be less than the contract amount. This All Risk Insurance should be submitted 21days after the Letter of Acceptance
8.6.1.3	The limit of Indemnity for Liability Insurance is R.....
8.6.a.	The amount of the Guarantee is to be as follows.



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Clause	
	<ul style="list-style-type: none"> (a) No surety for projects between R0 and R 500 000 (b) 1% surety for projects between R500 000 and R1 million (c) 2,5% surety for projects between R1 million and R2 million (d) 5% surety for projects above R2 million not exceeding R5 million (e) 10% surety for projects above R5 million
8.6.b.	The Guarantee(10%) is to be delivered within 21 days after the Letter of Acceptance.
10.1.1.1	The Contractor shall, within 28days after the circumstance, event, act or omission giving rise to such a claim, referring to this Clause and setting out.
10.3.2	If either party shall have given notice in compliance with Clause 10.3.1,the dispute shall be referred immediately to adjudication in terms of 10.5, unless amicable settlement is contemplated.
10.5.3	The number of Adjudication Board Members to be appointed is minimum of 3
Special Clause in terms of Retention Guarantee	A Retention Money Guaranteed may be permitted on request. A penalty will be applied for non-delivery of the Retention Money Guarantee as required. The penalty will be 10% of the value of the completion Retention Money Amount per calendar month for late delivery of the said Retention Money Guarantee.
Special Clause in terms of RDP	<p>Requirements in terms of government's reconstruction and development programme.</p> <p>Target values</p> <p>In this contract the minimum target values shall be as follows:</p> <ul style="list-style-type: none"> Labour Maximisation : 35% ABE support : 30% HDI Supervisory Staff : 50% <p>The penalties for not reaching the required target values will be calculated at 20% of the difference between the set target values and the actual target values achieved by the contractor at completion of the works. No bonuses for achieving the set target values are applicable.</p>



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Section 2: Data provided by the Contractor

Clause	
1.1.1.9	The contractor is
1.2.1.2	<p>The contractor's address for receipt of communication is:</p> <p>Telephone:.....Facsimile:.....</p> <p>e-mail:.....Cell.....</p> <p>Address:.....</p> <p>.....</p> <p>.....</p>
1.1.1.14	The time for achieving practical completion is.....
6.5.1.2.3	The percentage allowance to cover overhead charges is.....
6.8.3	The variation in cost of special materials is
5.14	The Works shall be completed within 4months as proposed by the contractor.



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The following amendments of the General Conditions of Contract 2010, 2nd edition apply to this contract.

1. GENERAL

1.2 Definitions

- 1.1.1.2 Certificate of Completion** means the certificate issued by the Engineer stating the date on which completion was achieved.
- 1.1.1.4 Certificate of Practical Completion** means the certificate issued by the Engineer stating the date on which Practical Completion was achieved
- 1.1.1.5 Commencement Date** means the date that the Agreement, made in terms of the Form of Offer and Acceptance, comes into effect.
- 1.1.1.7 Contract** means the documentation of the Agreement between the parties in terms of the Form of Offer and Acceptance, and such written amendments or additions to the Contract as may be agreed to between the parties
- 1.1.1.12 Day** mean a Calendar Day
- 1.1.1.13 Defects Liability Period** means the period stated in the Contract Data, commencing from the issue of the Certificate of Completion or Certificates of Completion in the event of more than one Certificate of Completion having been issued for different parts of the works, during which the Contractor has both the right and the obligation to make good defects in the materials, Plant and workmanship covered by the Contract.
- 1.1.1.14 Due Completion Date** means the date of expiry of the time stated in the Contract Data for achieving Practical Completion of the Works, calculated from the Commencement Date and as adjusted by such extensions of time or acceleration as may be allowed in terms of the Contract.
- 1.1.1.16 Engineer** means the person named as the Engineer in the contract Data or any other person appointed from time to time by Employer and of Contractor is notified, in writing, to act as Engineer for the purposes of the Contract as substitute for the Engineer so named.
- 1.1.1.17 Engineer's Preventative** means the natural person appointed from time to time by the Engineer in terms of the Contract.
- 1.1.1.24 Practical Completion** means that the whole or portion of the works has been reached a state of readiness, fit for the intended purpose, and occupation without danger or undue inconvenience to the Employer, although some work may be outstanding.
- 1.1.1.27 Re-measurement Contract** means the Contractor is paid an amount determined from the actual quantities of work completed multiplied by the rates or prices for such work subject to adjustments in accordance with the contract.
- 1.1.1.29 Site** means the land and other places made available by the Employer, for the purposes of contract, on, under, over, in or through which the works are executed.



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1.1.1.30 **Site Information** means the document that describes the site as at the time of tender to enable the tenderer to price the tender and to decide upon the method of work and the programme.

1.1.1.32 **Temporary Works** means the temporary works required for or in connection with execution of the Permanent Works and shall include items which are not intended to be permanent or to form part of the Permanent Works.

1.2 Interpretations

1.2.3 The common or statute law shall determine whether any person acting or purporting to act on behalf of the Employer, Engineer or Contractor is duly authorised, save to the extent that a party shall, by written notice to each of the others, designate a person or the holder of any office, to the exclusion of another person or holder of office, to have such authority, or to limit in any way, or terminate the authority of such designated person or holder of office.

1.3 General Provisions

1.3.1 No grant by the Employer or the Contractor to the other of any concession, waiver, condonation or allowance shall, in respect of any specific event or circumstance other than that in respect of which the grant was made, constitute a waiver of the rights of the grantor in terms of Contract or an estoppel of the grantor's right to enforce the provisions of the contract.

2. BASIS OF CONTRACT

2.1. Available data and information

2.1.2 The Contractor shall be deemed to have inspected the Site and its Surroundings and to have studied all available information pertaining thereto before submitting his tender. The Contractor shall thus be deemed knowledgeable in respect of:

2.1.2.1. The form and nature of the Site and surroundings.

2.1.2.2. Environmental, Hydrological and Climatic conditions.

2.1.2.3 The extent and nature of the work and materials required for execution and completion of the works.

2.1.2.4 The means of access to the Site and accommodation he may require.

2.1.2.5 The design of the Works and site conditions insofar as they affect the execution of the Works with regard to health, safety and environment.



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2.2. Adverse physical Conditions

2.2.3. Unless otherwise instructed by the Engineer, the Contractor shall carry out the additional work proposed in the notice or notices under Clauses 2.2.1 and 2.2.2 without limiting the right of the Engineer to order a suspension of work in terms of Clause 5.11 or a variation in terms of Clause 6.3.

2.3. Technical data

2.3.1. The Contractor shall be deemed to have based his tender on the technical data provided in the Contract and if, in the performance of the contract, any circumstances shall differ from the said technical data, which difference causes delay to Practical Completion and/or brings about proven additional cost, the Contractor shall be entitled to make a claim in accordance with Clause 10.1.

3. ENGINEER

3.1. Function of the Engineer

3.1.1. The function of the Engineer is to administer the Contract as agent of the Employer, in accordance with the provision of the Contract.

3.1.4 The Employer may, by written notice to the contractor and the Engineer, authorise an agent to act as his representative relating to the responsibilities imposed by Occupational Health and Safety Act on the Employer. Such an agent, if not the Engineer, shall be responsible to the Engineer in terms of these Conditions of Contract.

3.2. Engineer's Representative:

3.2.2. The Engineer 's representatives shall:

3.2.2.1. Observe the execution of the Works, examine and test materials and workmanship, and receive from the contractor such information as he shall reasonably require.

3.2.2.2. Have authority:

3.2.2.2.1. Assigned to him by any provisions of the Contract,

3.2.2.2.2. Assigned to him by the Engineer in terms of Clause 3.2.4,

3.2.2.2.3. To deliver to the Contractor oral or written communications from the Engineer, and

3.2.2.2.4. To receive, on behalf of the Engineer, oral or written communication from the contractor.



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3.2.3. Notwithstanding the aforesaid, the powers and authority of the Engineer's Representative shall be subject to the following conditions:

3.2.3.1. He shall have no authority to relieve the contractor of any of his obligations under the contract and, unless he is authorised thereto in terms of Clause 3.2.4, he shall have no authority to order any work involving delay or any additional payment by the employer, or to affect any variation of or in the works;

3.2.3.2. Notwithstanding any authority assigned to him in terms of Clauses 3.2.2 and 3.2.4, failure by the Engineer's Representative to disapprove of any work, workmanship

or materials shall not prejudice the power of the Engineer thereafter to disapprove thereof and exercise any of his powers in terms of contract in respect thereof.

3.2.4. The Engineer may, by written notice to the Contractor and the Employer, from time to time, authorise the Engineer's Representative, or any other person accountable to the Contract, and the act of any such person within the scope of his authority shall, for the purposes of the Contract, constitute an act of the Engineer.

4 CONTRACTOR'S GENERAL OBLIGATIONS

4.2 Engineer's instructions

4.2.1 The Contractor shall, in carrying out his aforesaid obligations, comply with the Engineer's instructions on all matters relating to the works.

4.2.2 The contractor shall take instructions only from the Engineer, the Engineer's Representative or a person authorised by the Engineer in terms of Clause 3.2.4.

4.3 Legal Provisions

4.3.2 If required, the contractor shall provide proof to the Engineer that the Contractor is in good standing with respect to duties, taxes, levies and contributions required in terms of legislation applicable to the work in this Contract.

4.4 Subcontracting

4.4.1 The Contractor shall not subcontract the whole contract.



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4.4.2 The Contractor shall be liable for the acts, defaults and negligence of any subcontractor, his agents or employees as fully as if they were the acts, defaults or negligence of contractor.

4.7. Fossils

4.7.1 All fossils, coin, articles of value or antiquity and structures and other remains or things of geological or archaeological interest discovered on the Site shall, as between the Employer and the Contractor, be deemed to be the absolute property of the Employer.

5 TIME AND RELATED MATTERS

5.4. Access to the Site

5.4.1 The Employer shall, upon the Engineer's instruction to commence executing the works referred to in Clause 5.3.1, give to the Contractor right of access to the Site, the location of which is stated in the Site information (Including physical access to the extent stipulated in the Site information) and possession of the whole of the Site subject to any provision to grant the contractor possession of the Site subject to any provision to grant the contractor possession of the Site in portions and/or any requirements as to the order in which the works shall be executed, all as stipulated in the Site information.

5.4.3 If the Contractor suffer delay to practical completion and/or incurs proven additional cost from failure of the Employer to give possession in accordance with the terms of this Clause, the Contractor shall be entitled to make a claim in accordance with Clause 10.1, for which purpose the time limit of 28 days provided in Clause 10.1.1.1 shall commence to run only from the time when possession of the Site has actually been given.

5.6 Programme

5.6.1 The Contractor shall deliver to the Engineer as part of the documentation required before commencement with works execution in accordance with Clause 5.3.1, an initial programme of carrying out the works in order to meet the Due Completion Date.

Whenever the approved programme no longer reflects that actual progress will meet the



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Due Completion Date, the Contractor shall deliver to the Engineer an adjusted programme

5.6.2 The initial programme and all subsequent adjusted programmes shall show and, when relevant, describe in statements, the entire scope of the work to be performed including but not limited to:

5.6.2.1 The commencement Date, commencement of the works Due Completion Date, and the planned completion date,

5.6.2.2 The sequence, timing and the resources for carrying out the Works,

5.6.2.3 The dates for Site accesses and possessions, and approvals instructions, inspections, tests and all information required to execute the works,

5.6.2.4 The events influencing the execution of the Works,

5.6.2.5 Other programming information set out in the Scope of Work,

5.6.2.6 A detailed cash flow forecast and

5.6.2.7 On adjusted programmes, the actual progress achieved for the various parts of the works and the amounts paid.

5.6.3 The Engineer shall, within 7 days after the Contractor has submitted the initial or adjusted programme, approve such programme or, giving his reasons, instruct the contractor to amend it failing which, the submitted programme shall be deemed to be the approved programme.

5.10 Delays attributable to the Employer

5.10.1 The contract may, in writing to the Engineer; demand compliance within a stated time by the Employer with the terms shall be specified in such demand. If the contractor suffers delay to Practical Completion and/or incurs proven additional cost from failure or delay on the part of the Employer, his agents, employees or other contractors (not employed by contractor) in fulfilling any necessary obligations in order to enable the works to proceed in accordance with the contract, the contractor shall be entitled to make a claim in accordance with Clause 10.1 for which purpose the time limit of 28 days provided in Clause 10.1.1.1 shall commence to run only from the time when compliance with the said terms has actually taken place.



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5.11 Suspension of Works

- 5.11.1 The contractor shall, on the written order of the Engineer stating the cause of suspension, suspend the progress of the works or any part thereof for such time and in such manner as the Engineer shall order and shall, during such suspension, properly protect the works as far as is necessary.
- 5.11.2 Unless such suspension or alteration is otherwise provided for in the contract or by reason of some default or breach of the contract by the contractor shall in respect of delay to practical completion and/or to proven additional cost of giving effect to the Engineer's order, be entitled to make a claim in accordance with clause 10.1
- 5.11.3 If the progress of the works or any part thereof is so suspended for more than 84 days in total, the contractor may deliver a written notice to the engineer requiring permission to proceed with the works or that part thereof in respect of which progress is suspended.

6. PAYMENT AND RELATED MATTERS

6.3. Variation

- 6.3.1 If, at any time before the issue of the Certificate of Completion, the Engineer shall require any variation of the form, quality or quantity of works or any part thereof that may be necessary or of any reason appropriate, he shall have power to order the contractor to do any of the following:

- 6.3.1.1 Increase or decrease the quantity of any work included in the contract,

6.7. Measurement of the Works

- 6.7.3 The Engineer shall, when he wished to make any measurement on the site or requires any parts of the works to be measured in his presence, give notice of this fact and of the date and time at which he will be present to contractor who shall:

6.10. Payments

- 6.10.4 The Engineer shall deliver to the Employer and the Contractor the payment certificate referred to in Clause 6.10.1 within 7 days of the receipt by the Contractor's said



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statement. Any dissatisfaction in respect of such payment certificates shall be dealt with in terms of Clause 10.2. The Employer shall pay the amount due to the Contractor within 28 days of receipt by the Employer of the payment certificate signed by the Engineer. Payment shall be subject to the Contractor submitting a tax invoice, if required by law, to the Employer for the amount due.

6.11 Variations exceeding 15 per cent

6.11.1 If, at the time of preparation of the payment certificate following the issue of certificate or certificates of completion for the whole of the works, it is found that the aggregate of:

6.11.1.1 All the variations made by the Engineer in terms of Clause 6.3

6.11.1.2 All additional payments allowed by the Engineer in terms of Clause 10.1 and

6.11.1.3 The adjustment upon measurement of the estimated quantities set out in the Bill of Quantities for a Re-measurement contract.

7.4.3 The contractor shall, in accordance with scope of work or if instructed by the Engineer, carry out tests on Plant and samples of materials intend to be incorporated into the works and on any test specimen from portion of the works, and shall carry out any other tests specified in Scope of Works.

8.6. Insurances

8.6.1 Except if provided otherwise in the contract Data, the Contractor, without limiting his obligations in terms of the terms of the contract, shall as part of the documentation required before commencement with works execution in accordance with Clause 5.3.1 at his own, effect and maintain the following insurance in the joint names of the Employer and contractor.

8.6.1.1 Insurance of the Works, plant intend for incorporation in the works, of all materials on the Site intended for incorporation in the works against damage or physical loss arising from whatever cause(except the cause set out in clause 8.3.1),for the period for which the contractor is responsible for the works in terms of Clause 8.2.1 and for a sum insured which shall be the aggregate of:

9.1.5 if the Contractor is terminated on any account in terms of this clause, the contractor shall be paid by the Employer(in as far as such amounts or items have not already



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been covered by payments on account made to the contractor) for all measured work executed prior to the date of termination, the amount (without retention) payable in terms of contract and in Contract and, in addition:

9.2.1.1 Application is made for the sequestration of the Contractor's estate, or if the Contractor publishes a notice of surrender of his estate, or presents a petition for the acceptance of the surrender of his estate as insolvent, or (being a company or close corporation) goes into liquidation, whether provisionally or finally (other than a voluntary liquidation for the purpose of amalgamation or reconstruction)

9.3 Termination by Contractor

9.3.1 In the event that the Employer:

9.3.1.1 Persist in:

9.3.1.1.1 Repudiating the contract

9.3.1.1.2 Failing to pay the contractor the amount due in terms of any payment certificate issued by the Engineer, within the time of payment provided in the contract,

9.3.1.1.3 Interfering with or obstructing the issue of any certificate for 14 days after receipt of written notice from the contractor (with specific reference to this Clause) to remedy the default,

10.1.5 Unless otherwise provided in the contract, the Engineer shall, within 28 days after the contractor has delivered his claim in terms of Clause 10.1.1 as read clause 10.1.2, give effect to clause 3.1.2 and deliver to the Contractor and the Employer his written and adequately reasoned ruling on the claim (referring specifically to this clause). the amount thereof, if any, allowed by the Engineer shall be included to the credit of the contractor in the next payment certificate;



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PART C2: PRICING DATA

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C2.1. PRICING INSTRUCTIONS

- 1 For the purposes of this bill of quantities, the following words shall have the meanings hereby assigned to them:

Unit: The unit of measurement for each item of work as defined in the standard specifications or the project specifications.

Quantity: The number of units of work for each item.

Rate: The payment per unit of work for which the tenderer tenders to do the work.

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

Lump Sum: An amount tendered for an item, the extent of which is described in the bill of quantities, the specifications or elsewhere, but of which the quantity of work is not measured in units.

- 2 This bill of quantities forms part of the contract documents and must be read in conjunction with all the other documents comprising the contract documents.

- 3 The quantities set out in the bill of quantities are only approximate quantities. The quantities of work finally accepted and certified for payment, and not the quantities given 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 finally certified for payment. Work is valued at the rates or lump sums tendered, subject only to the provisions of sub-clause 1209 (a) of the standard specifications.

- 4 Rates and lump sums shall include full compensation for overheads, profits, incidentals, tax (other than VAT), etc, and for the completed items of work as specified, all in accordance with sub-clause 1209 (b) of the standard specifications. Full compensation for completing and maintaining, during the defects liability period, all the work shown on the drawings and specified in the standard specifications and project specifications and for all the risks, obligations and responsibilities specified in the general conditions of contract, special conditions of contract, standard specifications and project specifications shall be considered as provided for collectively in the items of payment given in the bill of quantities, except in so far as the quantities given in the bill of quantities are only approximate.



MAKHADO MUNICIPALITY

TENDER NO: 79 OF 2021

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- 5 The tenderer shall fill in a rate or a lump sum for each item where provision is made for it even where no quantities are given. Items against which no rate or lump sum has been entered in the tender will not be paid for when the work is executed, as payment for such work will be regarded as being covered by other rates or lump sums in the bill of quantities.

The tenderer shall fill in a rate against all items where the words "rate only" appears in the amount column. Although no work is foreseen under such item and no quantities are consequently given in the quantity column, the tendered rate shall apply should work under this item actually be required. Tenders should note the provisions of paragraph 12 of this preamble.

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

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

- 6 The works executed are measured for payment in accordance with the methods described in the contract documents under the various payment items, notwithstanding any custom to the contrary. Attention is directed to the provisions of clause 1220 of the standard specifications regarding the measurements of quantities for payment. Except where specified otherwise than in clause 1220, the nett measurement or mass of the finished work in place shall be taken for payment, and any volume or mass of work in excess of that prescribed, shall be excluded.
- 7 The amount of work or the quantities of material stated in the bill of quantities shall not be considered as restricting or extending the amount of work to be done or quantity of material to be supplied by the contractor.
- 8 The statement of quantities of material or the amount of work in the bill of quantities shall not be regarded as authorisation for the contractor to order material or to execute work. The contractor shall obtain the engineer's detailed instructions for all work before ordering any materials or executing work or making arrangements in this regard.
- 9 The short descriptions of the payment items in the bill of quantities are only given to identify the items and to provide specific details. Reference shall, inter alia, be made to the drawings, standard specifications, project specifications, general conditions of contract and special conditions of contract for more detailed information regarding the extent of work entailed under each item.



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- 10 The provisions of clause 6.6 of the general conditions of contract shall apply to provisional sums and prime cost sums.
- 11 As per Clause 6.8.1 or elsewhere in the contract, the rates and /or prices stated in the Pricing Data shall be final and binding throughout the period of the Contract. Adjustment of the tender sum will take place prior to the signing of the contract. In their own interest tenderers must make doubly sure of the correctness of their tendered rates, the extensions and the tender sum.
- 12 A tender may be rejected if the unit rates or lump sums for some of the items in the bill of quantities are, in the opinion of the employer, unreasonable or out of proportion, and if the tenderer fails, within a period of seven (7) days of having been notified in writing by the employer to adjust the unit rates or lump sums for such items, to make such adjustments.
- 13 The units of measurement indicated in the bill of quantities are metric units

The following abbreviations are used 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
l	=	litre
kl	=	kilolitre
kg	=	kilogram
t	=	ton (1000 kg)
No	=	number
mn	=	meganewton
mn-m	=	meganewton-metre
%	=	per cent
kW	=	kilowatt
Kn	=	kilonewton
PC sum	=	prime cost sum
Prov sum	=	provisional sum



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(REGRAVELLING) AT MAKHADO MUNICIPALITY WITHIN VHEMBE DISTRICT OF
LIMPOPO PROVINCE**

- 14 All rates and sums of money quoted in the bill of quantities shall be in rands and whole cents. Fractions of a cent shall be discarded
- 15 The item numbers appearing in the bill of quantities refer to the corresponding item numbers in the standard specifications. Item numbers prefixed by the letter B refer to payment items described under part B of the project specifications, those with C to payment items described under part C, and so on for further parts of the project specifications.

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



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C2.2.BILL OF QUANTITIES

SCHEDULE A: GENERAL

1200 General requirements and provisions.....	1 of 19
1300 Contractor's establishment and provisions	2 of 19
1400 Housing, offices and laboratories for the engineer's personnel	3 of 19

SCHEDULE B: ROADWORKS

1500 Accommodation of traffic.....	6 of 19
1700 Clearing and grubbing.....	7 of 19
1800 Day work and hire of construction equipment	8 of 19
2100 Drains.....	9 of 19
2200 Prefabricated Culverts.....	10 of 19
3300 Mass Earthworks.....	11 of 19
3400 Pavement layers of gravel material.....	12 of 19
5100 Pitching, Stone work and protection against erosion.....	13 of 19
5600 Road signs.....	14 of 19
5900 Finishing.....	15 of 19
8100 Testing Material	16 of 19
1000 Environmental Management Plan and OHS.....	17 of 19

C2.3 SUMMARY OF SCHEDULE OF QUANTITIES 18 of 19

C2.4 MAIN SUMMARY..... 19 of 19

CONTRACT No. 79 of 2021						
SCHEDULE A : GENERAL						
SECTION 1200						
GENERAL REQUIREMENTS AND PROVISIONS						
CONSTRUCTION OF MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3 (REGRAVELLING)						
ITEM	LI	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
B12.01	LI/M	RELOCATION OF SERVICES				
		BY CONTRACTOR				
		(ai) Cost of work	Prov Sum	1	R30 000,00	R30 000,00
		(aii) Handling Cost and Profit in respect of subitems B12.01(ai and aii)	%	R30 000		
B12.04		Remuneration of the Project Team				
		(a) Project Liaison Officer	Months	5	R5 000,00	R25 000,00
		(b) Contractor's handling costs, profit and all other charges in respect of subitem B12.04(a)	%	R25 000		
		(c) Project Social and Community Responsibilities	Months	5	R5 000,00	R25 000,00
		(d) Contractor's handling costs, profit and all other charges in respect of subitem B12.04(c)	%	R25 000		
1200		TOTAL CARRIED FORWARD TO SUMMARY				

CONTRACT No. 79 of 2021

SCHEDULE A : GENERAL

SECTION 1300

CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS

CONSTRUCTION OF MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3 (REGRAVELLING)

ITEM	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
B13.01	The contractor's general obligations:				
	(a) Fixed obligations	L/Sum	1		
	(b) Value-related obligations	L/Sum	1		
	(c) Time-related obligations	month	5		
	NOTE:				
	The Combined total tendered for subitems (a),(b)and (c) should not exceed 15% of the tender sum(excluding the contingencies sum, CPA and VAT)				
1300	TOTAL CARRIED FORWARD TO SUMMARY				

CONTRACT No. 79 of 2021						
SCHEDULE A : GENERAL						
SECTION 1400						
HOUSING, OFFICES AND LABORATORIES FOR THE ENGINEER 'S SITE PERSONNEL						
CONSTRUCTION OF MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3 (REGRAVELLING)						
ITEM	LI	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
	LI					
14.01	LI	Office and laboratory accommodation				
		(a) Offices (interior floor space only - engineer's office and conference room	m ²	25		
		(e) Ablution units	No.	2		
14.02	LI	Office and laboratory furniture:				
		(a) Chairs	No.	10		
		(b) Desks, complete with drawers and locks	No.	1		
		(c) Conference tables	No.	1		
14.03	LI	Office and laboratory fittings, in- stallations and equipment				
		(a) Items measured by number:				
		(i) 220/250 volt power points	No.	6		
		(iii) Double 80 watt fluorescent light fittings complete with ballast tubes	No.	2		
		(v) Single incandescent light fittings complete with 100 watt globes.	No.	6		
		(vi) Wash - hand basins complete with taps and drains	No.	1		
		(ix) Fume capboards complete according to Engineer's instruction	No.	1		
		(x) Fire extinguishers, 2,5kg BCF type complete, mounted on wall with brackets	No.	2		
		(xi) Air-conditioning units with 2,2kW minimum capacity, mounted & with own power connection	No.	1		
		(xiv) General-purpose steel cup- boards with shelves	No.	1		
		TOTAL CARRIED FORWARD				

CONTRACT No. 79 of 2021						
SCHEDULE A : GENERAL						
SECTION 1400						
HOUSING, OFFICES AND LABORATORIES FOR THE ENGINEER 'S SITE PERSONNEL						
CONSTRUCTION OF MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3 (REGRAVELLING)						
ITEM	LI	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
		TOTAL BROUGHT FORWARD				
		(b) Prime-cost items and items paid in a lump sum:				
		(v) Provision of fax apparatus as specified	PC Sum	1,00	R2 000,0	R2 000,00
		(vi) Handling costs and profit in respect of subsubitem 14.03(b) (v) above	%	R2 000,00		
		(viii) Provision of gas installations, including gassorage cylinder, tubing, regulators, gas burners and shut off cocks and fridge	PC Sum	1,00	R2 000,00	R2 000,00
		(ix) Handling costs and profit in respect of subsubitem 14.03(viii) (b) above	%	R2 000,00		
14,04	LI	Car ports:				
		Car ports, as specified, at offices and laboratory buildings	No.	1		
14,05	LI	Housing for labourers				
		(a) Housing as specified including beds, mattresses bedside chest, chairs, tables lockers, electricity, plugs points, electricity, electrical light fittings and buglar proofing	No.	1		
		(b) Ablution facilities as specified, including latrines, wash basins, showers and taps	No.	1		
		(c) Cooking unit complete with stove, basin, concrete working table, shelving sink and fuel	No.	1		
		(d) Latrine unit as specified	No.	1		
14.07		Rented, hotel and other accomodation:				
		(a) Provisional sum for providing rented housing, hotel or other accomodation as described in sub-clause 14,03(c) (ii)	PC Sum	1,00	R25 000,00	R25 000,00
		(b) Handling costs and profit in respect of subitem 14.07(a)	%	R25 000,00		
14.08	LI	Services				
		Provision of water, electricity, low pressure gas, sewerage, septic tank, sewage and rubbish removals, cleaning services, maintenance and repairs, all as specified in clause 1404, including the construction and maintenance of acces roads, footpaths, etc.				
		(a) Services at offices and laboratories				
		(l) Fixed Costs	L. sum	1		
		TOTAL CARRIED FORWARD				

CONTRACT No. 79 of 2021						
SCHEDULE B : ROADWORKS						
SECTION 1500						
ACCOMMODATION OF TRAFFIC						
CONSTRUCTION OF MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3 (REGRAVELLING)						
ITEM	LI	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
15,01		Accommodating traffic, construction and maintaining deviations	km	4,00		
15,03	LI	Temporary traffic-control facilities				
		(a) Flagmen	man-days	480,00		
		(b) Portable Stop and Go-Ry signs	no	2		
		(e) Road signs, R- and TR-series(1200mm diameter)	no	5		
		(f) Road signs, TW-series,(1500mm)	no	5		
		(g) Road signs, STW, DTG, TGS and TG series excluding delineators and barricades)	no	5		
		(h) Delineators (DTG50(j))(200mmx 800mm plus sandbags				
		(1) Single	no	20		
		(2) Mounted back to back	no	20		
		(j) Traffic Cones(750mm)	no	20		
15,05		Gravelling and repair of temporary deviations and existing gravel shoulders used as temporary deviations				
		(a) Temporary deviations	m³	50		
		(b) Existing gravel Shoulders	m³	10		
B15,06		Watering of temporary deviations (10000 litres per day)	kilolitre	1450		
15,07		Blading by road grader of:				
		(a) Temporary deviations	km-pass	1		
		(b) Existing roads used as temporary deviations	km-pass	1		
1500		TOTAL CARRIED FORWARD TO SUMMARY				

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CONTRACT No. 79 of 2021						
SCHEDULE B : ROADWORKS						
SECTION 1800						
DAYWORKS & HIRE OF CONSTRUCTION PLANT						
CONSTRUCTION OF MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3 (REGRAVELLING)						
ITEM	LI	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
B18.01		Labour:				
		(a) Normal working hours:				
		(i) Team Leader	hour	3		
		(ii) Semi-skilled labourer	hour	3		
		(iv) Labourer	hour	3		
		(b) Overtime and Saturdays:				
		(i) Team Leader	hour	3		
		(ii) Semi-skilled labourer	hour	3		
		(iv) Labourer	hour	3		
B18.02		Hire of construction equipment:				
		1) Bulldozer with ripper:				
		(i) 70kW - 170kW	hour	3		
		2) Self-propelled grader (100 to 200 kW)	hour	3		
		3) Front-end loader with 2 to 3 m³ capacity	hour	3		
		4) Tip truck or dumper with:				
		(i) 5 m³ capacity	hour	3		
		(ii) 10 m³ capacity	hour	3		
		5) Air compressor with:				
		(i) 6 m³/min. capacity with two pneumatic drills	hour	3		
		6) Flatwheel roller (steel drums) with 10 to 20 tons capacity	hour	3		
		7) Pneumatic-tyred roller with 10 to 25 tons capacity	hour	3		
		8) Vibratory roller of 8 tons capacity	hour	3		
		9) TLB (tractor/loader/backhoe)	hour	3		
		10) 13 500 litre water tanker	hour	3		
		11) 18 000 litre water tanker	hour	3		
		12) Bomag 65	Daily	3		
		13) Bomag 90	Daily	3		
		14) Excavator 25 tons	hour	3		
		15) Excavator 30 tons	hour	3		
		16) Generator	Daily	3		
		17) Waterpump	Daily	3		
		18) Concrete saw cutter	Daily	3		
		19) Flatbed truck	hour	3		
		20) Lowbed	Km	10		
		21) LDV	Km	10		
1800		TOTAL CARRIED FORWARD TO SUMMARY				

CONTRACT No. 79 of 2021

SCHEDULE B : ROADWORKS

SECTION 2100

DRAINS

CONSTRUCTION OF MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3 (REGRAVELLING)

ITEM	LI	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
21.01	L/M	Excavation for open drains:				
		(a) Excavating soft materials situated within the following depth ranges below the surface level				
		(i) 0 m up to 1,5m	m ³	2800,00		
		(ii) Exceeding 1,5m and up to 3,0m	m ³	10,00		
		(b) Extra over subitem 21.01(a) for excavation in hard material, irrespective of depth	m ³	10,00		
21,15		Overhaul for material hauled in excess of 1km free-haul (normal overhaul)	m ³ -km	50,00		
2100		TOTAL CARRIED FORWARD TO SUMMARY				

CONTRACT No. 79 of 2021						
SCHEDULE B : ROADWORKS						
SECTION 2200						
PREFABRICATED CULVERTS						
CONSTRUCTION OF MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3 (REGRAVELLING)						
ITEM	LI	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
22,01	L/M	Excavation:				
		(a) Excavating soft material situated within the following depth ranges below the surface level:				
		(i) 0 m up to 1,5m	m ³	30,00		
		(ii) Exceeding 1,5m and up to 3,0m	m ³	5,00		
		(iii) Exceeding 3,0m and up to 4,5m	m ³	2,00		
		(b) Extra over item B22.01(a) for excavation in hard material, irrespective of depth	m ³	4,00		
22,02	LI	Backfilling:				
		(a) Using the excavated material	m ³	10,00		
		(b) Using imported selected material:				
		(i) Granular material	m ³	10,00		
		(c) Extra over subitems B22.02 (a) and (b)(i) for soil cement back-filling: (4% of Portland cement by volume)	m ³	5,00		
22,05		Portal and rectangular culverts				
		(b) without prefabricated floor slabs				
		(iv) 900mm x 900mm	m	24,00		
22.07L	LI	Cast in-situ concrete and formwork:				
		(b) In floor slabs for portal or rectangular culverts, including formwork and Class U2 surface finish:				
		(i) Class 25/19	m ³	10,00		
		(c) In inlet and outlet structures, catchpits, manholes, thrust blocks and anchor blocks, excluding formwork				
		(i) Class 25/19 concrete	m ³	10,00		
22,08	LI	Concrete backfill for culverts, class 15/19	m ³	3,00		
23.12L	LI	Steel reinforcement				
		(c) Welded mesh Ref 617	kg	396,11		
2200		TOTAL CARRIED FORWARD TO SUMMARY				

CONTRACT No. 79 of 2021
 SCHEDULE B : ROADWORKS
 SECTION 3300
 MASS EARTHWORKS

CONSTRUCTION OF MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3 (REGRAVELLING)

ITEM	LI	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
33,04		Cut to spoil, including free haul up to 1,0 km Material obtained from:				
		(a) Soft excavation	m³	10000,00		
		(b) Intermediate excavation	m³	2000,00		
		(c) Hard excavation	m³	200,00		
		(e) Boulder excavation Class B	m³	5,00		
33.10		Roadbed preparation and the compaction of material				
		(b) Compaction to 93% of modified AASHTO density	m³	6000,00		
33,13		Finishing-off cut and fill slopes, medians and interchange areas:				
		(a) Cut slopes	m²	100,00		
		(b) Fill slopes	m²	100,00		
		OVERHAUL				
33/16.02		Overhaul (item 33.04 on material hauled in excess of the free-haul distance of 1km (ordinary overhaul)	m³	12205,00		
3300		TOTAL CARRIED FORWARD TO SUMMARY				

CONTRACT No. 79 of 2021

SCHEDULE B : ROADWORKS

SECTION 3400

PAVEMENT LAYERS OF GRAVEL MATERIAL

CONSTRUCTION OF MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3 (REGRAVELLING)

ITEM	LI	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
34/36,01		Pavement layers constructed from gravel taken from type G5 natural material obtained from commercial sources(nominal maximum size of stone indicated) and compacted to:				
		(d) Gravel subbase (Unstabilized gravel) compacted to:				
		(i) 95% of modified AASHTO density (150mm compacted layer thickness)	m³	6000,00		
		(h) Gravel base (Unstabilized gravel) compacted to:				
		(i) 98% of modified AASHTO density (150mm compacted layer thickness)	m³	5400,00		
		(m) Gravel shoulder compacted to:				
		(ii) 95% of modified AASHTO density (150mm compacted layer thickness using excavated material)	m³	1200,00		
		(0) Gravel Wearing Course compacted to:				
		(i) 95% of modified AASHTO density (150mm compacted layer thickness using excavated material)	m³	6000,00		
34/32,06		Stockpiling of material	m³	6000,00		
34.10		(a) Vibratory rollers	m²	500,00		
		(c) Grid Rollers	m²	500,00		
		(d) Flat-wheeled rollers	m²	500,00		
34,11		Watering the pavement excavation floor	kl	5500,00		
34/16.02		Overhaul of material for a distance exceeding 1.0km(Ordinary Overhaul)	m³km	39300		
3400		TOTAL CARRIED FORWARD TO SUMMARY				

CONTRACT No. 79 of 2021

SCHEDULE B : ROADWORKS

SECTION 5100

PITCHING, STONEMWORK AND PROTECTION AGAINST EROSION

CONSTRUCTION OF MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3 (REGRAVELLING)

ITEM	LI	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
51.01L	LI	Stone pitching:				
		(b) Grouted stone pitching	m ²	20,00		
51.02L	LI	Riprap				
		(a) Packed Riprap average nominal diameter of				
		200mm with SG of 2.1	m ³	10,00		
51.03L	LI	b) Cement mortared stone walls.	m ³	10,00		
51.04L	LI	Concrete pitching and block paving:				
		(a) Cast In situ Concrete Pitching				
		(25/19Mpa and 100mm thickness)	m ²	5,00		
5100		TOTAL CARRIED FORWARD TO SUMMARY				

CONTRACT No. 79 of 2021
SCHEDULE B: ROADWORKS
SECTION 5600
ROAD SIGNS

CONSTRUCTION OF MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3 (REGRAVELLING)

ITEM	LI	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
56,01	LI	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:.				
		(c) Prepainted galvanized steel plate (chromadek 1,6mm thick or approved equivalent)				
		(i) Area not exceeding 2m ²	m ²	10,00		
		(ii) Area exceeding 2m ² but not 10m2	m ²	5,00		
56,02	LI	Extra over B56.01 for using:				
		(a) Background of retro-reflective material:				
		(iii) Class III	m ²	5,00		
		(b) Lettering, symbols, numbers, arrows, emblems				
		(ii) Class III	m ²	5,00		
56.03	LI	Road sign supports (overhead road sign structures excluded)				
		(a) Steel tubing (wall thickness 3mm)				
		(i) 75mm	t	0,50		
		(ii) 100mm	t	0,50		
		(b) Timber 150mm	m			
56.05	LI	Excavation and backfilling for road sign supports(not applicable to kilometer post)	m ³	5,00		
56.06	LI	Extra over item 56.05 for cement-treated soil backfill	m ³	2,50		
56,07	LI	Extra over item 56.05 for rock excavation	m ³	0,50		
56,12	LI	Hazard plates:				
		(a) 200mm*800mm	No	4,00		
5600		TOTAL CARRIED FORWARD TO SUMMARY				

CONTRACT No. 79 of 2021

SCHEDULE B: ROADWORKS

SECTION 5900

FINISHING THE ROAD AND ROAD RESERVE

CONSTRUCTION OF MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3 (REGRAVELLING)

ITEM	LI	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
59,01		Finishing the road and road reserve:				
		(b) Single carriageway road	km	4,00		
59.02		Treatment of old roads and temporary diviation	km	4,00		
5900		TOTAL CARRIED FORWARD TO SUMMARY				R0,00

CONTRACT No. 79 of 2021

SCHEDULE B: ROADWORKS

SECTION 8100

TESTING MATERIALS AND WORKMANSHIP

CONSTRUCTION OF MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3 (REGRAVELLING)

ITEM	LI	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
81.02	LI	Other special tests requested by the Engineer:				
		(a) Cost of testing	PSum	1	R10 000,00	R10 000,00
		(b) Charge on provisional sum for overheads and profits	%	10000,00		
8100		TOTAL CARRIED FORWARD TO SUMMARY				

CONTRACT No. 79 of 2021**SCHEDULE B: ROADWORKS****SECTION 1000****EMP AND OHS****CONSTRUCTION OF MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3 (REGRAVELLING)**

ITEM	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
B10.01	Penalty for not providing proper PPE's to Workers	day	1	R1 000,00	Rate Only
B10.02	Penalty for incorrect placing and use of temporary road signs per day	day	1	R500,00	Rate Only
B10.03	Penalty for not Conducting proper induction	no	1	R250,00	Rate Only
B10.04	Penalty for not conducting Toolbox Talk	day	1	R250,00	Rate Only
B10.05	Penalty for not providing toilets on Site	day	1	R250,00	Rate Only
B10.06	Penalty for not providing Clean drinking water	day	1	R150,00	Rate Only
B10.07	Penalty for neglecting the BY-Pass or Deviations	no	1	R500,00	Rate Only
B10.08	Penalty for not Barricading the designated areas	day	1	R500,00	Rate Only
B10.09	Penalty for not watering the Deviations	no	1	R500,00	Rate Only
B10.11	Penalty for Unnecessary removal of trees with girth between 0.6m and 2.6m	no	1	R1 000,00	Rate Only
B10.12	Penalty for Hazardous Chemical/Oil Spill and or dumping on non-approved sites	no	1	R1 000,00	Rate Only
B10.13	Penalty for Littering on Site	no	1	R1 000,00	Rate Only
B10.14	Penalty for lighting of illegal fires on site	no	1	R5 000,00	Rate Only
B10.15	Possession or use of Intoxicating substances on site	no	1	R1 000,00	Rate Only
B10.16	Any vehicles being driven in excess of designated speed limit	no	1	R1 000,00	Rate Only
B10.17	Illegal Hunting	day	1	R5 000,00	Rate Only
B10.18	Urination anywhere except in designated areas	day	1	R150,00	Rate Only
B10.19	Penalty for not doing proper appointments	no	1	R150,00	Rate Only
B10.20	Penalty for not doing the OHS report in writing	month	1	R500,00	Rate Only
B10.21	Penalty for not doing the Technical Report by the Contractor report in writing	month	1	R500,00	Rate Only
B10.22	Penalty for not doing the CLO report in writing	month	1	R500,00	Rate Only
1000	TOTAL CARRIED FORWARD TO SUMMARY				Rate Only

GENERAL SUMMARY		
CONTRACT No. 79 of 2021		
FOR		
CONSTRUCTION OF MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3 (REGRAVELLING)		
ITEM	DESCRIPTION	AMOUNT
	<u>SUMMARY OF SCHEDULE A : GENERAL</u>	
1200	GENERAL REQUIREMENTS AND PROVISIONS	
1300	CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS	
1400	HOUSING, OFFICES AND LABORATORY FOR THE ENGINEER'S SITE PERSONNEL	
	SUB-TOTAL TO MAIN SUMMARY :	
	<u>SUMMARY OF SCHEDULE B : ROADWORKS</u>	
1500	ACCOMMODATION OF TRAFFIC	
1700	CLEARING AND GRUBBING	
1800	DAYWORKS AND HIRE OF CONSTRUCTION PLANT	
2100	DRAINS	
2200	PREFABRICATED CULVERTS	
3300	MASS EARTHWORKS	
3400	PAVEMENT LAYERS OF GRAVEL MATERIAL	
5100	PITCHING, STONWORK AND PROTECTION AGAINST EROSION	
5600	ROAD SIGNS	
5900	FINISHING THE ROAD AND ROAD RESERVE AND TREATMENT OF OLD ROADS	
8100	TESTING MATERIALS AND WORKMANSHIP	
1000	EMP and OHS	Rate Only
	SUB-TOTAL TO MAIN SUMMARY :	

MAIN SUMMARY	
CONTRACT No. 79 of 2021	
FOR	
CONSTRUCTION OF MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3(REGRAVELLING)	
DESCRIPTION	AMOUNT
SCHEDULE A: GENERAL	
SCHEDULE B: ROADWORKS	
SUB-TOTAL 1	
PLUS CONTINGENCIES 10%	
(The sum provided above is under the sole control of the Engineer and may be deducted in whole or in part. The tenderer shall add 10% of the total of schedule of quantities (sub-total 1) for contingencies.)	
SUB-TOTAL 2	
VALUE ADDED TAX (15% VAT)	
GRAND TOTAL	
<p>Bidder 's Signature:.....</p> <p>Note:</p> <p>Market related Rates from the Suppliers will be requested and verified by both the Client Representative and the Contractor on all Rate Only items to avoid the sale of Abnormal Rates</p>	

C3.5 MANAGEMENT

C3.5.1 MANAGEMENT MEETINGS

The following meetings will be required as minimum for the management of the contract.

- (a) Monthly client site meeting (using standard agenda for management control).
- (b) Technical meetings as required for each phase of the work.
- (c) Monthly safety meetings in terms of the OHS requirements.
- (d) Weekly progress meetings

C3.5.2 QUALITY CONTROL

Contractor to supply details of quality plan and procedures. These shall include:

- Accommodation of traffic.
- Inspection and test plans.
- Approval process.
- Hold-points.
- Milestones.
- Method statement
- Borrow pit risk assessment
- Programme of work
- Testing
- Cash flow

C3.4.3.4 REQUIREMENTS OF EXTENDED PUBLIC WORKS PROGRAMME

The Requirements of the Expanded Public Works Programme included under PART C3.1.7, subsection A are applicable to the contract.

CONTENTS

C3.4.3.4.1 INTRODUCTION

C3.4.3.4.1 INTRODUCTION

The requirements of the Expanded Public Works Programme are contained in the document Guidelines for the Implementation of Labour Intensive Infrastructure Projects under the Expanded Public Works Programme (EPWP) included under PART C3.1.7; Subsection A. These requirements will apply to labour intensive work described under PART C3: SCOPE OF THE WORK..

Refer to PART 5: ANNEXURES; Subsection C5.1: PROFORMA DOCUMENTS for the series of report forms (Forms RDP 9(E) to 14(E)) to be completed monthly during the contract on issues relating to community liaison, training and employment.

Refer to PART T2: RETURNABLE DOCUMENTS for schedules to be completed which relate to labour intensive issues.

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 to be used is illustrated in Part C5 of this document, (form RDP 11 (E)).

C3.4.3.3.4 MEASUREMENT AND PAYMENT

<u>ITEM</u>	<u>UNIT</u>
E12.05 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.

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.

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.

C3.4.3.3.3.8 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)

C3.4.3.3.3.9 All entrepreneurial training shall take place within normal working hours.

C3.4.3.3.3.10 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.

C3.4.3.3.3.11 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

- (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.

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 Municipality 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 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****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	ESTIMATED DURATION (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

ENVIRONMENTAL IMPACTS						
SECTION	CONTENTS	POLLUTION TYPE	DEFORMATION OF LANDSCAPE	SOIL EROSION	ALIEN VEGETATION	SENSITIVE AREAS (to be completed by compiler)
		Storage Noise / lights Dust control	Demarcate sensitive areas Maintenance of windrows			
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 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	
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	

SECTION	CONTENTS	ENVIRONMENTAL IMPACTS					SENSITIVE AREAS (to be completed by compiler)
		POLLUTION TYPE	DEFORMATION OF LANDSCAPE	SOIL EROSION	ALIEN VEGETATION		
		Water supply Noise /lights Dust control	Preserve indigenous vegetation Preserve topsoil	Preserve indigenous vegetation Preserve topsoil	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 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		
3400 3900	Pavement layers	Waste treatment Hazardous waste Water supply Spillage	Selection of site Preserve indigenous vegetation Preserve topsoil	Selection of site Preserve indigenous vegetation Preserve topsoil	Preserve indigenous vegetation Preserve topsoil Management of weeds		

Table 1: Mechanisms that Cause Environmental Impacts during Construction Activities

SECTION	CONTENTS	ENVIRONMENTAL IMPACTS					SENSITIVE AREAS (to be completed by compiler)
		POLLUTION TYPE	DEFORMATION OF LANDSCAPE	SOIL EROSION	ALIEN VEGETATION		
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 Washing waste	Turning circles Parking areas	Restrict access to sensitive areas	Protection of indigenous vegetation Preserve topsoil		
1700	Clearing and grubbing	Waste treatment Hazardous waste	Selection of site	Selection of site	Protection of indigenous vegetation		

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- 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 Municipality'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.

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.

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

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

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 Municipality of Economic Development, Environmental and Tourism, that records its approval of a planned undertaking to improve, upgrade 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

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 Municipality 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.



MAKHADO MUNICIPALITY

TENDER NO: 79 of 2021

CONSTRUCTION OF MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3 (REGRAVELLING) ROAD AT MAKHADO MUNICIPALITY WITHIN VHEMBE DISTRICT OF LIMPOPO PROVINCE

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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- * 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

to Municipality within two days and to the Provincial Director of 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 Municipality and the Provincial Director of the Department of Labour forthwith by telephone, telefax or E-mail.

The Principal Contractor is required to provide 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 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 Municipality reserves the right to hold its own investigation into an incident or call for an independent external investigation.

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 Municipality:

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 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

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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 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 Municipality OH&S meetings and

a list of dates, times and venues will be provided to the Principal Contractor by Municipality.

(i) Checking, Reporting and Corrective Actions

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

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

(v) Competence

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- * 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

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 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 Municipality 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 Municipality for record keeping purposes.

- (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.

- (i) 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.

- * Proof of Registration and good standing with a COID Insurer (Construction Regulation 4 (g))
- * 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

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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

(i) 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.)

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 Municipality together with concise CV's of the appointees. All appointments must be officially approved by Municipality. Any changes in appointees or appointments must be communicated to Municipality forthwith.

The Principal Contractor must, furthermore, provide 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 Municipality or an Inspector of the Municipality of Labour, the Principal Contractor must appoint a competent OH&S Officer subject to the approval of the Municipality

In addition, 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.)

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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 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 OHSAct
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)

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 Municipality as possibly applicable to the abovementioned contract work. It is, by no means, exhaustive and is offered as an 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

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 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 *9and 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.

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

CONTENTS

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

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, 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 Municipality to 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 PROJECT SPECIFICATIONS: ADDITIONAL SPECIFICATIONS

CONTENTS

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 EXTENDED PUBLIC WORKS PROGRAMME

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The unit of measurement shall be the cubic meter of material measured loose.

The tendered rate shall include full compensation for transporting the material from the borrow pit (designated by the engineer) and depositing in heaps of the tendered size at the specified spacing on or along the road.

Item	Unit
34.06 Construction of untreated/Unstabilized gravel pavement layer from heaped material beside or on road	
(a) Lower subgrade (specify compacted layer thickness) cubic metre (m ³)	
(b) Upper subgrade (specify compacted layer thickness) .....cubic metre (m ³)	
(c) Gravel subbase (specify compacted layer thickness) .....cubic metre (m ³)	
(d) Gravel wearing course (specify compacted layer thickness) cubic metre (m ³)	
(e) Gravel shoulders (specify compacted layer thickness) cubic metre (m ³)	

The unit of measurement shall be the cubic meter of compacted pavement layer of the specified thickness. The quantity shall be calculated from the authorised dimensions of the compacted layer.

The tendered rate shall include full compensation for treatment of the heaps on or along the road to Optimum Moisture Content, loading the material into wheel barrows and hauling the material from these heaps, erecting the shuttering, placing, spreading, screeding/levelling the material, covering with plastic sheet and compacting the layer at OMC to the specified width and thickness.

Item	Unit
34.07 Construction of treated/stabilised pavement layer from heaped material beside or on road.	
(a) ETB base layer (specify compacted layer thickness .....cubic metre (m ³)	
(b) Composite ETB base layer (specify compacted layer thickness) .....cubic metre (m ³)	
(c) Other (Specify) cubic metre (m ³)	

The unit of measurement shall be the cubic meter of compacted, treated/stabilised pavement layer of the specified thickness. The quantity shall be calculated from the authorised dimensions of the compacted layer.

The tendered rate shall include full compensation for loading and hauling the material from heaps along or on the road to the mixing site, batching and mixing the various materials as described in Section 3500 (including the supply of the treatment/stabilising agent) in suitably sized concrete mixers, discharging into wheelbarrows and hauling, erecting shuttering, placing, spreading, screeding/levelling the material, covering with plastic sheet and compacting the layer to the specified width and thickness.

For tender purposes a nominal rate of 45 litres of anionic grade emulsion (60% net bitumen) and 7 litres (22Kg) of cement per cubic meter of compacted material shall be used for ETB and composite ETB pavement layers. Variations are measured under Section 3500.

roads, trimming the edges of the completed surface and all other incidentals necessary for completing the work as specified.

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

(v) Gravel Lower Subgrade: 25

No separate payment will be done for trial sections. This work is deemed to be included in the tendered rates for the various layerworks.

MEASUREMENT AND PAYMENT

Replace with the following:

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

34.01	Preparation of road bed (subgrade)
	(existing alignment)

..... cubic meter (m³)

The unit of measurement shall be the cubic meter of compacted roadbed. The quantity shall be calculated by taking dippings and calculating the volume of the compacted layer based on the dipping.

The tendered rate shall include full compensation for obtaining the material from heaps along the road, windrows or surplus loose material on the road, bringing the material to OMC, placing, spreading, levelling and compacting.

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

34.02	Stripping of topsoil and wheelbarrow haul (specify average haul distance) to designated area in road reserve
--------------	---

..... cubic meter (m³)

The unit of measurement shall be the cubic meter of material measured in cut,

The tendered rate shall include full compensation for excavating the topsoil material, loading the material into wheelbarrows, transporting, placing and spreading the material in the designated area in the road reserve as instructed by the Employers Representative (ER)

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

34.03	Excavation of material from road formation to heaps on or along road
--------------	---

(d)	Soft Class 2	cubic meter (m ³)
-----	--------------------	-------------------------------

(e)	Soft Class 3	cubic meter (m ³)
-----	--------------------	-------------------------------

(f)	Intermediate material	cubic meter (m ³)
-----	-----------------------------	--------------------------------

The unit of measurement shall be the cubic meter of material measured in cut,

The tendered rate shall include full compensation for excavating the material, placing the material in heaps along the road and bringing the material to OMC

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

34.04	Load from stockpile in borrow pit
--------------	--

..... cubic meter (m³)

The unit of measurement shall be the cubic meter of material measured loose.

The tendered rate shall include full compensation for loading the material by hand from stockpiles in the borrow pit onto trucks.

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

34.05	Haul from borrow pit (specify borrow pit number and average haul distance) to heap on or along road.
--------------	---

(a)	8m ³ heap	cubic meter (m ³)
-----	----------------------------	--------------------------------

(b)	6m ³ heap	cubic meter(m ³)
-----	----------------------------	------------------------------

(c)	Other	cubic meter(m ³)
-----	-------------	------------------------------

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squeegees and steel screed bar the material shall be spread level with the top of the spacer plate to obtain a 225mm or 150mm thick loose layer. No pedestrian traffic shall be allowed onto the loose layer before screening or compaction.

Where the layer is constructed adjacent to previously constructed work a suitably sized spacer shall be placed on top of the existing work to obtain the correct loose thickness for the new work.

When using coarse material over-sized fractions shall be removed from the surface and replaced with finer material to achieve the required smooth finish.

A plastic sheet shall be rolled out over the layer as the work progresses in order to inhibit the material drying out.

Composite layers: The same process as above shall be followed except that the lower unstabilised material shall be placed, spread and levelled flush with the vertical flange of the shutter, after which the steel spacer plate shall be placed on top of the vertical flange of the shutter and the upper stabilised material placed, spread and levelled flush with the top edge of the spacer plate.

(vi) **Compaction of the layer**

Once 8m to 10m in length of the layer has been completed, the plastic sheet may be rolled up and compaction may commence.

Compaction with an approved pedestrian roller in vibratory mode shall be executed until the loose layer, as determined by the spacer plate, has been compacted to the top edge of the vertical flange of the steel side form.

Rolling shall commence at a 45° angle to the edge line of the shutters and shall thereafter continue in such a manner that the roller is always supported over approximately a half of its width initially either on an existing surface or the steel side forms.

Compaction shall be done in vibratory mode, parallel to the shutter lines, moving from both sides inward towards the middle of the layer in increments of slightly less than half the width of the roller, after each pass of the roller.

The composite layer shall be compacted as a single layer.

(g) **Construction of gravel shoulder**

The gravel shoulder, as required, shall be also be constructed as stipulated under subclause 3403(f).

3404 **PROTECTION AND MAINTENANCE**

Retain as is except to replace "engineer" with "Employer's Representative (ER)".

3405

3406 **CONSTRUCTION TOLERANCES**

Retain as is except that the tolerances given shall apply to the placement and position of the steel shutters themselves, prior to construction of the soil/gravel layers inside the shutters. If for any reason the steel shutters should become in-operative during construction regarding correct guidance as to level, layer thickness or grade, these tolerances shall apply to the so constructed layer itself, subject to the discretion and directive of the Employer's Representative (ER).

3407 **QUALITY OF MATERIALS AND WORKMANSHIP**

Replace with the following:

(a) **General**

The Employer's Representative (ER) will do routine inspections and conduct routine tests to determine whether the quality of material and workmanship provided comply with the requirements of this section as well as the project specification.

(b) **Trial section**

An eight metre long trial section shall be constructed on a suitably prepared and located position as directed by the Employer's Representative (ER) and inspected by the ER for compliance to the specification. Only when passed by the ER and subject to the direction of the ER, may the contractor proceed to construct the specific layer in its proper location on the road under construction.

This procedure shall be followed each time the material to be used for the construction of a pavement layer changes substantially in quality and/or grading, or the contractor has difficulty in attaining the specified level of workmanship, subject to the discretion and direction of the ER.

While no density specification is given for layers constructed by labour and light plant in these special specifications, the integrity and workmanship of each trial section shall be assessed by Dynamic Cone Penetrometer (DCP) and shall comply with the following *in situ* readings:

The average of 4 DCP readings randomly chosen to cover the entire trial section and expressed in mm/blow, shall not exceed the following figures:

- | | | |
|-------|-----------------------------|----|
| (i) | ETB layer: | 3 |
| (ii) | Gravel Base/Wearing course: | 4 |
| (iii) | Gravel Subbase layer: | 9 |
| (iv) | Gravel Upper Subgrade: | 18 |

A subbase and base course, as required, shall be constructed on the surface of the completed and approved subgrade layer, as stipulated under 3403(f).

(iii) Gravel wearing course

A gravel wearing course, as required, shall be also be constructed as stipulated under subclause 3403(f) and the requirements of TRH 20..

(c) **Crushing and screening**

Delete

(d) **Stabilisation**

Retain as is except to replace "engineer" with "Employer's Representative (ER)".

(e) **Classification of layers for pavement purposes**

Retain as is except to delete the last paragraph.

(f) **Construction of a gravel pavement layer**

(i) General

Steel side forms shall be used for the placing of the pavement layer. The steel angle formwork shall have dimensions conforming to 150mm x 100mm x 6mm thick and be available in 3m, 2m and 1m lengths or as specified in the project specifications and approved by the Employer's Representative (ER). (The shorter lengths to be used for smaller curves.)

Sufficient steel forms for one day's work shall be available.

(ii) Control of gravel heaps along the side of the road

The distance over which the material is to be carted from the gravel heaps to be placed on the road shall be minimised.

To facilitate the achievement of this objective where material is hauled by trucks from borrow pits to the work area, it should be strived to use trucks of the same measured and known capacity (e.g. 6m³, 7m³ or 6m³, etc.).

The spacing of the gravel heaps delivered by the truck/s shall be established from Employer's Representative (ER) approved tables or calculations, based on the loose thickness to which the material shall be placed.

The spacing for each truck shall be demarcated and controlled by means of stop blocks on the surface of the road.

(iii) Addition of compaction water

No compaction shall be attempted on dry material.

The heaped gravel material shall be brought to and maintained at optimum moisture content (OMC) as described in subclause 3403(a)(iii) prior to placement on the road, and the material shall be protected against drying out during the construction process using plastic sheets.

(iv) Placing of steel side forms (shutters)

Care shall be taken when fixing the steel formwork to ensure that no bumps are built into the surface and that a smooth vertical and horizontal alignment is obtained.

The steel formwork shall be firmly and correctly placed so as to comply with the specified dimensions, lines and levels of the road or section to be constructed and be subject to the approval of the Employer's Representative (ER).

Once the steel side forms have been placed, the levels shall again be checked (by string lining across the tops of the side forms) and the surfaced trimmed to ensure that the correct thickness of pavement layer is laid.

(v) Mixing of the components for treated/stabilised layers

Refer to section 3500: Stabilisation

Placing of the layer

Before placing the layer, the lower layer shall be lightly watered.

The material for the layer being constructed shall be wheelbarrow placed between the steel side forms at a uniform spacing to achieve a minimum amount of material relocation when the loose material is screeded/levelled to the required depth of 1,5 times the compacted depth.

Calculation of the spacing of the wheelbarrow loads shall be done subject to the approval of the Employer's Representative (ER).

A steel spacer plate (bulking rail) shall be placed on top of the 150mm or 100mm flange of the steel side forms to obtain a height of 225mm or 150mm (depending on the required compacted thickness of the layer – 100mm or 150mm). Using the steel

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- Form a depression (dam) at the top of the heap.
- Pour the predetermined required amount of water slowly into the dam.
- Cover the dam/heap with plastic sheeting.
- Allow the water to soak through the material for approximately 24 to 36 hours.
- Draw off in wheelbarrows only the damp material and cover the wheelbarrow with a plastic sheet too (some limited addition of water and mixing by hand may be required).
- Only dump material from wheelbarrows when labour is ready to spread and screed the material.

Treated/stabilised layers: For treated/stabilised layers, including the unstabilised portion of composite layers, the correct moisture content shall be obtained by first mixing the dry materials thoroughly in a concrete mixer and then adding the liquids to the dry material in the concrete mixer and mixing it to a uniform consistency (Refer to section 3500: Clause 3505).

This method is proposed to achieve uniform distribution of the small amounts of stabilising/ treatment agent with the gravel and thereafter the uniform mixing of the liquids with the dry ingredients.

(In view of the small amounts of stabilising/treatment agent mixing by hand is not advocated.)

(b) Placing and compacting

Replace with the following:

(i) Roadbed

Existing alignment: No spreading of the material or compaction shall be done on dry material. The heaped material shall be brought to its laboratory determined OMC prior to usage and protected from drying out until labour is ready to spread and screed the material as directed under subclause 3403(a)(iii).

The surface onto which the material is to be placed shall be dampened with water immediately prior to dumping the heaped material onto it.

After spreading and screeding the damp material, the surface shall be covered with plastic sheeting (which is rolled up systematically ahead of the roller as compaction progresses) to reduce evaporation of water from the material.

The fill material shall be placed approximately 50% higher than the required compacted thickness and compacted and trimmed back to the required level.

Compaction (in vibratory mode) shall commence only once approximately 12m of the subgrade (roadbed) has been completed and covered with plastic sheeting.

The plastic sheeting shall be rolled back ahead of the roller as it progresses.

The levels shall be checked and trimmed back or have excess material removed after one complete half-wheel pass of the roller. Rolling shall then be completed and the final trimming done.

Rolling shall be stopped immediately when the roller drums tend to "bounce" on the layer. (Generally on thin layers, that is <50mm, 2 to 3 half-wheel passes prove sufficient.)

Any differential settlement during compaction shall be corrected by adding extra material or by cutting away of high spots to achieve a smooth longitudinal surface between the reference pegs. This shall be checked for acceptance with boning rods and string lines.

(The wearing course is constructed on the surface of this completed and approved subgrade layer.)

New alignment: No spreading of the material or compaction shall be done on dry material. The heaped material shall be brought to its laboratory determined OMC prior to usage and protected from drying out until labour is ready to spread and screed the material as directed under subclause 3403(a)(iii).

The lower subgrade shall be constructed to specified compacted thickness (i.e. 150mm) over half the width of the road in 12m sections in the longitudinal direction of the road, using 150mm x 1000mm steel shutters, with the material at OMC stockpiled on the open half of the road.

The gaps left by the steel shutters shall be similarly back-filled and compacted.

The same process shall be followed for construction of the second half of the lower subgrade of the road.

The material previously stockpiled along the edge of the road shall be used to construct the second (upper) subgrade in exactly the same manner. Material of an equal quality may be added to make up for any shortage of material, subject to the direction and approval of the Employer's Representative (ER).

The subbase, if specified, shall be constructed on the surface of this completed and approved second subgrade layer as stipulated under subclause 3403(f))

(ii) Gravel pavement layers



MAKHADO MUNICIPALITY

TENDER NO: 79 of 2021

CONSTRUCTION OF MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3 (REGRAVELLING) ROAD AT MAKHADO MUNICIPALITY WITHIN VHEMBE DISTRICT OF LIMPOPO PROVINCE

3403 CONSTRUCTION

(a) Requirements applying prior to construction of the layer

Replace with the following:

(i) General

Pavement layers shall be constructed only where the underlying layer meets all the specified requirements and has been approved by the Employer's Representative (ER).

(ii) Preparation of roadbed (sub-grade)

Existing alignment: Once the horizontal and vertical alignment and cross fall of the road have been set out and before the pavement layer gravel is placed, the existing subgrade (roadbed) shall be prepared.

Pegs at the centre line and edge of the riding surface to the left and right of the centre line shall determine the levels of the top of the subgrade (roadbed). The type and quality of the materials shall govern the most practical treatment of the road.

Before any layer construction can proceed, whether for surfaced or un-surfaced roads, the rutting/unevenness shall be rectified. For this purpose, the *in situ* material within the road reserve shall be considered (if suitable depending laboratory test results) before importing suitable material is considered. Any material excavated from the subgrade to achieve the required levels shall also be considered for this purpose. The non-plastic coarse gravel intended for the layer work shall not be used for this purpose.

The amount of material required for filling of the ruts/unevenness shall be determined by using a string/ line and tape and placed in suitably sized heaps along the side of the road at a pre-determined spacing to suit the need.

New alignment (based on two *in situ* subgrade layers being required to obtain the required controlled compaction depth):

The area below and immediately adjacent to the edge of the road shall be cleared and grubbed, including the removal of topsoil which shall be stockpiled for later use as directed by the Employer's Representative (ER).

The subgrade shall be excavated and exposed to the required depth below final road level to a width of 600mm wider than the final subbase width. The excavated material shall be stockpiled along the edge of the road.

The exposed subgrade shall be excavated to a depth equal to that of the lower subgrade (i.e. 150mm) for half the width of the road over a length of 12m in the longitudinal direction of the road, and the material stockpiled on the open half of the road.

The excavated material stockpiled on the open half of the road shall be brought to OMC and covered with a plastic sheet to minimise evaporation of the water.

(iii) Controlling the moisture content of the heaped materials on or next to road

Untreated/unstabilised layers: It is important that the material in the pavement layers is compacted at Optimum Moisture Content (OMC) as determined in the laboratory.

The following procedure is recommended for consideration where labour and light plant is used for ensuring that the material placed on the road for the construction of the untreated/unstabilised layer, is properly mixed with the water and compacted at Optimum Moisture Content (OMC):

** This could be subjective depending on the moisture content of the cohesive material.

Table 3402/3: Consistency of materials

GRANULAR MATERIALS		COHESIVE MATERIALS	
CONSISTENCY	DESCRIPTION	CONSISTENCY	DESCRIPTION
Very loose	Crumbles very easily when Scraped with a geological pick	Very soft	Geological pick head can easily be pushed in as far as the shaft of the handle
Loose	Small resistance to penetration by sharp end of geological pick	Soft	Easily indented by thumb; sharp end of geological pick can be pushed in 30-40 mm; can be moulded by fingers with some pressure
Medium dense	Considerable resistance to penetration by sharp end of geological pick	Firm	Indented by thumb with effort; sharp end of geological pick can be pushed in up to 10mm; very difficult to mould with fingers; can just be penetrated with an ordinary hand spade
Dense	Very high resistance to penetration by sharp end of geological pick; requires many blows for excavation	Stiff	Can be indented by thumb-nail with difficulty; slight indentation produced by pushing geological pick point into soil; cannot be moulded by fingers
Very dense	High resistance to repeated blows of geological pick	Very stiff	Indented by thumb-nail with difficulty; slight indentation produced by blow of geological pick

- Screeding boards comprising steel or aluminium straight edge of suitable length for screeding loose material.
- Plastic sheeting.
- Cross fall templates of 2% or 3% as specified.
- Steel pegs of various lengths (Y10).
- String or sisal, 3mm white.
- Water tank on LDV or mounted on trailer with pump, 1000 litres.
- Wheelbarrows
- Shovels
- Brooms
- Steel tape, 50m

(b) Compaction requirements

Delete - refer to subclauses 3403(b)(i) and 3403(f)(vii)

(c) Classification of excavation

The Employer's Representative (ER) shall classify excavated materials as soft Class 1, soft Class 2, soft Class 3, intermediate or rock.

The classification shall be based on the descriptions given in Tables 3402/1 and 3402/2 from the CIDB Best Practice Guideline #2.

The Contractor shall notify the Employer's Representative (ER) of the presence of what he considers to be rock or intermediate material immediately upon discovery thereof. The ER will inspect the material and decide whether the material shall indeed be classified as suggested by the Contractor or not. The decision of the Employer's Representative (ER) shall be final and binding, subject to the provisions of the Contract.

Table 3402/1: Classification of excavated materials

CLASSIFICATION	DESCRIPTION
Soft Class 1	Material which can be excavated by means of a suitable shovel without the use of a pick or other hand swung tool.
Soft Class 2	Material which can be readily excavated with the aid of a pick or other hand swung tool.
Soft Class 3	Material which can be excavated with difficulty with the aid of a hand swung tool.
Intermediate	Material which is difficult to excavate by hand even with the aid of a crow bar and requires the assistance of pneumatic tools for economic removal.
Rock	Material which cannot be economically fragmented and loosened by hand implements and pneumatic tools except by drilling and blasting or the use of rock breaking equipment.

Table 3402/2: Classification of materials in terms of consistency and shear strength

MATERIALS CLASSIFICATION	CONSISTENCY (as defined in Table 3302/3)		NUMBER OF DCP BLOWS TO PENETRATE 100mm*	
	Granular soil	Cohesive soil	Granular soil	Cohesive soil**
SOFT Class 1	Very loose to loose.	Very soft to soft	≤ 2	≤ 1
SOFT Class 2	Loose to medium dense.	Soft to stiff	2 – 6	1 – 5
SOFT Class 3	Dense.	Stiff to very stiff	7 – 15	6 – 8
INTERMEDIATE	Very dense.	Very stiff	> 8	> 8
ROCK	Very dense.	Very stiff	> 8	> 8

* Only applicable to materials comprising not more than 10% gravel (particles having dimensions > 2mm) of size less than 10mm and materials containing no isolated small boulders.

SERIES 3000: EARTHWORKS AND PAVEMENT LAYERS OF GRAVEL OR CRUSHED STONE**SECTION 3200: SELECTION, STOCKPILING AND BREAKING-DOWN THE MATERIAL FROM BORROW PITS, CUTTINGS AND EXISTING PAVEMENT LAYERS, AND PLACING AND COMPACTING THE GRAVEL LAYERS**

(Refer to section 3400 for construction by labour and light plant.)

SERIES 3000: EARTHWORKS AND PAVEMENT LAYERS OF GRAVEL OR CRUSHED STONE**SECTION 3300: MASS EARTHWORKS**

(Refer to section 3400 for construction by labour and light plant.)

SERIES 3000: EARTHWORKS AND PAVEMENT LAYERS OF GRAVEL OR CRUSHED STONE**SECTION 3400: PAVEMENT LAYERS OF GRAVEL****MATERIAL****CONTENTS**

3401	SCOPE
3402	MATERIALS
3403	CONSTRUCTION
3404	PROTECTION AND MAINTENANCE
3405	CONSTRUCTION TOLERANCES
3406	QUALITY OF MATERIALS AND WORKMANSHIP
3407	MEASUREMENT AND PAYMENT

3401 SCOPE

Replace with the following:

This section covers the preparation of the roadbed/subgrade on the existing alignment, the construction of selected layers (where applicable), subbase, bases (unstabilised and treated/stabilised in accordance with Section 3500: Stabilisation), wearing courses and shoulders with natural gravel and also gravel wearing courses by labour and light plant.

3402 MATERIALS

Delete and replace with the following:

3402 MATERIALS AND PLANT**(a) General**

(i) Materials required for the construction of the layer.

- Gravel/soil – approved from *in situ* sources or sources in borrow areas (gravel pit/quarry).
- Water.

(ii) Construction plant and equipment

The following specialised plant and equipment shall be used to promote the construction of the layer by labour intensive methods:

- Suitably sized (approx. 1 ton) tandem vibratory pedestrian rollers having two equally sized drums in tandem - both drums driven, each drum to have a separate eccentric shaft.
- Steel angle formwork (shutters), 150mm x 100mm x 6mm thick (1m, 2m and 3m lengths).
- Steel spacer plates (bulking rails), 75mm x 6mm and 50mm x 6mm capable of slotting onto the steel angle formwork to form a continuous shutter for levelling the loose material (1m, 2m and 3m lengths).
- 75mm x 75mm and 50mm x 50mm steel box sections for tying in levels of new work with previously constructed work (1m, 2m, and 3m lengths)
- Steel squeegees.

3107 MEASUREMENT AND PAYMENT

Replace with the following:

Item	Unit
31.01 Stripping of topsoil and wheelbarrow haul (specify average haul distance) to designated area in borrow area	..... cubic meter (m ³)

The unit of measurement shall be the cubic meter of material measured in cut,

The tendered rate shall include full compensation for excavating the material, loading the material into wheelbarrows, transporting and placing the material in the designated area in the borrow area as instructed by the Employers Representative (ER)

Item	Unit
31.02 Excavation of and wheelbarrow haul (specify average haul distance) of excess overburden to outer limits of borrow area	
(a) Soft Class 2	cubic meter (m ³)
(b) Soft Class 3	cubic meter (m ³)
(c) Intermediate material	cubic meter (m ³)

The unit of measurement shall be the cubic meter of material measured in cut,

The tendered rate shall include full compensation for excavating the material, loading the material into wheelbarrows, transporting and placing the material long the outer limits of the borrow area as instructed by the Employers Representative (ER)

Item	Unit
31.03 Excavate borrow material and load onto trucks	
(a) Soft Class 2	cubic meter (m ³)
(b) Soft Class 3	cubic meter (m ³)
(c) Intermediate material	cubic meter (m ³)

The unit of measurement shall be the cubic meter of material measured in cut,

The tendered rate shall include full compensation for excavating the material in the borrow pit, and loading the material into the trucks.

Item	Unit
31.04 Finishing –off borrow areas	

(a)	Disposing of overburden in Item 3.02 in borrow pit	cubic meter (m ³)
-----	--	-------------------------------

The unit of measurement shall be the cubic meter of material that was measured in cut under 31.02.

The tendered rate shall include full compensation for loading the material placed long the outer limits of the borrow area, loading into wheelbarrows, transporting and placing the material in the borrow pit as instructed by the Employers Representative (ER)

(b)	Spreading of topsoil in Item 31.01	cubic meter (m ³)
-----	--	-------------------------------

The unit of measurement shall be the cubic meter of topsoil material that was measured in cut under Item 31.01 spread in a

layer of approximately 100mm thick over the area of the borrow pit being finished-off.

The tendered rate shall include full compensation for loading the material placed in the designated area of the borrow area under Item 31.01, loading into wheelbarrows, transporting and spreading the topsoil material over the area as instructed by the Employers Representative (ER).

C

CLASSIFICATION	DESCRIPTION
Soft Class 1	Material which can be excavated by means of a suitable shovel without the use of a pick or other hand swung tool.
Soft Class 2	Material which can be readily excavated with the aid of a pick or other hand swung tool.
Soft Class 3	Material which can be excavated with difficulty with the aid of a hand swung tool.
Intermediate	Material which is difficult to excavate by hand even with the aid of a crow bar and requires the assistance of pneumatic tools for economic removal.
Rock	Material which cannot be economically fragmented and loosened by hand implements and pneumatic tools except by drilling and blasting or the use of rock breaking equipment.

Table 3107/2: Classification of materials in terms of consistency and shear strength

MATERIALS CLASSIFICATION	CONSISTENCY (as defined in Table 3107/3)		NUMBER OF DCP BLOWS TO PENETRATE 100mm*	
	Granular soil	Cohesive soil	Granular soil	Cohesive soil**
SOFT Class 1	Very loose to loose.	Very soft to soft	≤ 2	≤ 1
SOFT Class 2	Loose to medium dense.	Soft to stiff	2 – 6	1 – 5
SOFT Class 3	Dense.	Stiff to very stiff	7 – 15	6 – 8
INTERMEDIATE	Very dense.	Very stiff	> 8	> 8
ROCK	Very dense.	Very stiff	> 8	> 8

* Only applicable to materials comprising not more than 10% gravel (particles having dimensions > 2mm) of size less than 10mm and materials containing no isolated small boulders.

** This could be subjective depending on the moisture content of the cohesive material.

Table 3107/3: Consistency of materials

GRANULAR MATERIALS		COHESIVE MATERIALS	
CONSISTENCY	DESCRIPTION	CONSISTENCY	DESCRIPTION
Very loose	Crumbles very easily when Scraped with a geological pick	Very soft	Geological pick head can easily be pushed in as far as the shaft of the handle
Loose	Small resistance to penetration by sharp end of geological pick	Soft	Easily indented by thumb; sharp end of geological pick can be pushed in 30-40 mm; can be moulded by fingers with some pressure
Medium dense	Considerable resistance to penetration by sharp end of geological pick	Firm	Indented by thumb with effort; sharp end of geological pick can be pushed in up to 10mm; very difficult to mould with fingers; can just be penetrated with an ordinary hand spade
Dense	Very high resistance to penetration by sharp end of geological pick; requires many blows for excavation	Stiff	Can be indented by thumb-nail with difficulty; slight indentation produced by pushing geological pick point into soil; cannot be moulded by fingers
Very dense	High resistance to repeated blows of geological pick	Very stiff	Indented by thumb-nail with difficulty; slight indentation produced by blow of geological pick

SERIES 3000: EARTHWORKS AND PAVEMENT LAYERS OF GRAVEL OR CRUSHED STONE

SECTION 3100: BORROW MATERIALS

CONTENTS

3101	SCOPE
3102	NEGOTIATIONS WITH OWNERS AND AUTHORITIES
3103	OBTAINING BORROW MATERIALS
3104	OPENING AND WORKING BORROW PITS AND HAUL ROADS
3105	FINISHING-OFF BORROW AREAS AND HAUL ROADS
3106	DISPOSAL OF BORROW MATERIALS
3107	CLASSIFICATION OF BORROW PITS FOR GRAVEL MATERIALS FOR PAVEMENT LAYERS
3108	MEASUREMENT AND PAYMENT

SCOPE

Add "by labour and hand tools in borrow pits of limited size suitable for developing by hand" at the end of the paragraph.

3101 NEGOTIATIONS WITH OWNERS AND AUTHORITIES

Retain as is

3102 OBTAINING BORROW MATERIALS

Retain as is except to replace "engineer" with "Employer's Representative (ER)".

3103 OPENING AND WORKING BORROW PITS AND HAUL ROADS

- (a) Retain as is except to replace "engineer" with "Employer's Representative (ER)"
- (b) Retain as is except to replace "engineer" with "Employer's Representative (ER)"
- (c) Retain as is except to replace "engineer" with "Employer's Representative (ER)"
- (d) Omit the last paragraph and replace "engineer" with "Employer's Representative (ER)"
- (e) Retain as is except to replace "engineer" with "Employer's Representative (ER)"
- (f) Retain as is
- (g) Retain as is except to replace "engineer" with "Employer's Representative (ER)"

3104 FINISHING-OFF BORROW AREAS AND HAUL ROADS

Retain as is except to replace "engineer" with "Employer's Representative (ER)"

3105 DISPOSAL OF BORROW MATERIAL Retain as is

3106 CLASSIFICATION OF BORROW PITS FOR GRAVEL MATERIALS FOR PAVEMENT LAYERS

Replace with:

The Employer's Representative (ER) shall classify excavated materials as soft Class 1, soft Class 2, soft Class 3, intermediate or rock.

The classification shall be based on the descriptions given in Tables 3107/1 and 3107/2 from the CIDB Best Practice Guideline #2.

The Contractor shall notify the Employer's Representative (ER) of the presence of what he considers to be rock or intermediate material immediately upon discovery thereof. The ER will inspect the material and decide whether the material shall indeed be classified as suggested by the Contractor or not. The decision of the Employer's Representative (ER) shall be final and binding, subject to the provisions of the Contract.

SPECIAL SPECIFICATIONS TO COLTO SPECIFICATIONS

FOR LABOUR INTENSIVE WORK

SERIES 1000: GENERAL

SECTION 1700: CLEARING AND GRUBBING

CONTENTS

1701 SCOPE

1702 DESCRIPTION OF THE WORK

1703 EXECUTION OF THE WORK

1704 MEASUREMENT AND PAYMENT

1701 SCOPE

Add "by labour and light plant" at the end of the first paragraph.

1702 DESCRIPTION OF WORK

(a) Clearing

Replace the second paragraph with:

The breaking down, removal and disposal of structures will be paid for separately as determined in the project specifications.

(b) Grubbing

Retain as is

(c) Conservation of topsoil

Retain as is except to replace the reference to section 5800 with section 3100 and "engineer" with "Employer's Representative (ER)".

(d) Conservation of vegetation

Retain as is

1703 EXECUTION OF THE WORK

(a) Areas to be cleared and grubbed

Retain as is except to replace "engineer" with "Employer's Representative (ER)".

(b) Cutting of trees

Retain as is

(c) Disposal of material

Retain as is except to replace "engineer" with "Employer's Representative (ER)".

(d) Re-clearing of vegetation

Retain as is except to replace "engineer" with "Employer's Representative (ER)".

(e) Cleaning out of hydraulic structures

Retain as is

1704 MEASUREMENT AND PAYMENT

Item	Unit
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17.01 Clearing and grubbing

Replace with:

(a) Borrow areassquare meters (m²)

The unit of measurement for clearing and grubbing is the square meter. The quantity shall be taken as the area in square meters designated by the Employer's Representative (ER) and cleared and grubbed in accordance with these specifications.

The tendered rate shall include full compensation for all work necessary for the clearing of the surface, the removal and grubbing of trees and tree stumps (except large trees and stumps as defined below), cutting the branches, and the removal, transporting by wheelbarrow (specify average distance) and stockpiling (if necessary) in the designated area of the borrow area and the final disposal in the finished borrow pit as directed by the Employers' Representative (ER).

Fifty percent (50%) of the tendered rate shall be paid on placing of the material in the stockpile/s and the remaining fifty percent (50%) on disposal of the material in the finished borrow pit as directed and authorised by the ER.

(b) Roadbed square meters (m²)

The unit of measurement for clearing and grubbing is the square meter. The quantity shall be taken as the area in square meters designated by the Employer's Representative (ER) and cleared and grubbed in accordance with these specifications.

The tendered rate shall include full compensation for all work necessary for the clearing of the surface, the removal and grubbing of trees and tree stumps (except large trees and stumps as defined below), cutting the branches, backfilling of cavities and the removal, transporting (specify average distance) and the final disposal of the material as specified in this section and directed by the Employer's Representative (ER).

Item	Unit
17.02 Removal and grubbing of large trees and tree stumps	

Retain as is.

Item	Unit
17.03 Reclearing of surfaces (on written instructions of the engineer only)	

Retain as is except to replace "engineer" with "Employer's Representative (ER)" and Hectare (ha) with square meters (m²).

Item	Unit
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17.04 to 17.06

Retain as is except that where applicable the average distance over which the material is to be transported and the mode of transport is to be defined and replace "engineer" with "Employer's Representative (ER)".

**SPECIAL SPECIFICATIONS APPLICABLE TO
STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE WORKS FOR STATE ROAD
AUTHORITIES (1998 Edition) – (COLTO SPECIFICATIONS) FOR LABOUR INTENSIVE
CONSTRUCTION**

INTRODUCTION

These Special Specifications contain amendments and additions to and are to be read in conjunction with the “Standard Specifications for Road and Bridge works for State Road Authorities (1998)”.

The Special Specifications shall form an integral part of the contract documents.

Where there are any discrepancies between these Special Specifications, the Project Specification and the “Standard Specification for Road and Bridge works for State Road Authorities (1998)” these special specifications shall have precedence. This shall be brought to the Engineer’s attention immediately.

Note:

Where reference is made to “engineer” in the Standard Specifications it shall be replaced with Employer’s Representative (ER).

PROJECT SPECIFICATIONS:

PART B3: SPECIAL SPECIFICATIONS TO COLTO SPECIFICATIONS FOR LABOUR INTENSIVE CONSTRUCTION

PROJECT SPECIFICATIONS:**PART B3:SPECIAL SPECIFICATIONS TO COLTO SPECIFICATIONS FOR LABOUR INTENSIVE CONSTRUCTION**

1.	INTRODUCTION	5.86
2.	SECTION 1700: CLEARING AND GRUBBING	5.87
3.	SECTION 3100: BORROW MATERIALS	5.88
4.	SECTION 3200: SELECTION, STOCKPILING AND BREAKING-DOWN THE MATERIAL FROM BORROW PITS, CUTTINGS AND EXISTING PAVEMENT LAYERS, AND PLACING AND COMPACTING THE GRAVEL LAYERS	5.91
5.	SECTION 3300: MASS EARTHWORKS	5.91
6.	SECTION 3400: PAVEMENT LAYERS OF GRAVEL MATERIAL	5.92

8100: TESTING MATERIALS AND WORKMANSHIP**ADD THE FOLLOWING CLAUSE****B 8118: Tests on retro-reflective material for use on road signs**

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

TABLE 8118/1 COEFFICIENTS OF RETRO-REFLECTION

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

*See CIE Publication 15 (E-1.3.1)

SECTION**SECTION 5900: FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS****B5902 FINISHING THE ROAD AND ROAD RESERVE**

Add the following to the first paragraph:

"The contractor shall pay special attention to the collection and removal of all waste materials originating from the construction activities. All materials trimmed or excavated from the road shall be collected and removed from the road reserve to the satisfaction of the engineer.

This requirement shall be deemed to be incorporated in the tendered rates for item 59.01 of the bill of quantities or such other items as the contractor may decide upon.

The engineer may order additional finishing of the road reserve which will entail the collection and disposal of loose rocks etc. Payment for this work will be made under daywork items included in section 5900 of the bill of quantities as described in section 1800 of these project specifications."

"ITEM	UNIT
B56.10 Danger plates at culverts/structures	
(a) Type A at stormwater culverts (size indicated)	number (No.)
(b) Type B at brldges (size indicated)	number (No.)

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

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

"ITEM	UNIT
B56.11 Replace marker boards on existing kilometre posts	number (No)

The unit of measurement shall be the number of reference marker boards provided and attached to existing kilometer posts in accordance with the drawings.

The tendered rate shall include full compensation for the manufacturing and supplying of the completed marker boards, for attaching the marker board to existing posts along the route and for all materials equipment, labour, nuts and bolts necessary for attaching the marker board as specified."

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

reflective material

Covering the sign face with an impermeable material that does not allow free circulation of air."

B5606 ERECTING ROAD SIGNS

(c) Erection

Add the following:

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

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

B5608 DISMANTLING, STORING AND RE-ERECTING EXISTING ROAD SIGNS

Add the following:

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

Dismantling shall include sign panels and ground mounted sign supports.

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

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

B5609 MEASUREMENT AND PAYMENT

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

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

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

SECTION 5600: ROAD SIGNS

B5601 SCOPE

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

B5603 MANUFACTURING OF ROAD SIGN BOARDS AND SUPPORTS

(a) Road signboards

Add the following:

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

(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."

B5604 ROAD SIGN FACES AND PAINTING

Add the following new subclause:

"(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."

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-

SECTION 3400: PAVEMENT LAYERS OF GRAVEL MATERIAL**B3402 MATERIALS****(a) General**

Add the following:

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

B3405 CONSTRUCTION TOLERANCES**(e) Cross-section**

Delete the second paragraph and replace with the following:

"The normal cross fall of the road wearing course where the road is in a straight horizontal alignment, is specified as 2% as shown on the drawings.

At any cross-section the measured cross fall between any two points shall at least be 2% and not more than 3, 5%. At any cross-section the actual level at any point shall not be higher than 10mm above the computed level from the cross-section as specified and the actual level, if lower than the computed level, shall not be lower by more than that derived from the specifications for longitudinal grade and cross fall deviations."

(f) Surface regularity

Add the following:

"Where transverse construction joints in base layers are made between newly and previously constructed sections, the contractor shall exercise level control at such joints by installing level poles at 5m intervals on either side of the joint of the layer covering at least a 30m length into the newly constructed section."

B3406 QUALITY OF MATERIALS AND WORKMANSHIP

Add the following:

"Test results and measurements shall be assessed by the engineer according to the provisions of Section 8300 of the standard specifications".

B3308 FINISHING THE SLOPES**(d) General**

Add the following:

"Where existing cut and fill slopes are excessively eroded or where slippages occurred in slopes, the slopes are to be reinstated by means of backfilling with suitable gravel material. All loose material and vegetation shall first be removed from the eroded cut and fill slopes before backfilling may commence from the bottom of the cut or fill. The backfill material shall be benched into the existing slopes and compacted to 90% of modified AASHTO density, using suitable small compaction equipment e.g. Bomag walk-behind rollers or hand-held compaction tools. Benching shall be executed to the dimensions shown on the drawings. Upon completion of the backfilling operation the cut and fill slopes shall be neatly finished as specified."

B3312 MEASUREMENT AND PAYMENT

Add the following sub-item to item 33.10:

"ITEM	UNIT
B33.10 (e) Extra over sub-items 33.10(a), (b) and (d) for blading to controlled levels (existing road)	cubic metre (m ³)

The unit of measurement in respect of the material bladed as specified in sub clauses 33.05 (c) shall be the cubic metre of material bladed, measured in the original position before blading, in accordance with the method of average end areas.

The tendered rate shall include full compensation for blading of such material to level.

Only material bladed on the instruction of the engineer for exposing the underlying roadbed material for treatment will be measured and paid for as described above."

SECTION 3300: MASS EARTHWORKS**B3305 TREATING THE ROADBED****(a) Removing unsuitable material**

Add the following to the third paragraph:

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

(c) Preparing and compacting the roadbed

Delete the last sentence of the first paragraph "If necessary, roadbed. Depth of compaction" and replace as follows:

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

B3307 FILLS**(c) Constructing a pioneer layer**

Add the following to the first paragraph:

"For the purpose of this contract, pioneer layers shall be completed by means of eight-pass roller compaction using vibratory rollers as specified in sub clause 3304(b) of the standard specifications."

(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."

SECTION 3200: SELECTION, STOCKPILING AND BREAKING-DOWN THE MATERIAL FROM BORROW PITS, CUTTINGS AND EXISTING PAVEMENT LAYERS, AND PLACING AND COMPACTING THE GRAVEL LAYERS

B3204 BREAKING-DOWN THE MATERIAL

(a) Initial breaking-down of the material in cuttings, borrow pits and existing pavement layers

Add the following to the table in the second paragraph of this sub clause:

"Pioneer layers - 500mm maximum dimension

Not more than 20% of pioneer layer material shall pass through the 2,0mm sieve."

(b) Further breaking-down of pavement material

Add the following:

"Material used for the construction of selected, and wearing course layers shall be broken down by means of normal grid-rolling or additional normal grid-rolling to such an extent that the compacted pavement layer shall contain material of which 95% of the aggregate size shall not exceed 65mm. All oversize material, after breaking-down, shall be removed".

B3209 PLACING AND COMPACTING THE MATERIALS IN LAYER THICKNESSES IN EXCESS OF 200mm AFTER COMPACTION

Add the following new sub clause:

(d) Pioneer layer

"The maximum size rock used in pioneer layers shall be 500mm and the layer thickness before compaction shall not be more than one-and-a-half times the maximum actual size of the rock. Not more than 20% of pioneer layer material shall pass through the 2,0mm sieve. Pioneer layer processing and compaction shall be as specified in sub clause 3307(c) of the standard specifications".

the borrow pits.

Add the following new sub clause:

“(h) Haul roads

Haul roads to designated borrow pits along the road shall be constructed along alignments as instructed by the engineer and shall be maintained at the contractor's own cost to the satisfaction of the engineer."

B3105 FINISHING-OFF BORROW AREAS AND HAUL ROADS

Add the following to this clause:

"Should the employer, engineer or any other authority approved by the engineer, require a higher standard of shaping and finishing off of borrow pits than specified in the standard specifications, measurement and payment for such extra work shall be made using day work items as scheduled under this section."

B3108 MEASUREMENT AND PAYMENT

Change item 31.01 to read as follows:

"ITEM	UNIT
B31.01 Excess overburden:	
(a) Depth up to and including 0,5m	cubic meter (m ³)
(b) Depth exceeding 0,5m and up to 1,0m	cubic meter (m ³)

Measurement and payment shall be as specified for item 31.01 of the standard specifications with the abovementioned depth ranges applicable."

Add the following new item:

"ITEM	UNIT
B31.04 Compensation to landowners:	
(a) Prime cost sum for compensation to landowners	prime cost (PC) sum
(b) Handling cost and profit in respect of sub-item B31.04 (a) above	percentage (%)

Measurement and payment shall be in accordance with the provisions of clause 48(2) of the general conditions of contract. Payment to the landowner shall be made within fourteen (14) days after such order has been given by the engineer. The contractor shall provide detailed proof of payment before payment shall be certified to the contractor.

The tendered percentage is an extra over percentage on the amount actually spent under sub-item B31.04 (a) which shall include full compensation for the handling costs and profit of the contractor."

SECTION 3100: BORROW MATERIALS

B3102 NEGOTIATIONS WITH OWNERS AND AUTHORITIES

Add the following to sub-clause 3102(a):

"Arrangements regarding to access to borrow pits and the alignment of haul roads shall be made between the contractor and the owners of the land on which borrow pits are situated. The engineer's representative on site shall be present at all such negotiations, which shall be confirmed in writing by the contractor. All costs involved with such negotiations as well as the requirements contained in clause 3102 and clause 1225 of the specifications shall be borne entirely by the contractor."

B3103 OBTAINING BORROW MATERIALS

(a) General

Add the following:

"The expropriation and compensation for land from which borrow materials is obtained shall be negotiated and paid for by the employer."

(b) Use of borrow materials

Add the following to the second paragraph of this sub clause:

"Compensation to owners and arrangements with owners for taking material from alternative borrow pits proposed by the contractor shall be the contractor's responsibility and entirely at his own expenses."

B3104 OPENING AND WORKING BORROW PITS AND HAUL ROADS

(c) Excess overburden

Add the following:

"All excess overburden removed at borrow pits shall be replaced over the entire area of the borrow pit after initial shaping has been undertaken in an even layer. Payment for this requirement shall be deemed to be included in pay item 31.01

f) Protecting borrow pits

Add the following:

"It is a requirement of the contract that, each borrow pit or pits shall be provided with fencing around the perimeters, including a access gate, of the borrow areas, including the supply of danger warning signage fixed to the fencing, visible at all sides approaching the borrow pit area. The fencing shall be erected prior to entering the land for borrowing purposes and shall on final finishing of the borrow areas as specified by the employer, be dismantled and removed or left in-place as instructed by the employer. Payment for fencing around borrow pits shall be made in accordance with the stipulations of section 5500 in these specifications."

In addition to fencing, Security Guards shall be supply on a 24 hour, 7 days a week basis, with full time communication to the Site Manager or site camp for the duration of the contract and activities at

and backfilled.

- (ii) Remaining 20% of the payment shall be made after the wing walls have been constructed and backfilled.

ITEM

UNIT

B22.32 Cutting of concrete pipes

a) Diameter indicated

Number (No.)

The unit of measurement shall be the number of pipes that have been cut. The tendered rate shall be full compensation for the cutting, by means of mechanical saw (angle grinder) and finishing off of the pipes for the specific angle of skew at which the pipes must be laid.

Cutting of pipes shall only be paid for if the headwall of the wing walls is at such a skew angle in respect to the centre line of the pipes that cutting is required and where non-standard lengths are required. The maximum skew angle at which pipes are allowed to be cut shall be 30 degrees and the minimum length of pipe, measured along the shortest side, shall be 1,5m."

Classification of soft/hard materials as well as all quantities shall be agreed upon and finalised as the work progresses.

Add the following to pay item 22.08:

"In addition to the requirements for measuring concrete backfill to rectangular culverts as specified for item 22.08, the following shall apply:

Concrete backfill shall be measured to the actual dimensions of the precast units, i.e. actual volumes between ribs and haunches shall be taken into account. For the purpose of calculating concrete backfill quantities, the horizontal dimensions of the concrete backfill on the outside of the culvert(s) (closest to excavated face), shall be taken as 100mm maximum irrespective of what type or make of precast portal is used or the actual width of the excavation.

The width of the concrete backfill between portals in the case of multiple culverts shall be taken as 80mm for precast units with a leg height of 1500mm and 100mm for precast units with a leg height exceeding 1500mm. The vertical dimensions, in both cases, shall be equal to the height of the portal".

Add the following new items:

ITEM	UNIT
B22.29 Tie bars for joining in situ concrete invert slabs to inlet and outlet structures, as indicated on the drawings (Type, diameter and length indicated)	Number (No.)

The unit of measurement shall be the number of tie bars installed as specified and indicated on the drawings.

The tendered rate shall include full compensation for supply and installation of the tie bars.

ITEM	UNIT
B22.30 a) Preparation and compaction of in-situ bedding material to 90% of Mod. AASHTO density (depth indicated)	cubic metre (m ³)
b) Extra over sub-item B22:30(a) for compaction to 93% of Mod. AASHTO density (depth indicate)	cubic metre (m ³)

The unit of measurement shall be the cubic metre of material ripped and compacted as specified.

The tendered rate shall include full compensation for the ripping of the in-situ material to the specified width and depth, wetting of the material to such an extent that the specified density can be achieved.

ITEM	UNIT
B22.31 Dewatering and keeping dry of culvert excavations	

The unit of measurement shall be the number of culverts constructed. The tendered rate shall be full compensation for dewatering and keeping dry of the culvert excavations until the backfill is completed.

Payment shall be as follows:

- (i) 80% of the payment shall be made after the barrel of the culvert has been constructed

Delete sub clause B.2210 (b) (ii): "Prefabricated floor slabs."

B2211 BACKFILLING OF PREFABRICATED CULVERTS

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

B2212 INLET AND OUTLET STRUCTURES, CATCHPITS AND MANHOLES

(b) Concrete work

Add the following:

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

(h) Prefabricated inlet and outlet structures

Add the following:

"The use of precast concrete inlets and outlets as described in clause 2212(h) shall not be allowed under any circumstances. Cast in situ concrete wing wall type inlets and outlets shall be constructed as indicated on the drawings and shall be in accordance with section 6000 of the Standard Specifications. Allowance for measurement and payment for wing wall type inlets and outlets is made in the schedule in this section."

B2218 MEASUREMENTS AND PAYMENT

Add the following:

"ITEM	UNIT
B22.01 (c) Extra over sub item B22.01 (a) for excavation by hand using hand tool	cubic metre (m ³)

Measurement shall be as specified for pay item 22.01 of the standard specifications.

The tendered rate shall include full compensation for carrying out the excavations by hand where circumstances prevent the use of mechanical excavators.

ITEM	UNIT
B22.07 (f) Formwork for joints in cast in situ concrete invert slabs	
(i) Transverse construction joints (type indicated)	square metre (m ²)
(ii) Longitudinal joints (as per drawing)	metre (m)

Measurement and payment shall be as specified in item 22.07 of the standard specifications with the exception that formwork for construction joints in cast in situ invert slabs in trench conditions as indicated on the drawings, shall be measured and paid for in accordance with section 6200 of the standard specifications. No payment shall be made for formwork to the outside edges of invert slabs (closest to excavated face)."

measures. The supplementary rate for excavation by hand shall not apply to minor finishing or clearing jobs in excavations which are otherwise being done by mass excavation plant.

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

B2205 EXCAVATION FOR CONSTRUCTION BY TRENCH METHOD

Add the following sub clauses:

"(c) Excavation by hand

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

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

(d) Drainage of excavations

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

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

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

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

B2210 LAYING AND BEDDING OF PREFABRICATED CULVERTS

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

Replace with the following:

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

All culverts (precast as well as in situ) shall be constructed with an in situ reinforced concrete floor laid on a 75mm concrete screed".

ITEM	UNIT
B21.21 Subsoil drainage markers	Number (No)

Measurement and payment shall be as specified for item 22.24 in the standard specifications."

SECTION 2200: PREFABRICATED CULVERTS

B2201 SCOPE

Add the following:

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

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

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

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

B2203 MATERIALS

(f) Skewed Ends

Delete the second and third paragraphs and substitute with the following:

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

B2204 CONSTRUCTION METHODS

Add the following:

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

(c) Excavation by hand

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

SECTION 2100: DRAINS**B2103 BANKS AND DYKES**

Add the following:

"Mitre banks at culvert inlets should be considered at such a skew angle that it guides the water into the Inlet with a minimum loss of velocity (energy)."

B2104 SUBSOIL DRAINAGE**(a) Materials****(i) Pipes**

Delete the last sentence of the fifth paragraph and substitute it with the following:

"Perforation for 100mm pipes shall be spaced in two rows, one on each side of the vertical centre line of the pipe, and at one third of the circumference. The perforation for the 150mm pipes shall be spaced in four rows, two as described for 100mm pipes, and the other two rows at two thirds of the circumference."

(ii) Synthetic-fibre filter fabric

Add the following:

"All filter fabric shall be a non-woven needle punched type material and must be approved by the engineer. Filter fabrics shall have a minimum co-efficient of permeability of 3×10^{-3} m per second."

B2107 MEASUREMENT AND PAYMENT

Change item 21.09 to read as follows:

ITEM	UNIT
B21.09 Polyethylene sheeting, 0,25mm thick, or similar approved material, for lining subsoil draining systems	square metre (m ²)

Measurement and payment shall be as specified for item 21.09 in the standard specifications."

Add the following new items:

"ITEM	UNIT
B21.20 Galvanised wire mesh 250 x 250mm, at the outlets of subsoil drainage systems. Mesh 10mm x 2,5mm wire diameter	Number (No)

The unit of measurement shall be the number of 250mm x 200mm pieces of wire mesh, with a 10mm x 10mm mesh and 2,5mm wire diameter built into the subsurface drain outlet structure as shown on the drawings.

The tendered rate shall include for procuring, furnishing and installing the material, cutting, waste and keeping the mesh in the pipe opening clean during installation.

ITEM**UNIT**

**B19.02 Saw cutting of in situ materials (type of material and
depth of saw cut indicated)**

metre (m)

The unit of measurement shall be the metre length of material cut with the saw cutting machine for each type of material and depth of saw cut. The tendered rate shall include full compensation for the saw cutting of the materials as directed as well as for all plant, labour, fuel and other incidentals necessary."

SECTION 1900: MECHANICAL SAW CUTTING

Note: This is a new section added to the Standard Specifications.

Add the following section:

B1901 SCOPE

This section covers the saw cutting of various types of in-situ material with a mechanical saw cutting machine.

B1902 PLANT

Saw cutting machines shall be power driven saws suitable and capable to cut accurately to required depths and alignment in various materials as specified. Skilled operators shall be required for operating the sawing machines. Operators shall be equipped with suitable safety equipment (e.g. industrial goggles, suitable boots as well as clothing) for operating the sawing machines.

B1903 PREPARATION PRIOR TO SAW CUTTING

Before saw cutting may commence the cut line shall be accurately pre-marked to the specified dimensions in terms of the drawings or as instructed by the engineer.

B1904 CONSTRUCTION TOLERANCES

Mechanical saw cutting shall be undertaken within the following dimensional tolerances:

(a) Horizontally

The maximum deviation from the specified line shall not be more than 5mm.

(b) Vertically

The cut depth shall never be less than the specified depth but shall not exceed the specified depth by more than 25mm".

B1905 MEASUREMENT AND PAYMENT

ITEM	UNIT
B19.01 Establishment of suitable saw cutting machine on site	number (No.)

The unit of measurement shall be the number of saw cutting machines provided on the instruction of the engineer.

The tendered rate shall include full compensation for the provision of the saw cutting machine including transport to and from the site. No payment shall be made for providing substitute saw cutting machines for machines that have broken down. No payment shall be made for standing time of saw cutting machines and at least one saw cutting machine shall be available on the site when such a machine is required on site. Payment shall only be made once for the establishment of the saw cutting machine on site irrespective of any discontinuity in the application of the saw cutting machine on site.

C

The tendered rates shall include full compensation for all cost items including overheads, head-office expenses and profits as described in sub clause 40(3) of the general conditions of contract and shall be subject to contract price adjustment as provided for in the contract.

The mark-ups on day work items in accordance with the Appendix to the Tender shall not be applicable on day work items listed in the bill of quantities in terms of the above specifications. In the event of new day work rates being requested for items not appearing in the bill of quantities, then the provisions of the general conditions of contract and the Appendix to the Tender shall apply.

Prior to the commencement of any work by the labourers described under item B18.01, the contractor must obtain written consent from the engineer regarding the classification and composition of all labourers in terms of "unskilled" and "skilled" labourers required for the work as ordered by the engineer."

SECTION 1800: DAYWORK SCHEDULE

Note: This is a new section added to the Standard Specifications.

Add the following:

B1801 SCOPE

This section covers the listing of day work items for use in determining payment for work which cannot be quantified in specific pay item "units" in the bill of quantities or work ordered by the engineer during the construction period which was not foreseen at tender stage for which no applicable rate exists in the schedule or for work of a special or different character warranting special payment as decided by the engineer.

B1802 ORDERING OF DAYWORK

No day work shall be undertaken unless specific written authorisation is obtained from the engineer.

B1803 MEASUREMENT AND PAYMENT

The engineer may order the following day work items:

ITEM	DESCRIPTION	UNIT
B18.01	Labourers:	
	(i) Unskilled	Hour (h)
	(ii) Semi-skilled	Hour (h)
	(iii) Skilled	Hour (h)
B18.02	Foreman	Hour (h)
B18.03	Tipper trucks:	
	(i) 3 – 5 ton	Hour (h)
	(ii) 5,1 – 10 ton	Hour (h)
B18.04	Loader (0,5m ³)	Hour (h)
B18.05	Grader (CAT 140G or similar)	Hour (h)
B18.06	LDV	Hour (h)
B18.07	Compaction Rollers:	
	(i) Vibrator roller	Hour(h)
	(ii) Tamping roller	Hour (h)
	(iii) Grid roller	Hour(h)
B18.08	Hand Controlled Compactors	
	(i) Pedestrian roller (Bomag BW90)	Hour(h)
	(ii) Vibratory plate	Hour(h)
	(iii) Rammers	Hour(h)
B18.09	Water truck (min 10000 l)	Hour(h)
B18.10	Dozer (D7 or similar)	Hour(h)

The unit of measurement shall be the actual number of hours worked by labourers or foremen or an item of plant.

B1704 MEASUREMENT AND PAYMENT

Change item 17.01 to read as follows:

ITEM	UNIT
B17.01 Clearing and grubbing of:	
a) Normal areas:	
i) Within the road reserve	hectare (ha)
ii) In borrow pits	hectare (ha)
b) Existing fill embankments with Slopes steeper than 1:4	hectare (ha)

Measurement and payment for sub-items (a) and (b) shall be as specified for item 17.01 of the standard specifications. Where distinction is made for clearing and grubbing existing fill embankments with slopes steeper than 1:4 (vertical: horizontal), payment shall be made under item B17.01."

SECTION 1700: CLEARING AND GRUBBING**B1702 DESCRIPTION OF WORK****a) Clearing**

Add the following:

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

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

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

Payment for gabion boxes and mattresses which have to be removed and the material sorted and stacked shall be made under section 5200"

B1703 EXECUTION OF WORK**a) Areas to be cleared and grubbed**

Add the following:

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

contractor.

ITEM	UNIT
B15.15 Prime cost sum for:	
(a) Compensation to landowners for land taken up by deviations	prime cost (PC) sum
(b) Handling cost and profit in respect of sub-item B15.15 (a) above	percentage (%)

The prime cost sum shall be expended in accordance with the provisions of the general conditions of contract. Payment to the landowner shall be made within fourteen (14) days after such order has been given by the engineer. The contractor shall provide detailed proof of payment before payment shall be certified to the contractor.

The tendered percentage in item B15.15 (b) is an extra over percentage on the amount actually spent under sub-item B15.15 (a) which shall include full compensation for the handling costs and profit of the contractor."

Add the following clause:

B1517 RETRO-REFLECTIVE MATERIAL

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

B1518 MEASUREMENT AND PAYMENT

Renumber item 15.01 as B15.01 and add the following:

"The tendered rate shall also include for all measures necessary to safeguard traffic on temporary deviations during blasting operations."

Renumber item 15.03 as B15.03

Add the following sub-item:

"ITEM	UNIT
B15.03 Temporary traffic control facilities	
(n) Provision of high visibility safety jackets and safety hats	number (No)

The unit of measurement shall be the number of safety jackets supplied to the supervisory staff.

The tendered rate shall include full compensation for providing and maintaining hats and the jackets equipped with high visibility retro-reflective and/or fluorescent panels in red, yellow and white for the duration of the contract".

Add the following items:

"ITEM	UNIT
B15.14 Allow provisional sum for:	
(a) repair of damaged temporary road signs and delineators	provisional sum
(b) replacement of damaged temporary road signs and delineators	provisional sum

The provisional sums allowed under sub-items (a) and (b) shall be expended on a day work basis in terms of the provisions of the general conditions of contract.

Payment shall only be made in respect of repair work or replacement of such temporary traffic-control facilities arising from damage or loss occasioned by the travelling public and which did not arise from negligence or non-compliance with the requirements of the specifications on the part of the

well as back-to-back mounted delineators are required.

The obligation to arrange safe passage of traffic shall always be vested with the contractor regardless what is indicated on the drawings of the engineer."

(c) Channelization devices and barricades

Add the following:

"Drums shall not be used as channelization devices.

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

- a) It shall be manufactured from a flexible material and shall comply with SABS 1555. The blade portion of the delineator shall be positively affixed to a base unit which in turn shall be stable on its own or be stabilized by means of sandbags when used on the road.
- ii) The blade shall be retro-reflectorized, with class 1 yellow sheeting on the side facing oncoming traffic.
- iii) It shall nominally be 1000mm high x 250mm wide and the bottom edge of the delineator shall not be more than 200mm above the road surface.
- iv) It shall be subject to the approval of the Engineer.

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

e) Warning devices

Add the following:

"It is a requirement of this contract that all construction vehicles and plant used on the works will be equipped with rotating amber flashing lights and warning boards as specified in the standard specifications. Construction vehicles travelling outside the limits of construction areas shall however, not operate the warning lights.

The warning lights shall have a base diameter of at least 170mm and the amber bulb cover a height of at least 150mm high. It shall be a requirement that the contractor also provides the engineer's site personnel with warning lights for their vehicles (a maximum of two lights are required) without any payment applicable.

B1514 TEMPORARY FENCING AND GATES

Replace the contents of this clause with the following:

"Where temporary fencing is ordered by the engineer, it shall be paid for under item 55.06 of the standard specifications. The temporary fencing shall be new fencing material, which shall subsequently be dismantled and removed and erected at an alternative position as directed by the engineer. When ordered by the engineer, temporary fences and gates shall be moved to new locations or either left in place or when no longer required be dismantled and removed from site if so directed. Allowance is made in the bill of quantities for moving existing fences and gates."

(l) Land taken up for deviations

Negotiations with landowners to obtain the land taken up by temporary deviations will be undertaken by the employer. A prime cost sum is allowed in the bill of quantities for payment of compensation to affected landowners. All other negotiations regarding temporary access to properties, land-use, fencing requirements etc. shall be dealt with by the contractor in conjunction with the engineer and be confirmed in writing and be kept on record by the contractor.

“(m) Maximum lengths of construction areas

A temporary deviation, where the proposed road follows the existing route shall be constructed along the length of existing road. Traffic shall generally be accommodated as follows:

On two-way two lane gravel deviation (Class 1) constructed partially outside or adjacent to the existing road reserve boundaries of road.

- (i) On one-way single lane gravel deviation (Class 2) constructed inside the existing road reserve boundaries and on either side of road. In this instance special cognisance shall be taken to accommodate traffic to private properties.

A maximum length of one section of approximately 5,0km or two sections of 3,0km each of deviation (Class 1 or 2) shall be operational at a time and no relieve of this limitation shall be considered by the engineer except where the programme necessitates such at the construction of bridges.”

B1503 TEMPORARY TRAFFIC CONTROL FACILITIES

Add the following after the first paragraph:

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

(b) Road signs and barricades

Add the following:

“All the temporary road signs are to be mounted on posts as specified in section 5600 of the specifications. Provision shall be made for the supply and erection of the signs and the maintenance of the signs during the construction period. Provisions shall also be made for the removal of the temporary road signs on completion of the construction work when such signs are no longer required.

Temporary road signs and channelization devices shall be manufactured in accordance with the latest edition of the South African Road Traffic Signs Manual (June 1999) and placed as shown on the drawings and in Road Signs Note 13. Delineators shall be manufactured from a non-metal material and shall be mounted on a base section also manufactured of non-metal material. Single as

SECTION 1500: ACCOMMODATION OF TRAFFIC

B1502 GENERAL REQUIREMENTS

(e) Access to properties

Add the following:

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

(i) Traffic safety officer

Add the following after sub clause (viii):

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

(vi) arrange for the removal of broken down vehicles that obstruct the normal traffic flow

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

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

Add the following new subclasses:

"(j) Handing over the site

The total extent of the site between the limits of construction as described in this document and indicated on the drawings will be handed over to the contractor at the commencement of the contract period. The engineer however reserves the right to adjust this arrangement should progress or safe passage of traffic warrant such a change.

(k) Use of explosives in close proximity of temporary deviations

The contractor shall arrange all necessary traffic control and other requirements to safeguard the traffic on temporary deviations during blasting operations.

sub-item B14.03 (b) (ix) 2

Percentage (%)

The unit of measurement for sub-sub-item B14.03 (b) (ix) 1 shall be the number of cellular telephones supplied to the engineer's site supervisory staff. The tendered rate shall include full compensation for the purchasing of the cellular phones inclusive of any fixed contract costs with the service provider."

Measurement and payment in respect of the provisional sum item shall be made in accordance with the provisions of the general conditions of contract.

The tendered percentage is a percentage of the amount actually spent under sub-item B.14.03 (b) (ix) 2, which shall include full compensation for the handling costs of the contractor, and the profit in connection with the payment of the cost of calls and other charges relating to the use by the engineers site staff of the supplied cellular telephones."

ITEM**UNIT****B14.11 Provision and erection of security fencing (Including gate)**

metre (m)

The unit of measurement shall be the metre of security fence supplied and erected as indicated on the drawings and/or ordered by the engineer. The tendered rate shall include full compensation for procuring and furnishing of all material, including one vehicle gate, labour and equipment required to erect the specified security fence and maintain it for the duration of the contract."

General: Method of payment

Add the following:

"The tendered rates under this section of the bill of quantities shall also include full compensation for the dismantling and removal from site of all offices, laboratories and other facilities provided for the engineer's supervisory staff at the completion of the contract."

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

B1402 OFFICES AND LABORATORIES

(a) General

Add the following:

"The facilities to be provided for the engineer in terms of these specifications shall be fenced off by a two-metre-high veranda type security fence with diamond mesh on the vertical portion and barbed wire on the overhang. A security gate shall be provided in the fence which shall be guarded at all times by an acceptable watchman provided by the contractor.

The engineer's establishment may be incorporated within the contractor's establishment provided that the preceding requirements are met to the satisfaction of the engineer.

Separate payment shall be made for the provision and erecting of the security fence and gate as indicated on the drawings, but the cost in respect of the provision of a watchman at all times by the contractor shall be deemed to be included in the contractor's tendered rate for item B13.01(c)."

b) Offices

Add the following new sub-sub-clause:

"(xviii) The engineer's site supervisory staff shall be provided with cellular telephones by the contractor for site communication purposes. Provision is made in the bill of quantities for separate payment of the supply and operating costs of such cellular phones."

B1403 HOUSING

c) Rented accommodation

Add the following:

"The engineer may arrange for the obtaining of rented accommodation for his supervisory personnel on site. Payment of such rent shall be made under the provisional sum in sub-item 14.07(a) and shall be expended on a monthly basis by the contractor as ordered by the engineer."

B1406 MEASUREMENT AND PAYMENT

Add the following sub-item:

ITEM	UNIT
B1403 (b) (ix) 1. Provision of cellular telephones	Number (No)
2. Provisional sum for the costs of cellular calls and other charges	Provisional sum
3. Handling cost and profit in respect of	

1300: CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS**B1302 GENERAL REQUIREMENTS****(a) Camps, constructional plant and testing facilities**

Add the following:

"The contractor shall, at each area where work is being undertaken, provide on a daily basis at least one (1) portable chemical Latrine Unit per thirty (30) workers for use by construction workers employed on the project. The latrine units shall be serviced daily and kept in a hygienic and orderly state to the satisfaction of the engineer. No separate payment shall be made for this requirement and shall be deemed to be included in the rates tendered for the contractor's time-related obligations."

B1303 PAYMENT**ITEM****UNIT****B13.01 The contractor's general obligations**

(As specified)

Add the following after the fifth paragraph:

"The combined total tendered for sub-items (a), (b), (c) and (d) shall not exceed 15% of the tender sum, excluding VAT.

Should the contractor be of the opinion that 15% is inadequate to cover his costs in terms of section 1300, he shall indicate separately with his tender where such costs have been allowed for in his tender. If no such indication is given, the contractor shall not at any stage during the contract for any reason whatsoever claim additional compensation under this item."

C

(c)	Provision of security guards	Prime Cost Sum (PC Sum)
(d)	Handling cost and profit in respect of sub-item B12.05 (b) and (c)	Percentage (%)

Payment of the rate per month for sub-item B12.05 (a) shall include full compensation for all the contractors' obligations relevant to the Mine Health and Safety Act.

The prime cost sums shall be paid in accordance with the provisions of the General Conditions of Contract. The tendered percentage is a percentage of the amount actually spent under the prime cost items, which shall include full compensation for the profit in connection with providing the specified service.

B12.06. Provisional Sum or Prime for submitting of OHS file.

B12.07. Quality control test ordered by the Engineer (Prime cost)

- a. Payment for Quality control test as ordered by the Engineer should be made on presentation of the invoices in accordance with the scale of tariffs of the approved testing laboratory.
- b. Payment shall only be made for tests on work passing the specified requirements and no payment shall be made for tests on works that has been rejected by quality control measures.

B12.08. Handling costs and profit in respect of sub item B12.06 and B12.07

The percentage tendered for charges and profit on OHS and Quality Control test shall include full compensation for all cost, profit charges, handling and transport related to the service.

Measurement and payment shall be as specified for item 22.02 in the standard specifications.

ITEM		UNIT
B12.03	(a) Allow a provisional sum for existing services to be relocated and/or protected as ordered by the engineer	provisional sum
	(b) Handling costs and profit in respect of sub item B12.03 (a) above	percentage (%)

Measurement and payment shall be in accordance with the general conditions of contract."

ITEM	UNIT
B12.04 Provision for a Community Liaison Officer	
a) Provisional sum for the payment of the Community Liaison Officer (R5 000.00/month)	Provisional Sum
b) Handling costs and profit in respect of sub-item B12.04 (a)	Percentage (%)
c) Provisional sum for the payment of the Project Steering Committee (R1000.00/month)	Provisional Sum
d) Handling costs and profit in respect of sub-item B12.04 (c)	Percentage (%)
e) Provisional sum for the payment of the Student (R5 000.00/month)	Provisional Sum
f) Handling costs and profit in respect of sub-item B12.04 (e)	Percentage (%)

Expenditure of the above item shall be made in accordance with the general conditions of contract.

The tendered percentage is a percentage of the amount actually spent under the sub-item B12.04 (a, c, e), which shall include full compensation for the handling costs of the contractor, and the profit in connection with providing the community liaison officer."

Item	Unit
B12.05 (a) Mine Health and Safety Obligations	Month
(b) Special information signs	Prime Cost Sum (PC Sum)

B1235 MEASUREMENT AND PAYMENT

Add the following items:

B1235 SPOIL AREA

The Contractor shall make his own arrangements with the involvement of CLO and the PSC for the provision of a suitable approved dumping site for the disposal of material obtained from excavations, demolition, clearing and grubbing and rock excavation or blasting. The tendered rate shall include full compensation for excavation or blasting in all classes of material, Loading, Hauling and off-loading including shaping and levelling of spoil material and transporting over a free-haul distance of 0.5km.

"ITEM	UNIT
B12.01 Excavation	
Excavating material within the following depth ranges below ground level for the exposing of/or searching for services	
(a) 0m to 2m	
(i) soft material	cubic metre (m ³)
(ii) hard material	cubic metre (m ³)
(b) Extra over item B12.01 (a) for excavation by means of hand tools such as picks, crowbars and pneumatic tools or mechanical breakers in close vicinity of services where no machine excavation is permitted	
(i) soft material	cubic metre (m ³)
(ii) hard material	cubic metre (m ³)

Measurement and payment shall be as specified for item 22.01 in the standard specifications.

ITEM	UNIT
B12.02 Backfilling	
(a) Using the excavated material	cubic metre (m ³)
(b) Using imported selected material	cubic metre (m ³)

B1234 MINE HEALTH AND SAFETY ACT 1996, ACT 29 OF 1996**(a) Introduction**

The main objective of this Act is to protect the health and safety of persons at mines. This specification is therefore aimed at promoting health and safety specifically at borrow pits. Borrow pits are classified as mines.

(b) General Provisions

The contractor shall be responsible for controlling his operations at every borrow pit where material is being excavated to ensure compliance with all the requirements of the Mine Health and Safety Act, 1996. The contractor shall also ensure that the works, shaping and finishing off of the borrow pit are done in accordance with the provisions as specified in section 3100 of the COLTO Standard Specifications and this Act. The contractor shall also comply to the requirements as set out in C3.4.3.2 Environmental Management Plan.

The minimum requirements for operations at borrow pits are:

- Borrow Pits are worked in such a way that the health and safety of employees and the public will not be endangered.
- A monthly report shall be submitted to the engineer on health and safety aspects at the borrow pits.
- The Contractor shall appoint a manager to manage the borrow pits in accordance with the Mine Health and Safety Act.
- The Contractor shall take the necessary steps to ensure that the work area of the borrow pits are safe at all times. This shall include items such as the provision of **Fencing and Security Guards**.

c) Duties of the Manager

The minimum duties of the manager supervising the activities at borrow pits shall be:

- Maintain a Healthy and safe borrow pit environment.
- Identify hazards and related risks to which persons and employees are exposed.
- Establish a health and safety policy that
 - Describes the organisation of work.
 - Contains aspects concerning the protection of the employees and other persons' health and safety.
 - Contains a risk analysis.
- Supply and erect the necessary safety and warning signs.

- (viii) To attend disciplinary proceedings through the PSC to ensure that hearings are fair and reasonable.
- (ix) To keep a daily written record of his interviews and community liaison.
- (x) To attend monthly site meetings to report (in a written format, handing and present) on labour and RDP matters.
- (xi) All such other duties as agreed upon between all parties concerned.
- (xii) To submit monthly returns regarding community liaison as illustrated in Part C5.1 of this document (form RDP 14(E)).

(b) Payment for the Community Liaison Officer

A special pay item is incorporated in section 1200 of the bill of quantities relating to payment of the liaison officer on a prime cost sum basis. This payment shall only be made for the period for which the duties of the liaison officer are required and not necessarily for the full duration of the contract. The remuneration of the CLO shall be R 5000.00 per month.

(c) Period of employment of the Community Liaison Officer

The period of employment of the community liaison officer shall be as decided upon jointly by the Contractor, Engineer and Employer at a maximum period of a six (6) months basis, but with the option of renewal.

B1232 SUBCONTRACTORS

Over and above the stipulations of clause 4.4 of the General Conditions of Contract 2010, regarding subletting of part of the works, it is a condition of the contract that an approved subcontractor shall not sublet part of his work, covered in his appointment by the main contractor, to another subcontractor without the consent and approval of the engineer. Subletting shall in all cases be critically considered by the engineer.

In addition to the provisions of clause 8 of the general conditions of contract regarding subcontracting of the works, it is a requirement of this contract that an approved subcontractor shall not further subcontract work subcontracted to him by the main contractor, to another subcontractor without the consent and approval of the engineer. Subcontracting shall in all cases be critically considered by the engineer. The engineer reserves the right to limit the extent or the volume of work subcontracted by the contractor, should he deem it necessary in terms of progress or quality of workmanship.

B1233 WORKMEN'S COMPENSATION ACT

All labour employed on the site shall be covered by the **Compensation for Occupational Injuries and Deceases Act (COIDA)**. The contractor shall pay in full, including the payment of the necessary levies, such amounts, as are due in terms of the Act. The contractor at the commencement of the contract shall resolve the manner in which Workmen's Compensation will be handled. Amounts paid by the contractor shall not be included in the wage rates but shall be covered by the Contractor to be deemed as included in his General Obligations rates in Section 1300 of the SOQ.

contractor in providing in-service training shall be taken into consideration should the contractor fail to reach his CPG at the completion of the project.

(b) Lead time for training

The training of labour as specified shall, as far as possible, take place before commencement of each activity and the contractor shall take into account in his programme the lead-time he requires for such training. All training herein specified shall be deemed to be a construction activity and a non-negotiable condition of the contract”.

B1231 COMMUNITY LIAISON OFFICER (CLO)

The Contractor or his appointed Site Agent will appoint a Community Liaison Officer (CLO) after consultation with the Local Communities, the Engineer and the Employer. The Contractor shall direct all his liaison efforts with the local communities through the appointed officer. The Contractor shall, however, accept the appointed as part of his management personnel. A Contract of Employment shall be signed between the Contractor and the CLO stating all the terms and conditions of employment.

(a) Duties of the Community Liaison Officer

The Community Liaison Officer's duties will be:

- (i) To be available on site daily between the hours of 07:00 and 12:00 and 13:00 to 17:00 and also at other times as the need arises. His normal working day will extend from 07:00 in the morning until 17:00 in the afternoon. and also on an urgent basis.
- (ii) To determine, in consultation with the contractor, the needs of the temporary labour for relevant skills training. He will be responsible for the identification of suitable trainees in consultation with the community leaders/PSC if need be and will attend one of each of the training sessions.
- (iii) To communicate daily with the contractor and the engineer to determine the labour requirements with regard to numbers and skills, to facilitate in labour disputes and to assist in their resolution in consultation with the PSC
- (iv) To assist in and facilitate in the recruitment of suitable temporary labour through the Project Steering Committee (PSC) and the establishment of a “labour desk”.
- (v) To attend all meetings in which the community and/or labour are present or are required to be represented.
- (vi) To assist in the identification, and screening of labourers through the PSC from the community in accordance with the contractor's requirements.
- (vii) To inform temporary labour through the PSC mandate of their conditions of temporary employment and to inform temporary labourers as early as possible when their period of employment will be terminated.

Add the following new clauses:

“B1230: IN-SERVICE AND STRUCTURED TRAINING

The contractor shall in addition to the structured (accredited) training as provided for in Part C of this document implement an in-service training programme, from the commencement of the contract, in which the various skills required for the execution and completion of the works are imparted to the labourers engaged thereon, in a programmed and progressive manner. Labourers and identified local residents shall be trained progressively throughout the duration of the contract, in the various stages of a particular type of work.

(a) Details of in-service and structured training

- (i) The contractor shall attach to form RDP 1(E) basic details of his proposed in-service training programme, which details shall inter alia include the following:
 - the details of training to be provided
 - the manner in which the training is to be delivered
 - the number and details of trainers to be utilised.
- (ii) The in-service training programme shall be submitted with the initial works programme. The progress in relation to this programme will be recorded monthly and attached to the site meeting minutes and payment certificate.
- (iii) The contractor shall provide on-site, sufficient skilled and competent trainers to train all labourers engaged on the contract, in the various skills required for the execution and completion of the works.
- (iv) All labourers shall be remunerated in respect of all time spent undergoing training.
- (v) Every worker engaged on the contract shall on the termination of his participation on the contract, be entitled to receive from the contractor, a certificate of service in which the following information shall be recorded:
 - The name of the contractor
 - The name of the employee
 - The name of the project/contract
 - The nature of the work satisfactorily executed by the worker and the time spent thereon
 - The nature and extent of training provided to the worker
 - The dates of service.

The cost of the above obligations shall be deemed to be covered by the sums and rates

tendered for items B13.01 (a), (b) and (c) in the bill of quantities. The performance of the

B1229 SABS CEMENT SPECIFICATIONS

Replace the last paragraph of this clause with the following:

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

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

Part 1: Common cements.

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

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

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

reinforced concrete members.”

Rainfall records for Makhado

MONTH	AVERAGE RAINFALL (mm)	RAIN DAYS (per month)
JANUARY	74	11
FEBRUARY	108	12
MARCH	75	11
APRIL	47	8
MAY	15	4
JUNE	17	3
JULY	14	3
AUGUST	11	3
SEPTEMBER	39	5
OCTOBER	93	9
NOVEMBER	76	12
DECEMBER	128	14

B1217 PROTECTION OF THE WORKS AND REQUIREMENTS TO BE MET BEFORE CONSTRUCTION OF NEW WORK ON TOP OF COMPLETED WORK IS COMMENCED

Add the following sub clause:

- "(h) No concrete kerbing or concrete drains directly adjoining the bituminous surfacing shall be constructed prior to the completion of the bituminous surfacing. The contractor will only be paid for the specified width and length of Surfacing the road.

B1222 USE OF EXPLOSIVES

Add the following sub clause:

- "(h) Where blasting operations are undertaken in close proximity of temporary deviations, the contractor shall implement all such safeguarding measures as may be required and instructed by the engineer."

B1224 THE HANDING-OVER OF THE ROAD RESERVE

Add the following:

"The total length of the road reserve between the specified limits of construction will be handed over to the contractor on the commencement date. Reference shall, however, be made to the requirements of section 1500 of these specifications where limitations in respect of work-areas are specified. In the event of the non-adherence by the contractor in terms of the mentioned specifications, the engineer shall withdraw such sections of the road reserve as may be justified to ensure suitable progress of the works or safe passage of traffic."

(SMME's) shall remain the responsibility of the contractor after payment has been made in respect of materials on site."

B1215 EXTENSION OF TIME RESULTING FROM ABNORMAL RAINFALL

Add the following after the first paragraph of this clause:

"For the purposes of this contract, extension of time resulting from abnormal rainfall or other forms of inclement weather shall be determined according to the requirements of Method ii (critical-path method)."

Method (ii) (Critical path method)

Delete "(based on a five-day working week)" in the fifth and sixth lines of the second paragraph of the description of this method.

Delete the last sentence of the second paragraph of the description of this method and replace with the following:

"The value of "n" shall be taken as three (3) working days per calendar month.

If normal rainy or inclement weather, resulting in delays, occurs for less than three (3) working days in any calendar month, the difference between the three (3) working days and the actual number of working days on which normal rainy or inclement weather occurred, shall be ignored and not accumulated for the duration of the contract period for the purposes of determining an extension of time due to normal rainy weather, nor due to any other reason.

Items of work on the critical path of the programme of work which are subject to climatic limitations shall also be considered for extension of time if such items of work are delayed by e.g. cold weather, high winds or other inclement weather conditions.

In this regard, reference shall be made to weather limitations specified for the application of various bituminous products. However, for months during which seal-work cannot be undertaken in terms of the specifications, no extension of time shall be claimed for.

the engineer shall not relieve the contractor of his obligations to maintaining his own quality control system."

Add the following at the end of this clause:

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

B1206 THE SETTING-OUT OF THE WORK AND PROTECTION OF BEACONS

Add the following:

"The contractor shall be responsible for the true and proper setting out of the Works and for the correctness of the position, levels, dimensions and alignment of all parts of the Works and for the provision of all necessary instruments, appliances and labour in connection therewith."

The Contractor shall take care that property beacons, trigonometrically survey beacons or setting-out beacons are not displaced or destroyed without the consent of the Engineer. Property beacons and trigonometrically survey beacons that have been displaced or destroyed shall be replaced by a registered land surveyor, who shall certify such replacement.

The cost of replacing all beacons displaced or destroyed during the course of the Contract without the consent of the Engineer shall be borne by the Contractor."

B1209 PAYMENT

(b) Rates to be inclusive

Add the following:

"VAT shall be excluded from the rates and provided for as a lump sum in the Summary of Bill of Quantities".

(e) Materials on the site - 80% of Material on Site will be paid after evaluation

Add the following:

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

- (a) The site selected for this purpose is approved by the engineer
- (b) Such land is physically separated from any production plant or operation
- (c) Only materials for use under this contract is stockpiled on such land
- (d) The contractor has provided proof of an agreement with the owner of such land that the owner has no claim whatsoever on any materials stockpiled on such land
- (e) Materials obtained by the contractor for or on behalf of emerging subcontractors

1200: GENERAL REQUIREMENTS AND PROVISIONS**SECTION A: LABOUR INTENSIVE CONSTRUCTION****SECTION B: MACHINE CONSTRUCTION****B1202 SERVICES**

Add the following to the fifth paragraph:

"The Contractor shall take all reasonable precautions to protect existing services during construction and during the relocation of such services, where protective measures involve the construction of permanent work, the contractor shall execute the work in accordance with the Engineer 's instructions, and payment shall be made as provided in the project specifications."

B1204 PROGRAMME OF WORK**(a) General requirements**

Amend the word "network" in the fourth line of the first paragraph to read as "bar (Gantt) chart".

Add the following after the third paragraph:

"The bar-chart programme to be provided by the contractor shall show the various activities in such detail as may be required by the engineer. Progress in terms of the programme shall be updated monthly by the contractor in accordance with the progress made by the contractor.

In compiling the programme of work, the contractor shall indicate and make due allowance for the following, as specified elsewhere in the contract documents:

- The requirements regarding the accommodation of traffic and areas that may be occupied at any time for construction purposes (as indicated on the drawings and specified in Section 1500 of the specifications)
- Requirements regarding the training of labourers and Emerging Contractors (EC's).
- The requirements for work to be undertaken by labourers and work to be undertaken by EC's.

(b) Programme of work for rehabilitation work

Amend the word "network" in the fourth line of the second paragraph to read as "bar (Gantt) chart".

B1205 WORKMANSHIP AND QUALITY CONTROL

Add the following to the third paragraph:

"The engineer shall, however, undertake acceptance control tests for the judgement of workmanship and quality, without accepting any obligations vested with the contractor in terms of the contract with specific reference to quality of materials and workmanship. Such acceptance control test done by

MATTERS RELATING TO THE STANDARD SPECIFICATIONS

SECTION 1200 : GENERAL REQUIREMENTS AND PROVISIONS

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

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

SECTION 1500: ACCOMMODATION OF TRAFFIC

SECTION 1700: CLEARING AND GRUBBING

SECTION 1800: DAYWORK SCHEDULE

SECTION 2100 : DRAINS

SECTION 2200 : PREFABRICATED CULVERTS

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

SECTION 3100: BORROW MATERIALS

SECTION 3200: SELECTION, STOCKPILING AND BREAKING-DOWN THE MATERIAL FROM
BORROW PITS, CUTTINGS AND EXISTING PAVEMENT LAYERS, AND PLACING
AND COMPACTING THE GRAVEL LAYERS

SECTION 3300: MASS EARTHWORKS

SECTION 3400: PAVEMENT LAYERS OF GRAVEL MATERIAL

SECTION 5100 : PITCHING, STONE WORK AND PROTECTION AGAINST EROSION

SECTION 5600 : ROAD SIGNS

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

SECTION 8100 : TESTING MATERIAL AND WORKMANSHIP

SECTION 1000: ENVIRONMENTAL MANAGEMENT PLAN AND OHS

C3.4.2.2 Amendments to the Standard Specifications

There are no amendments to the Standard Specifications as issued by the Committee of Land Transport Officials (COLTO).

C3.4.2.3 Project Specifications Relating to Standard Specifications

Notes to tenderer:

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 consists of the prefix B followed by a number corresponding to the number of the relevant clause or payment item in the standard specifications. The number of a new clause or a new payment item, which does not form part of a clause or a payment item in the standard specifications and 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.

C3.4.2 PROJECT SPECIFICATIONS RELATING TO STANDARD SPECIFICATIONS

C3.4.2.1 General Conditions of Contract Referred to in the Standard Specifications

The references to the General Conditions of Contract appearing in the COLTO Standard Specifications refer to the COLTO General Conditions of Contract which is superseded in this contract by the General Conditions of Contract for Construction Works 2015. The corresponding clause in the latter document pertaining to the reference in the COLTO Standard Specifications is listed in the table below.

Clause No. in the Standard Specifications	Clause No. in COLTO General Conditions	Equivalent Clause No. in General Conditions of Contract 2004
1202	15	12(2)
1206	14	Deleted
1209	52	49(1)(5)
1210	54	51(1)
1212(1)	49	46
1215	45	42(2)
1217	35	32
1303	49	46
1303	53	50
1303	12	10
1303	45	42(2)
1403	40(1)	37
1505	40	37
31.03	40	37
3204(b)	40	37
3303(b)	2	2
5803(c)	40	37
5805(d)	40	37
6103(c)	40	37
Item 83.03	22	19
ALL SECTIONS	48	45

Becker Street / 1685
Midrand

(b) SABS or BS Specifications and Codes of Practice

Wherever any reference is made to the South African Bureau of Standards (SABS) and the British Standards Specification (BSS) in either these Bill of Quantities or the Specification of Materials and Methods to be Used (OOG-001E), this reference shall be deemed to read "SABS or equivalent standard" and BS or equivalent standard" respectively.

(c) Various other specifications specified in the COLTO Standard Specifications or the Project Specifications.

(d) Latest Sabita Manual, Manual 25 entitled "Quality Management in the Handling and Transport of Bituminous Binders".

9.14 Notification of Acceptance

Successful service providers or tenderers shall be notified before the tender validity period expires.

9.15 CONTRACTUAL AGREEMENT

The relationship between the Municipality and the Contractor shall be managed under the following contractual documents:

- (a) The tender document submitted by the tenderer;
- (b) The project drawings relevant for the tendered project;
- (c) The General Conditions of Contract for Construction Works 3rd Edition of 2015 and the COLTO Standards & Specifications for Road Bridge Works for State Authorities 1998 edition as they may apply from time to time.
- (d) The Municipality's Procurement Policy;
- (e) Any other relevant legislation aimed at meeting other government policy initiatives.

9.16 TAX CLEARANCE CERTIFICATE

No contract shall be awarded to an entity which fails to submit a valid original Tax Clearance Certificate from the South African Revenue Service (SARS), certifying that the taxes of the said entity are in order or that suitable arrangements have been made with SARS, and submitted proof as part of the tender documentation. Also the registration Pin Code together with a letter for VAT registration should be attached.

In cases where the successful tenderer has only submitted a letter from SARS, the tenderer will be given seven (7) working days or 48 hours to submit the original Tax Clearance Certificate. Failure to do so, shall lead to the disqualification of the tenderer. The tenderer with the second highest points shall be awarded the contract.

9.17 Variations

- (a) The Municipality shall have the right to reduce or increase the scope of work by no more than 30% of the tendered amount.

CONSTRUCTION

C3.4.1 STANDARD SPECIFICATIONS

- (a) The following specifications shall apply for the construction of the Works.
 - (i) The COLTO Standard Specifications for Road and Bridge Works for State Road Authorities (1998 edition).

The contractor may purchase copies from the South African Institution of Civil Engineers.

SAICE		Tel : (011) 805-5947
Waterfall Park	/ Postnet Suite 81	Fax : (011) 805-5971
Howick Gardens	/ Private Bag X65	
Vorna Valley	/ Halfwayhouse	Contact Person : Angeline Aylward

9.10 CESSIONS

A service provider awarded a contract may not cede or subcontract a contract/project or any part thereof without written consent of the Municipality and where such consent is granted, a signed agreement involving the cedent, cessionary and the Municipality shall be entered into.

In any event, not more than 25% of the value of the contract shall be subcontracted. Both the cedent and the cessionary shall be jointly and severally liable for the quality of the material supplied and workmanship.

9.11 PERFORMANCE GUARANTEES

The Municipality shall strive to facilitate the participation of HDI's and SMME by waiving or reducing the maximum amounts of sureties as follows:

- (a) No surety for projects between R0 and R 500 000
- (b) 1% surety for projects between R500 000 and R1 million
- (c) 2,5% surety for projects between R1 million and R2 million
- (d) 5% surety for projects above R2 million not exceeding R5 million
- (e) 10% surety for projects above R5 million

The period required to provide surety shall be 21 calendar days. However, depending on circumstances, a shorter period may be prescribed. In the event of failure to submit the surety within the stipulated period, the Municipality shall be entitled to cancel the contract and award the tender to a suitable contractor.

Sureties may only be accepted from a banking institution registered in terms of the Banks Act, 1996, an insurer registered in terms of the Short-term Insurance Act (Act 53 of 1998), or from governmental institutions established for such purposes.

9.12 Retention Fees

Retention amount deducted from the progress certificates will be capped at 10% of the project amount. Fifty (50%) percent of this amount will be kept for the duration of the liability period after being reduced during the signing of the Works Completion Certificate.

9.13 Arithmetical errors and imbalanced unit rates

Check all responsive tender offers for arithmetical errors, correcting them in the following manner:

- If there is an error in the line item total resulting from the product of the unit rate and quantity, the unit rate shall govern and the line item shall be corrected.
- Where there is an error in the total of the process either as a result of other corrections required by this checking process or in the tenderer's addition of the prices shall be corrected

Check responsive tender offers for imbalanced unit rates and the preferred tenderer shall be requested to amend and adjust any rates declared imbalanced by the employer while retaining the total of the prices derived after any correction made in terms of this condition to tender.

If the preferred tenderer does not correct or accept the correction of his arithmetical errors or amend/adjust an imbalanced unit rate in the manner described above, tender offer shall be rejected.

9.8 POINTS IN RESPECT OF PRICE FOR TENDERS UP TO 50MILLION

Tenders shall be evaluated on the basis of price at 80%, BBBEE at 20% and functionality 70%. The criteria and weight shall be calculated in terms of the formula tabulated below:

(a) Calculation of percentage for price

The percentage scored for price should be calculated as follows:

The lowest acceptable bid/proposal will obtain the maximum percentage allocated for price. The other bids/proposals with higher prices will proportionately obtain lower percentages based on the following formula:

$$P_s = \frac{P_{\min}}{P_t} \times AP$$

Where

P_s = Percentage scored for price by bid/proposal under consideration

P_{\min} = Lowest acceptable bid/proposal

P_t = Price of bid/proposal under consideration

AP = Percentage allocated for price

Points scored for specified goals as contemplated by the PPPFA and its Regulations are then calculated separately and added to the points scored for price and functionality in order to obtain a final point. The contract should be awarded to the bidder scoring the highest points.

- i. After calculation, the tenderer that scores the highest points, when adding the scores on status of enterprises and price and functionality, shall be awarded the tender;
- ii. Points scored on tenders shall be rounded off to 2 decimal places;
- iii. Where equal points are scored, the one with the highest preference points shall be awarded;
- iv. Should two or more tenders be equal in all respects, the award shall be decided by the drawing of lots.

9.9 Authority to Award

- (a) The Municipality's Procurement Committee of the Board, upon recommendation by the Municipality's Procurement Committee, has the authority to award tenders with the value of up to R50 000 000.00.
- (b) The Provincial Tender Board, upon recommendation by the Procurement Committee, has the authority to award tenders in excess of R50 000 000.00.

9.6.2 The 90/10 Preference System (this is not applicable in this tender but as a reference)

The following formula shall be used to calculate the points in respect of tenders/procurement with a Rand value above R50 000 000.00 (fifty million Rands). This formula should be used to determine points for price and functionality.

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

Where:

P_s = Points scored for price and functionality for
the tender under consideration.

P_t = Rand value of tender under consideration.

P_{\min} = Rand value of the lowest acceptable tender.

- (a) a maximum of 10 points may be awarded to a tenderer for being an Historically Disadvantaged Individual or a pro rata thereof commensurate with the percentage of an HDI in a firm or a JV.
- (b) the points scored by a tenderer in respect of the HDI shareholding will be added to the points scored for price and functionality.
- (c) only the tenderer with the highest number of points scored may be awarded.

9.7 Points in Respect of Status of Enterprise

A maximum of 10 (ten) and twenty (20) potential points in respect of 90/10 and 80/20 respectively, will be awarded in respect of the status of the enterprise, which may take into consideration factors such as: -

Factor Appraised	90/10 points	80/20 points
(a) No franchise before 1983 and 1993 constitution	3 points	8 points
(b) Women in Equity	1 point	2 points
(c) Youth	2 points	4 points
(d) Locality	2 points	4 points
(e) Disable	1 point	2 points
(f) Promotion of SMME's	1 point	

The above points shall be allocated on a pro-rata basis to the total composition of owners who are actively involved in the management of the enterprise under consideration.

9.6.1 The 80/20 Preference System

The following formula shall be used to calculate the points in respect of tenders/procurement with a Rand value equal to or up to a Rand value of R50 000 000.00(fifty million Rands).

The Municipality may, however, apply this formula for procurement with a value up to R50 000 000.00, if and when appropriate. This formula shall be used to determine points for price and functionality.

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

Where

P_s = Points scored for price and functionality for the tender under consideration.

P_t = Rand value of tender under consideration.

P_{\min} = Rand value of the lowest acceptable tender.

- (a) a maximum of 20 points may be awarded to a tenderer for being a Historically Disadvantaged Individual or a prorata thereof commensurate with the percentage of an HDI in a firm or a JV.
- (b) the points scored by a tenderer in respect of an HDI shareholding will added to the points scored for price.
- (c) Only the tenderer with the highest number of points scored may be awarded.

MAXIMUM CONTRACT VALUE	GRADE
R 1 000 000	2
R 3 000 000	3
R 6 000 000	4
R 10 000 000	5
R 20 000 000	6
R 60 000 000	7
R 200 000 000	8
No limit	9

(h) Any special condition which may be attached to any tender of the Municipality.

9.4 Closure and Opening of Tenders

Tenders shall close on a date and time specified in the tender document and shall be opened and read in public.

9.5 Evaluation of Tenders

Tenders to be evaluated shall comply with the requirements as outlined under outlined under 9.3.

9.6 Preferential Point System

All tenders shall be evaluated according to price, functionality and preference in compliance with the Preferential Procurement Policy Framework Act No. 5 of 2000 and the Regulations, as amended. Preference points shall be awarded according to tenders whose firms or joint ventures comprise specific combinations of historically disadvantaged persons as owners, trustees, equity shareholders, subcontractors, joint ventures and or managers. Preference will be calculated in accordance with the preferential point system/s set-out hereunder:

8.3 Authority to Appoint

The Municipality's Procurement Committee of the Board shall have the authority to appoint consultants, upon recommendation by the Municipality's Executive Management Committee.

8.4 Changes in Scope of Work

- (a) The Municipality shall have the right to revise the scope of work, including discontinuing with the project during the design stage;
- (b) The consultant shall have the right to be compensated for work done prior and up to cancellation stage;
- (c) The discontinued project shall be deemed to have been removed from the Municipality's programme of work and the consultant shall have no right to be appointed on the same project should the project be revived at a later stage.

9. APPOINTMENT OF CONTRACTORS

9.1 Procedure for Invitation of Tenders

Tenders will be invited publicly through the general media and other forms of communication to ensure that target communities are reached. The intention is to ensure that the SMME's in rural areas that may not be in a position to access the general press are also reached.

In the event where normal tendering is not practical due to other constraints, at least three (3) selected service providers shall be invited to submit quotations.

9.2 The tender invitation shall include:

- (a) Specifications and description of project or services to be procured;
- (b) Tendering information and documentation will be in English;
- (c) A non-refundable charge shall be payable to cover the cost of the tender documents and specifications;

9.3 Compulsory Requirements

The following requirements shall be applicable to all tenders and non-adherence thereto shall result in an automatic disqualification for the advertised tender:

- (a) Attendance of site inspection for briefing;
- (b) Submission of valid original tax clearance certificate;
- (c) Authority to act and contractually bind the tenderer.
- (d) Omission of addenda with financial implications must be attached.
- (e) Collusion
- (f) Tenderers are required to register with the Construction Industry Development Board (CIDB), which will then allocate a grade applicable to the tenderer. The grades applicable are shown in the table below.
- (g) All the tenderers with CIDB grading of CE, their experience must be relevant to roads construction.

- (iv). The business name and director's, members or individual names must be stated on the quotations;
- (v). In cases of emergency and where only two (2) or one (1) quotation has been submitted, the lowest quotation will be accepted, after the action has been explained to and condoned in writing by the manager of the division concerned. Where two quotations are received, the available quotations will be considered and the lowest price will be accepted.
- (g) Where only one quotation is received, it shall not be considered, instead, more suppliers will be requested to submit quotations.

8. APPOINTMENT OF CONSULTANTS

In procuring services of professional consultants, databases for different professions shall be compiled from which consulting firms will be selected for specific projects. Only in cases where the required services are specialized in nature, will expert consultants be considered even if not on the Municipality's database.

8.1 Requirements for Inclusion in the Database

The inclusion in the database shall be by way of invitations, through advertisements. In order to be considered for inclusion in the database the service provider shall:

- (a) Comply with statutory labour requirements;
- (b) Be registered with the South African Revenue Service, for categories of taxes applicable to it;
- (c) Have an office in Limpopo;
- (d) The offer to Consultants shall be made provided there's a Professional person by the time of appointment.
- (e) Have Professional Indemnity Insurance;
- (f) Submit, together with application forms, an Original Valid Tax Clearance Certificate;
- (g) Be willing to submit to the physical inspection of the offices for verification of the information supplied in the application forms.

8.2 Selection of Consultants for Appointment

The criteria for the selection of consultants for appointment shall take the following order:

- (a) Firms with the highest HDI shareholding status;
- (b) Firms with relevant expertise and experience to perform in relation to the service under consideration;
- (c) Firms with the capacity in terms of personnel and equipment in relation to the size of the project under consideration;
- (d) Giving opportunity to others before re-appointing one firm for the second time within the appointment cycle, except for specialized type of service;
- (e) Performance history (quality, efficiency, etc.)

6.10 Award of Contract to Tenderer not scoring the Highest Number of Points

Despite the fact that only the tenderer with the highest number of points scored may be awarded, a contract may, on reasonable and justifiable grounds, be awarded to a tender that did not score the highest number of points. This decision solely based on the power and preference from the Municipality.

7. PROCUREMENT OF GOODS AND SERVICES

Directive for purchasing goods and services up to a Rand value of R50 000 000.00

7.1 Service Providers

In procuring goods and services, a database, for different service providers, shall be compiled from which service providers, in their respective categories of operation, will be selected for specifically identified requirements.

The inclusion into the database shall be by way of invitation through advertisements. The database shall be used for the purposes of rotating requests for quotations from appropriate suppliers. The database shall include service providers supplying stationery, refreshments, security services, minor repairs, etc., but excluding specialized professional services such as HR Consulting, Engineering, etc.

7.2 Requirements for Inclusion in the Database

The respective and prospective service providers shall be:

- (a) Registered with the South African Revenue Services for all categories of taxes applicable to it.
- (b) Reserve the right to have access and/or require production of the original or certified proof of any such registration at a time agreed to by the parties or as may be prescribed by law.

7.3 Procedures and Processes

The following procedures and processes, in respect of procuring goods and services shall be applicable: -

- (a) Requests for quotations shall be issued to a minimum of three service providers.
- (b) Quotations shall be faxed or placed in a tender box at the Municipality.
- (c) Faxes will be printed or the tender box publicly opened at a prescribed time.
- (d) All quotations below R30 000.00 is no longer awarded on price.
- (e) All quotations above R30 000.00 is no longer awarded on an 80/20-point system as outlined in the General Conditions of the policy. The service provider with the highest points shall be awarded the tender.
- (f) The following information shall be provided in the original or faxed quotation:
 - (i). The fax number of the sender must concur with the number on the supplier's letterhead;
 - (ii). No supplier may submit more than one quotation, except when a specific alternative product or service is offered;
 - (iii). All quotations shall reflect the contact person's name and surname;

A maximum of 20 points may be awarded to a tenderer for being a Historically Disadvantaged Individual or a prorata thereof commensurate with the percentage of an HDI in a firm or a JV.

- (a) The points scored by a tenderer in respect of the HDI shareholding will be added to the points scored for price and functionality.
- (b) Only the tenderer with the highest number of points scored may be awarded.

6.9 Preference Point System: 90/10(Not applicable in this tender but as a reference)

The following formula must be used to calculate the points in respect of tenders/procurement with a Rand value above R50 000 000.00(fifty million Rands). This formula should be used to determine points for price and functionality.

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

Where:

P_s = Point scored for price and functionality for the tender under consideration.

P_t = Rand value of tender under consideration.

P_{\min} = Rand value of the lowest acceptable tender.

- (a) A maximum of 20 points may be awarded to a tenderer for being a Historically Disadvantaged Individual or a prorata thereof commensurate with the percentage of an HDI in a firm or a JV.
- (b) The points scored by a tenderer in respect of the HDI shareholding will be added to the points scored for price and BBBEE.
- (c) Only the tenderer with the highest number of points scored may be awarded.

The Municipality may, in addition to any other remedy it may have against the person contemplated in sub-clause 6.5(a):

- I. Recover all costs, losses or damages it has incurred or suffered as a result of that person's conduct;
- II. 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;
- III. Restrict the contractor and its shareholders, directors, partners, sole proprietor, joint venture, trusts, etc. from obtaining business from the Municipality for a period not exceeding 10 years. The Municipality reserves the right to have access and/or require production of the original or certified proof of any such registration at a time agreed to by the parties or as may be prescribed by law.

6.6 Areas of Policy Coverage

The above-mentioned provisions of this policy shall apply to, but not limited to, the following entities and/or activity:

- (a) Procurement of goods or services;
- (b) Appointment of consultants;
- (c) Appointment of contractors, consortia and joint venture contractors;

6.7 Criteria for Tender Evaluation

The Municipality shall use the following criteria to evaluate tenders: -

- (a) Compliance with tender conditions;
- (b) Preference point system 90/10 on tenders with a Rand value above R50 000 000 (five million Rands) and preference point system 80/20 for tenders with a Rand value equal to, R50 000 000(Fifty million Rands);
- (c) Status of the enterprise; and
- (d) Functionality for further Evaluation
- (e) Price and BBBEE level.

6.8 Preference Point System: 80/20

The following formula shall be used to calculate the points in respect of tenders/procurement with a Rand value up to R50 000 000.00 (fifty million rands). The Municipality may, however, apply this formula for procurement with this value, if and when appropriate. The formula shall be used to determine points for price and functionality.

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

Where:

P_s = Points scored for price and functionality for the tender under consideration.

P_t = Rand value of tender under consideration.

P_{\min} = Rand value of the lowest acceptable tender.

- iii. The following formula must be applied to calculate the number of points for equity ownership by an HDI:

$$NEP = NOP \times \frac{EP}{100}$$

Where:

NEP = Points awarded for equity ownership by an HDI

NOP = The maximum number of points awarded for equity ownership by an HDI

EP = The percentage of equity ownership by an HDI within the enterprise or business, determined in accordance with sub-Clauses 6.3(a), (b), (c) and (d).

- (f) Equity claims for a Trust may only be allowed in respect of those persons who are both trustees and beneficiaries and who are actively involved in the management of the Trust.
- (g) Documentation to substantiate the validity of the credentials of the trustees contemplated in sub-clause 6.3(f) must be submitted to the relevant Municipality.
- (h) A Consortium or Joint Venture may, based on the percentage of the contract value managed or executed by their HDI members, be entitled to equity ownership in respect of an HDI.
- (i) The number of points scored for a Consortium or Joint Venture must be added to the number of points scored for achieving specified goals.
- (j) The points contemplated in sub-clause 6.3(i) must be added to the points scored for price, in order to establish the total number of points scored.
- (k) Subject to clause 6.3(i), the contract must be awarded to the tenderer which scores the highest points.

6.4 Declarations

A tenderer must, in the stipulated manner, declare that-

The information provided is true and correct;

- (a) The signatory to the tender document is duly authorised; and
- (b) Documentary proof regarding sub-clause 6.4(a), when required, shall be submitted to the satisfaction of the Municipality.

6.5 PENALTIES

- (a) Upon detecting that a preference in terms of the Act, the regulations or this policy have been obtained on a fraudulent basis, or any specified goals are not attained in the performance of the contract, the Municipality shall act against the person awarded the contract.

6.2 Tender Evaluation

- (a) Only a tenderer who has completed and signed the declaration part of the tender documentation may be considered for preference points.
- (b) The Municipality may, before a tender is adjudicated or at any time, require a tenderer to substantiate claims it has made with regard to preference.
- (c) The Municipality shall, when calculating comparative prices, take into account any discounts, which have been offered unconditionally.
- (d) A discount, which has been offered conditionally, despite not being taken into account for evaluation purposes, must be implemented when payment is effected.
- (e) In the event that different prices are tendered for different periods of a contract, the price for each period must be regarded as a firm price if it conforms to the definition of a "firm price".
- (f) Points scored must be rounded off to the nearest two decimal places.
- (g) In the event that two or more tenders have scored equal total points, the successful Tenderer must be the one scoring the highest number of preference points for specified goals. Should two or more tenders be equal in all respects, the award shall be decided by the drawing of lots.

6.3 PRINCIPLES

- (a) Preference points stipulated in respect of a tender must include preference points for equity ownership by HDIs, such ownership being ownership in the entity under evaluation.
- (b) The equity ownership contemplated in sub-clause (6.3(a)) must be equated to the percentage of an enterprise or business owned by individuals or, in respect of a company, the percentage of a company's shares that are owned by individuals, who are actively involved in the management of the enterprise or business and exercise control over the enterprise, commensurate with their degree of ownership at the closing date of the tender.
- (c) In the event that the percentage of ownership contemplated in sub clause (6.3(b)) changes after the closing date of the tender, before the award, the Tenderer must notify The Municipality and such a tenderer will not be eligible for any preference points.
- (d) Preference points may not be claimed in respect of individuals who are not actively involved in the management of an enterprise or business and who do not exercise control over an enterprise or business commensurate with their degree of ownership.
- (e) Subject to sub-clauses 6.3(a), (b), (c) and (d), all claims made for equity ownership by an HDI must be considered according to the following criteria:
 - i. Equity within private companies must be based on the percentage of equity ownership;
 - ii. Preference points may not be awarded to public companies and tertiary institutions

4. OBJECTIVES

The specific objectives of the policy are to:

- (a) Implement best procurement practises through effective planning, strategic purchasing and contract management;
- (b) Standardise levels of skill and knowledge of employees/workers;
- (c) Promote HDI enterprises providing services and goods within the Province;
- (d) Introduce a systematic approach to the appointment of service providers and to promote consistency in respect of supply chain management and offer related policy initiatives.

5. LEGISLATIVE FRAMEWORK

The procurement system is prescribed and regulated by legislation, being:

- (a) Section 217 of the Constitution, Act 108 of 1996 which provides that in contracting for goods and services, organs of state must do so in accordance with a system that is fair, equitable, transparent, competitive and cost effective;
- (b) Public Finance Management Act 1 of 1999 which aims to regulate financial management of certain organs of state to ensure that all revenue, expenditure, assets and liabilities are managed efficiently and effectively;
- (c) Preferential Procurement Policy Act 5 of 2000 ("the Act") and the regulations promulgated in terms of the Act giving effect to Section 217(3) of the Constitution by providing a framework for the implementation of the preferential procurement policy contemplated in Section 217 (2) of the Constitution;
- (d) All other applicable laws, policies and regulations.

6. GENERAL CONDITIONS

The abovementioned provisions of this policy document shall apply, subject to the following terms and conditions:

6.1 Company Registration

Whereas the Municipality shall have the above responsibilities, the respective and prospective service providers shall be:

- (a) Registered with the South African Revenue Services for all categories of taxes applicable to it.
- (b) The Municipality reserves the right to have access and/or require production of the original or certified proof of any such registration at a time agreed to by the parties or as may be prescribed by law.

- (o) "The Municipality" means Makhado Municipality.;
- (p) "Companies and Shares" shall be read so as to include Close Corporations and members interests *mutatis mutandis*;
- (q) "Executive Management Committee" shall mean a committee comprising the Municipality's Heads of Divisions and any other Manager so invited.
- (r) "Historically Disadvantaged Individual (HDI)" means a South African citizen –
 - (1) Who, due to the apartheid policy that had been in place, had no franchise in national elections prior to the introduction of the Constitution of the Republic of South Africa, 1983 (Act No 110 of 1983) or the Constitution of the Republic of South Africa, 1993 (Act No 200 of 1993) ("the Interim Constitution"); and/ or
 - (2) Who is a female; and / or
 - (3) Who has a disability:

provided that a person who obtained South African citizenship on or after the coming to effect of the Interim Constitution, is deemed not to be an HDI;
- (s) "Tender" means a written offer or bid in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of services or goods;
- (t) "Collusion" means an intentional and unlawful agreement by two or more companies/firms which is intended or calculated to misrepresent facts or defraud with the sole purpose of influencing the procurement process thereby prejudicing the interests of the service provider.

2. PREAMBLE

Whereas the, being the Municipality, as defined, and engaged in contracts for the acquisition of goods and services and obliged to do so in accordance with a system which is fair, equitable, transparent, competitive and cost effective, hereby provides for a procurement policy to that effect.

3. GOALS

The broad goals of this policy are to:

- (a) Ensure effective and efficient application of resources;
- (b) Promote accountability, transparency and fairness;
- (c) Create opportunities for local small, medium and micro enterprises;
- (d) Enhance quality services;
- (e) Stimulate socio-economic development;
- (f) Eliminate and counter corruption;
- (g) Contribute towards reduction of unemployment.

C3.3 PROCUREMENT

MUNICIPALITY PREFERENTIAL PROCUREMENT POINT SYSTEM POLICY

1. DEFINITIONS

The words in this policy shall bear a meaning as prescribed and/or ascribed by applicable legislation, and in the event of a conflict, the meaning attached thereto by National Legislation shall prevail.

- (a) "**Act**" means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000);
- (b) "**Comparative price**" means the price after the factors of a non-firm price and all unconditional discounts that can be utilised have been taken into consideration;
- (c) "**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;
- (d) "**Contract**" means the agreement that results from the acceptance of a tender by an organ of state;
- (e) "**Disability**" means, in respect of a person, a permanent impairment of a physical, intellectual, or sensory function, which results in restricted, or lack of, ability to perform an activity in the manner, or within the range, considered normal for a human being;
- (f) "**Firm price**" is 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 a 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;
- (g) "**Management**" in relation to an enterprise or business, means an activity inclusive of control and performed on a daily basis, by any person who is a principal executive officer of the company, by whatever name that person may be designated, and whether or not that person is a director;
- (h) "**Non-firm prices**" means all prices other than "firm" prices;
- (i) "**Person**" includes reference to a juristic person;
- (j) "**Rand value**" means the total estimated value of a contract in Rand denomination which is calculated at the time of tender invitations and includes all applicable taxes and excise duties;
- (k) "**Sub-Contracting**" means the primary contractor's assigning or leasing or making out work to, or employing,
- (l) "**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;
- (m) "**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.
- (n) "**Individual**" an individual shall mean a natural person;

C3.2 ENGINEERING**C3.2.1 Design**

- (a) The **Employer** is responsible for the design of the permanent Works as reflected in these 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) Detail description of Works
- (b) General Works
- (c) Sign Gantries.

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 Design procedures

All designs and modifications thereto shall be communicated in writing and the contractor and engineer shall maintain master lists to record and track all transactions.

- Progress report detailing production output compared to the programme of works

C3.1.8 Use of Local Resources:

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

C3.1.10 Labour-Intensive Construction Activities

(a) General

The portions of the Works listed in Subclause (b) below shall, unless otherwise instructed by the Engineer, be constructed under this Contract using labour-intensive construction methods only.

(b) Work to be done using labour intensive methods

Everything labour-intensive except the following:

- i. Excavation in borrow pit.
- ii. Hauling of material.
- iii. Water bowser.
- iv. Compaction.
- v. Spreading of aggregate by chippey.
- vi. Construction of formation and excessive earthworks as agreed with Makhado Municipality.

C3.1.13 (b) Employment of Unskilled and Semi-Skilled Workers in Labour-Intensive Works

1.1.2 The Rate of pay set for the SPWP is R 180.00 per task or per day.

- 1.1.6 (a) 50% women;
- (b) 20% youth who are between the ages of 18 and 35; and
- (c) 1% on persons with disabilities.

employer of an intention to return to work will have terminated the contract. However, the worker may be re-engaged if a position becomes available for the balance of the 24-month period.

- A46.5 A worker who does not attend required training events, without good reason, will have terminated the contract. However, the worker may be re-engaged if a position becomes available for the balance of the 24-month period.

A47 Certificate of Service

A47.1 On termination of employment, a worker is entitled to a certificate stating –

- (a) the worker's full name;
- (b) the name and address of the employer;
- (c) the SPWP on which the worker worked;
- (d) the work performed by the worker;
- (e) any training received by the worker as part of the SPWP;
- (f) the period for which the worker worked on the SPWP;
- (g) any other information agreed on by the employer and worker.

A48 Contractor's default in payment to Labourers and Employees

Any dispute between the Contractor and labourers, regarding delayed payment or default in payment of fair wages, if not resolved immediately may compel the Employer to intervene.

The Employer may, upon the Contractor defaulting payment, pay the moneys due to the workers not honoured in time, out of any moneys due or which may become due to the Contractor under the Contract.

A49 Provision of Handtools

The Contractor shall provide his labour force with hand tools of adequate quality, sufficient in numbers and make the necessary provisions to maintain the tools in good and safe working conditions

A50 Reporting

The Contractor shall submit monthly returns/reports as specified below:

- Signed Master rolls/pay sheets of temporary workers and permanent staff detailing the number, category, gender, rate of pay and daily attendance.
- Plant utilization returns

actually paid to the worker; or

- (c) pay the employer or any other person for having been employed.

A44 Health and Safety

A44.1 Employers must take all reasonable steps to ensure that the working environment is healthy and safe.

A44.2 A worker must –

- (a) Work in a way that does not endanger his/her health and safety or that of any other person;
- (b) Obey any health and safety instruction;
- (c) Obey all health and safety rules of the SPWP;
- (d) Use any personal protective equipment or clothing issued by the employer;
- (e) Report any accident, near-miss incident or dangerous behaviour by another person to their employer or manager.

A45 Compensation for Injuries and Diseases

A45.1 It is the responsibility of the employers (other than a contractor) to arrange for all persons employed on a SPWP to be covered in terms of the Compensation for Occupational Injuries and Diseases Act, 130 of 1993.

A45.2 A worker must report any work-related injury or occupational disease to their employer or manager.

A45.3 The employer must report the accident or disease to the Compensation Commissioner.

A45.4 An employer must pay a worker who is unable to work because of an injury caused by an accident at work 75% of their earnings for up to three months. The employer will be refunded this amount by the Compensation Commissioner. This does NOT apply to injuries caused by accidents outside the workplace such as road accidents or accidents at home.

A46 Termination

A46.1 The employer may terminate the employment of a worker for good cause after following a fair procedure.

A46.2 A worker will not receive severance pay on termination.

A46.3 A worker is not required to give notice to terminate employment. However, a worker who wishes to resign should advise the employer in advance to allow the employer to find a replacement.

A46.4 A worker who is absent for more than three (3) consecutive days without informing the

- A42.4 A time-rated worker will be paid at the end of each month.
- A42.5 Payment must be made by cheque or by direct deposit into a bank account designated by the worker.
- A42.6 Payment by cheque must take place –
- (a) at the workplace or at a place agreed to by the worker;
 - (b) during the worker's working hours or within fifteen minutes of the start or finish of work;
 - (c) in a sealed envelope which becomes the property of the worker.
- A42.7 An employer must give a worker the following information in writing –
- (a) the period for which payment is made;
 - (b) the numbers of tasks completed or hours worked;
 - (c) the worker's earnings;
 - (d) any money deducted from the payment;
 - (e) the actual amount paid to the worker.
- A42.8 If the worker is paid in cash or by cheque, this information must be recorded on the envelope and the worker must acknowledge receipt of payment by signing for it
- A42.9 If a worker's employment is terminated, the employer must pay all monies owing to that worker within one month of the termination of employment.
- A43 Deductions**
- A43.1 An employer may not deduct money from a worker's payment unless the deduction is required in terms of a law.
- A43.2 An employer must deduct and pay to the SA Revenue Services any income tax that the worker is required to pay.
- A43.3 An employer who deducts money from a worker's pay for payment to another person must pay the money to that person within the time period and other requirements specified in the agreement law, court order or arbitration award concerned.
- A43.4 An employer may not require or allow a worker to –
- (a) repay any payment except an overpayment previously made by the employer by mistake;
 - (b) state that the worker received a greater amount of money than the employer

- (c) in the event of a death of –
 - (i) the employee's spouse or life partner;
 - (ii) the employee's parent, adoptive parent, grandparent, child, adopted child, grandchild or sibling.

A40 Statement of Conditions

A40.1 An employer must agree with the local worker on a signed contract of employment containing the following details at the start of employment –

- (a) the employer's name and address and the name of the SPWP;
- (b) the tasks or job that the worker is to perform; and
- (c) the period for which the worker is hired or, if this is not certain, the expected duration of the contract;
- (d) the worker's rate of payment and how this is to be calculated;
- (e) the training that the worker will receive during the SPWP.

A40.2 An employer must ensure that these terms and conditions are explained in a suitable language to any employee who is unable to read the statement.

A40.3 An employer must supply each worker with a copy of these conditions of employment.

A 41 Keeping Records

A41.1 Every employer must keep a written record of at least the following –

- (a) the worker's name and position;
- (b) in the case of a task-rated worker, the number of tasks completed by the worker;
- (c) in the case of a time-rated worker, the time worked by the worker;
- (d) payments made to each worker.

A41.2 The employer must keep this record for a period of at least three years after the completion of the SPWP (Special Public Works Program).

A42 Payment

A42.1 An employer must pay all wages at least monthly by cheque or into a bank account.

A42.2 A task-rated worker will only be paid for tasks that have been completed.

A42.3 An employer must pay a task-rated worker within five weeks of the work being completed and the work having been approved by the manager or the contractor having submitted an invoice to the employer.

- A37.10 A worker is not entitled to paid sick-leave for a work-related injury or occupational disease for which the worker can claim compensation under the Compensation for Occupational Injuries and Diseases Act.

A38 Maternity Leave

- A38.1 A worker may take up to four consecutive months' unpaid maternity leave. Department of labour will therefore handle this issue in terms of compensation.
- A38.2 A worker is not entitled to any payment or employment-related benefits during maternity leave.
- A38.3 A worker must give her employer reasonable notice of when she will start maternity leave and when she will return to work.
- A38.4 A worker is not required to take the full period of maternity leave. However, a worker may not work for four weeks before the expected date of birth of her child or for six weeks after the birth of her child, unless a medical practitioner, midwife or qualified nurse certifies that she is fit to do so.
- A38.5 A worker may begin maternity leave –
- (a) four weeks before the expected date of birth; or
 - (b) on an earlier date –
 - (i) if a medical practitioner, midwife or certified nurse certifies that it is necessary for the health of the worker or that of her unborn child; or
 - (ii) if agreed to between employer and worker; or
 - (c) on a later date, if a medical practitioner, midwife or certified nurse has certified that the worker is able to continue to work without endangering her health.
- A38.6 A worker who has a miscarriage during the third trimester of pregnancy or bears a stillborn child may take maternity leave for up to six weeks after the miscarriage or stillbirth.
- A38.7 A worker who returns to work after maternity leave, has the right to start a new cycle of twenty-four months' employment, unless the SPWP on which she was employed has ended.

A39 Family responsibility leave

- A39.1 Workers, who work for at least four days per week, are entitled to three days paid family responsibility leave each year in the following circumstances -
- (a) when the employee's child is born;
 - (b) when the employee's child is sick;

- (a) the worker's daily task rate, if the worker works for less than four hours;
- (b) double the worker's daily task rate, if the worker works for more than four hours.

A36.4 A time-rated worker who works on a public holiday must be paid –

- (a) the worker's daily rate of pay, if the worker works for less than four hours on the public holiday;
- (b) double the worker's daily rate of pay, if the worker works for more than four hours on the public holiday.

A37 Sick Leave

A37.1 Only workers who work four or more days per week have the right to claim sick-pay in terms of this clause.

A37.2 A worker who is unable to work on account of illness or injury is entitled to claim one day's paid sick leave for every full month that the worker has worked in terms of a contract.

A37.3 A worker may accumulate a maximum of twelve days' sick leave in a year.

A37.4 Accumulated sick-leave may not be transferred from one contract to another contract.

A37.5 An employer must pay a task-rated worker the worker's daily task rate for a day's sick leave.

A37.6 An employer must pay a time-rated worker the worker's daily rate of pay for a day's sick leave.

A37.7 An employer must pay a worker sick pay on the worker's usual payday.

A37.8 Before paying sick-pay, an employer may require a worker to produce a certificate stating that the worker was unable to work on account of sickness or injury if the worker is –

- (a) absent from work for more than two consecutive days; or
- (b) absent from work on more than two occasions in any eight-week period.

A37.9 A medical certificate must be issued and signed by a medical practitioner, a qualified nurse or a clinic staff member authorised to issue medical certificates indicating the duration and reason for incapacity.

A31.2 An employer and worker may agree that a worker will work four days per week. The worker may then work up to ten hours per day.

A31.3 A task rated worker may not work more than a total of 55 hours in any week to complete the tasks allocated (based on a 40-hour week) to that worker.

A32 Meal Breaks

A32.1 A worker may not work for more than five hours without taking a meal break of at least thirty minutes' duration.

A32.2 An employer and worker may agree on longer meal breaks.

A32.3 A worker may not work during a meal break. However, an employer may require a worker to perform duties during a meal break if those duties cannot be left unattended and cannot be performed by another worker. An employer must take reasonable steps to ensure that a worker is relieved of his or her duties during the meal break.

A32.4 A worker is not entitled to payment for the period of a meal break. However, a worker who is paid on the basis of time worked must be paid if the worker is required to work or to be available for work during the meal break.

A33 Special Conditions for Security Guards

A33.1 A security guard may work up to 55 hours per week and up to eleven hours per day.

A33.2 A security guard who works more than ten hours per day must have a meal break of at least one hour or two breaks of at least 30 minutes each.

A34 Daily Rest Period

Every worker is entitled to a daily rest period of at least eight consecutive hours. The daily rest period is measured from the time the worker ends work on one day until the time the worker starts work on the next day.

A35 Weekly Rest Period

Every worker must have two days off every week. A worker may only work on their day off to perform work which must be done without delay and cannot be performed by workers during their ordinary hours of work ("emergency work").

A36 Work on Sundays and Public Holidays

A36.1 A worker may only work on a Sunday or public holiday to perform emergency or security work.

A36.2 Work on Sundays is paid at the ordinary rate of pay.

A36.3 A task-rated worker who works on a public holiday must be paid –

2) Sectorial determination 2: Civil engineering sector

A29 Introduction

This document contains the standard terms and conditions for workers employed in elementary occupations on a Special Public Works Programme (SPWP). These terms and conditions do NOT apply to persons employed in the supervision and management of a SPWP.

A29.2 In this document –

- (a) “Municipality” means any implementing agent;
- (b) “employer” means Municipality, implementing agent or contractor that hires workers to work in elementary occupations on a SPWP;
- (c) “worker” means any person working in an elementary occupation on a SPWP;
- (d) “elementary occupation” means any occupation involving unskilled or semi-skilled work;
- (e) “management” means any person employed by a Municipality or implementing agent to administer or execute an SPWP;
- (f) “task” means a fixed quantity of work;
- (g) “task-based work” means work in which a worker is paid a fixed rate for performing a task;
- (h) “task-rated worker” means a worker paid on the basis of the number of tasks completed;
- (i) “time-rated worker” means a worker paid on the basis of the length of time worked.

A30 Terms of Work

A30.1 Workers on a SPWP are employed on a temporary basis.

A30.2 A worker may NOT be employed for longer than 24 months in any five-year cycle on a SPWP.

A30.2 Employment on a SPWP does not qualify as employment as a contributor for the purposes of the Unemployment Insurance Act 30 of 1966.

A31 Normal Hours of Work

A31.1 An employer may not set tasks or hours of work that require a worker to work–

- (a) more than forty hours in any week
- (b) on more than five days in any week; and
- (c) for more than eight hours on any day.

road signs, etc. to have been repaired to his satisfaction.

- d) The Contractor may not commence constructional activities before adequate provision has been made for accommodating traffic in accordance with the requirements of this document and the South African Road Traffic Signs Manual.
- e) The Contractor shall submit proposals in connection with directional signs to the Engineer for approval.
- f) The Contractor may not construct any deviations without the written approval of the Engineer.

C3.1.6.8 Permits and Wayleaves

The Contractor shall obtain wayleaves before construction commences from the relevant services agencies.

C3.1.6.9 Water for Construction purposes, power supply and other services

The Contractor shall make all his own arrangements concerning the supply of construction water, electrical power and all other services. The water for construction shall be tested and the results must be submitted to the Engineer prior to construction. No direct payment will be made for the provision of such services. The cost thereof shall be deemed to be included in the rates and amounts tendered for the various items of work for which these services are required.

C3.1.6.10 Survey Control and Setting out of the Works.

The Contractor shall check all survey control beacons indicated on the drawings before commencing with the works and must immediately notify the Engineer of any discrepancy.

C3.1.7 Labour Regulations

A27 Payment for the labour-intensive component of the works

Payment for works identified in clause 2.3 "the Extent of the Project" in the Project Specifications as being labour-intensive shall only be made in accordance with the provisions of the Contract if the works are constructed strictly in accordance with the provisions of the scope of work. Any non-payment for such works shall not relieve the Contractor in any way from his obligations either in contract or in delict.

A28 Applicable labour laws

- 1) The Ministerial Determination for Special Public Works Programmes, issued in terms of the Basic Conditions of Employment Act of 1997 by the Minister of Labour in Government Notice N° R63 of 25 January 2002, as reproduced below, shall apply to works described in the scope of work as being labour intensive and which are undertaken by unskilled or semi-skilled workers.

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

Provision is made in these specifications for the erection of a security fence around the site offices. The contractor shall be responsible for the security of his personnel and constructional plant on and around the site of the works and for the security of his camp, and the employer will consider no direct claims in this regard but on site establishment.

C3.1.6.4 Additional Requirements for Construction Activities

C3.1.6.4.1 The contractor may not commence constructional activities before adequate provision has been made to accommodate traffic in accordance with the requirements of this document and the South African Road Traffic Signs Manual.

C3.1.6.4.2 The Contractor shall submit proposals in connection with directional signs to the engineer for approval. Deviation layout will form part of the issued drawings.

C3.1.6.5 Programme Requirements for Construction Activities

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

C3.1.6.6 Construction in Confined Areas

It may be necessary for the contractor to work in confined areas. In certain areas the width of the fill material and pavement layers may reduce to zero and the working space may be confined. The method of construction in these confined areas depends on the contractor's construction plant. However, the contractor must note that measurement and payment will be in accordance with the specified cross-sections and dimensions, irrespective of the method used to achieve these cross-sections and dimensions, and that the rates and amounts tendered will be deemed to include full compensation for any special equipment or construction methods or for any difficulty encountered in working in confined areas and narrow widths, and at or around obstructions, and that no extra payment will be made nor will any claim for payment be considered on account of these difficulties.

C3.1.6.7 Site Usage: Additional Requirements for Construction Activities

- a) The Constructor shall be responsible for the accommodation of traffic. In all cases shall be the existing number of traffic lanes and possible movements of traffic be retained. The Contractor's tendered rates for the relevant items in the schedule of quantities shall include full compensation for all additional costs which may arise from this, and no claims for extra payment following on inconvenience caused by or a result of the modus operandi to be followed will be considered.
- b) The travelling public shall have the right of way on public roads, and the Contractor shall make use of approved methods to control the movement of his equipment and vehicles so as not to constitute a hazard on the road.
- c) Failure to maintain road signs, warning signs, or flicker lights, etc. in a good condition shall constitute ample reason for the Engineer to stop the Works until the

C3.1.4 Location of the Works

The project is located at Makhado Landfill Site and Tshikota location 3km Western side of Makhado Town.

C3.1.5 Temporary Works

The temporary works to be undertaken is the construction of bypass, watering and maintenance to keep it smooth and safer while constructing the road. Temporary accommodation of traffic will also be done by means of placing temporary road signs before the commencement of any work within the road formation aid shall be undertaken to the requirements and details shown on the accommodation of Traffic drawings. Temporary road signs will be removed on completion of the construction work when they are no longer required.

C3.1.6 General Information**C3.1.6.1 Drawings**

The reduced drawings contained at volume 2 that form part of the tender document shall be used for tender purposes only. Further drawings are to be provided on an on-going basis by the engineer.

The contractor will be supplied with an unreduced 0.05 mm thick transparent polyester print of each of the drawings. These polyester prints are issued free of charge and the contractor shall make any additional prints he may require at his own cost.

Any information in the possession of the contractor, which the resident engineer requires to complete the as-built drawings, shall be supplied to the resident engineer before a certificate of completion will be issued.

Only figured dimensions shall be used and drawings shall be scaled unless so instructed by the engineer. The engineer will supply all figured dimensions omitted from the drawings.

C3.1.6.2 Water for Construction purposes, power supply and other services

The contractor shall make all his/her own arrangements concerning the supply of construction water, electrical power and all other services. Construction water must be tested and approved by the Engineer prior to uses. No direct payment will be made for the provision of such services. The cost therefore shall be deemed to be included in the rates and amounts tendered for the various items of work for which these services are required.

C3.1.6.3 Contractor's Camp Site and Security

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

C3.1. DESCRIPTION OF WORKS

C3.1.1 Employer's Objectives

The Employer's objectives are to deliver Public infrastructure using labour-intensive methods where possible as required by the expanded public works programme to provide temporary employment opportunities to local unemployed people and to provide training or skills development to these locally employed workers.

In this instance, the public infrastructure will entail the upgrading of 6km gravel to surfaced road

C3.1.2 Overview and Location of Works

The work to be performed under this contract comprises.

- a) 4km gravel road
- b) Storm water system
- c) Signage

C3.1.3 Extent of Works

It is envisaged that the road works included in this contract will consists mainly of the following:

- 1) The geometric alignment will be altered slightly to smooth out unacceptable vertical and horizontal curves where applicable.
- 2) Warning and ruling signs will be erected where needs be on the road.
- 3) Bell mouths with 15m radii will be constructed on streets joining the road.
- 4) Based on the traffic volumes, the road width will vary from 5.5m to 12.2m with two lanes of 2.75m to 3.7m each, sealed to 2.7m to 3.7 with Kerbs and Edge Beams on the sides at some designated sections, Walkway will vary from 1m to 2m at some designation section of the road (as per the Engineer 's Instructions), Drainage Structures at some section of the road. The camber of the road will be 2%.
- 5) Permanent road Signs will be installed for the safety control of traffic, and the road Markings will be done.
- 6) Pavement structure

150G5	-150mm UnStabilized Base Layer G5
150G5	- 150mm Unstabilized Subbase gravel layer G5
150G6	- 150mm Subgrade Gravel layer G6

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MAKHADO MUNICIPALITY

TENDER NO: 79 of 2021

**CONSTRUCTION OF MAKHADO LANDFILL SITE AND RECYCLING CENTRE
PHASE 3 (REGRAVELLING) ROAD AT MAKHADO MUNICIPALITY WITHIN VHEMBE
DISTRICT OF LIMPOPO PROVINCE**

THE CONTRACT

PART C3	SCOPE OF WORKS
PART C4	SITE INFORMATION

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VOLUME 2 OF 2

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C5.1 :	Proforma Documents (White pages).....	C.154
C5.2 :	Guidelines for the Implementation of Labour Intensive Infrastructure Projects under the Expanded Public Works Programme (EPWP)	
C5.3 :	Contract Drawings (White pages).....	C.224



MAKHADO MUNICIPALITY

TENDER NO: 79 of 2021

**CONSTRUCTION OF MAKHADO LANDFILL SITE AND RECYCLING CENTRE
PHASE 3 (REGRAVELLING) ROAD AT MAKHADO MUNICIPALITY WITHIN VHEMBE
DISTRICT OF LIMPOPO PROVINCE**

PART C4: SITE INFORMATION

C4.1	SITE INFORMATION.....	C.122
C4.2	LOCALITY PLAN.....	C.123

C4.1 SITE INFORMATION

C4.1.1 Material site investigation (refer to Geotechnical Report)

C4.1.2 Pavement and layerworks design (refer to book of drawings volume 3)

C4.1.3 Structures (refer to book of drawings volume 3)

- Foundation design
- Details of structures

C4.1.4 Services (on site investigation by project team)

C4.1.5 Traffic counts (low volume road).

C4.1.6 Site Office (information sign board)

C4.2 LOCALITY PLAN

PART C5: ANNEXURES

C5.1	PROFORMA DOCUMENTS	C.125
C5.2	CONTRACT DRAWINGS	



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CONSTRUCTION OF MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3 (REGRAVELLING) ROAD AT MAKHADO MUNICIPALITY WITHIN VHEMBE DISTRICT OF LIMPOPO PROVINCE

C5.1 PROFORMA DOCUMENTS

The following is a list of proforma documents and examples that are required to be completed by the successful tenderer.

C5.1.1	RETENTION MONEY GUARANTEE PROFORMA.....	C.126
C5.1.2	EXAMPLE OF ABE DECLARATION AFFIDAVIT.....	C.128
C5.1.3	FORM RDP 9(E) : CONTRACT EMPLOYMENT REPORT	131
C5.1.4	FORM RDP 10(E) : EMPLOYMENT OF SUPERVISORY STAFF REPORT ...	132
C5.1.5	FORM RDP 11(E) : GENERIC TRAINING REPORT	133
C5.1.6	FORM RDP 12(E) : ENTREPRENEURIAL TRAINING REPORT	134
C5.1.7	FORM RDP 13(E) : ENGINEERING TRAINING REPORT	135
C5.1.8	FORM RDP 14(E) : COMMUNITY LIAISON MEETING REPORT.....	136

C5.1.1 RETENTION MONEY GUARANTEE PROFORMA

EXAMPLE

Makhado Municipality
Private Bag X2596
Louis Trichardt
0920

FOR INFORMATION ONLY:

This Guarantee is not to be

Guarantor.

A separate form will be issued
to the successful Tenderer

Notes to Tenderer

1. This pro forma is for information only. The successful tenderer's guarantor will need to reproduce it without amendment, omission or addition for completion and lodgement with the Employer.
2. The tenderer's guarantee will have to be on letterheads indicating the contact details of the guarantor, shareholders/board of directors, guarantee number and the company registration number.

CONTRACT No. 79 of 2021

FOR

**CONSTRUCTION OF MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3
(REGRAVELLING) ROAD AT MAKHADO MUNICIPALITY WITHIN VHEMBE DISTRICT
OF LIMPOPO PROVINCE**

The guarantee is issued on behalf of

Registration No

(hereinafter referred to as "the Contractor") in connection with the above mentioned contract
(hereinafter referred to as "the Contract").

Whereas you have agreed that the Contractor may provide a guarantee in lieu of the
retention monies provided for under the Contract.

Now therefore we, the undersigned, being duly authorised to represent the

.....
(full name of guarantor) registration number

undertake to pay you such amounts as you may from time to time demand from us,
immediately upon receipt of a written demand from you.

1. Each demand shall be in writing and delivered to us at
or such other address as we shall in writing notify to you.
2. Our liability to make the payments herein referred to shall be unconditional and

not be affected or diminished by any disputes, claims or counterclaims between you and the Contractor.

3. Our aggregate liability under this guarantee is limited to
(R.....) and is restricted to
payment of monies only.
4. This guarantee shall expire on the date on which the last of the retention monies,
which but for this guarantee would have been retained by you, becomes payable
to the Contractor.
5. This guarantee is neither negotiable nor transferable and must be returned to us
against final payment of our aggregate liability or on the date of the expiry of the
guarantee in terms of Clause 6.2 (above), whichever is the earlier.

Signed atfor and on behalf of

on this the day of in the year

GUARANTOR:

AS WITNESS:

1. 2.

NAME(Print): NAME(Print):

ADDRESS ADDRESS

.....
.....

C5.1.2 EXAMPLE OF ABE DECLARATION AFFIDAVIT

(facsimiles will be provided by the Employer to be completed by ABEs, EME OR QSE)

1. Name of firm :
- Postal address :
- Telephone no. : Fax no
- Contact person :
- VAT registration no. :

2. Type of firm (tick as appropriate)

- Partnership.....
- One-person business/sole trader.....
- Close corporation: registration no.....
- Date of registration.....
- Company: registration no.....
- Pty Ltd: registration no.....

3. Principal Business Activities :

4. Service/work to be performed on this contract:

5. Participation in this contract

- as a Sub-contractor Yes/No
- in a Joint Venture Yes/No
- with main contractor Yes/No
- with a sub-contractor Yes/No

6. List all partners, proprietors and shareholders:

Name	ID. No.	Citizen of RSA Yes/No	PDI status Yes/No	%owned

7. List the last four contracts/assignments completed by your firm. If required, a separate sheet may be used and attached to this page. Reference may be called from the Employers of the projects listed.

PROJECT AND WORK PERFORMED	EMPLOYER (NAME, ADDRESS, TEL, FAX)	VALUE OF RANDS

Notes to tenderer:

Under column 1 state the assignment or contract (eg. Contract XYZ0123): Construction of rural roads) and follow this with the work carried out (eg. construction of pipe culverts).

Under column 2, if it was a sub-contract give the required details of the employer for the main contract and also of the Contractor who employed you.

Under column 3 give the value of the main contract (if any and if known) and also the value of the work carried out by you.

8. Declaration

I,
being duly authorised to sign on behalf of the firm, affirm that the PDI equity in this business is as stated above and that the information furnished is true and correct.

Signature

Name (print)

Date

Signed on behalf of (print name)

Address

Telephone no.

Commissioner of Oath

Date

Note: In the case of A Company a certificate of authority for signatory must be provided.

CONTRACT NO: 69 of 2021

REPORT ON EMPLOYMENT ON THE ABOVE CONTRACT FOR THE MONTH OF 2021											
NAME OF COMPANY OR FIRM AND VENDOR NUMBER	AGE OF COMPANY OR FIRM	EMPLOYMENT GROUP	EMPLOYMENT								
			MALE	FEMALE	TOTAL	PERSON/HOURS			VALUE (RAND)		
						MALE	FEMALE	TOTAL	MALE	FEMALE	
		Unskilled (US)									
		Semi-Skilled (SS)									
		Skilled (SK)									
		Lab.Tech (LT)									
		Surveyor (SUR)									
		Eng. Tech (ET)									
		Engineer (EN)									
		Admin (AD)									
		Others (o)									
			TOTALS								
			GRAND TOTALS								

EXAMPLE

C5.1.4 FORM RDP 10(E) : EMPLOYMENT OF SUPERVISORY STAFF REPORT

CONTRACT NO: 69 of 2021

REPORT ON THE EMPLOYMENT OF SUPERVISORY STAFF ON THE ABOVE CONTRACT FOR THE MONTH OF _____ 2021				
POSITION HELD	NAME	PDI	NON-PDI	TOTAL
Contracts Manager				
Site Agent				
Construction Foremen				
Senior Materials Technician				
Senior Surveyor				
Earthworks Surveyor				
Compaction Supervisor				
Surfacing Supervisor				
Structures Supervisor				
Others: - List				
TOTALS				

CONTRACT NO:69 of 2021

REPORT ON GENERIC TRAINING ON THE ABOVE CONTRACT FOR THE MONTH OF 2021										
DATES OF TRAINING COURSES		EMPLOYER OF TRAINEE		NAME OF TRAINING INSTITUTE OR IF IN-HOUSE WRITE IH	ATTENDANCES				TOTAL COST OF TRAINING PER TYPE OF TRAINING	
					NUMBER ATTENDING		CERTIFICATES AWARDED			
START	FINISH	NAME	VENDOR NO.		MALE	FEMALE	MALE	FEMALE	MALE	FEMALE

EXAMPLE

C5.1.6 FORM RDP 12(E) : ENTREPRENEURIAL TRAINING REPORT

CONTRACT NO: 69 of 2021

[illegible]

CONTRACT NO: 69 of 2021

[illegible]

EXAMPLE

C5.1.8 FORM RDP 14(E) : COMMUNITY LIAISON MEETING REPORT

CONTRACT NO: 69 of 2021

[illegible]



C.217

MAKHADO MUNICIPALITY

TENDER NO: 69 of 2021

CONSTRUCTION OF MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3(REGRAVELLING) AT MAKHADO MUNICIPALITY WITHIN VHEMBE DISTRICT OF LIMPOPO PROVINCE

APPENDIX A: SOURCES OF ADDITIONAL INFORMATION

The following sources provide comprehensive information in respect of the following topics:

Topic	Reference	Obtainable from
Besa building system	Agrément South Africa's Guideline 1, The Manufacture of BESA Blocks Agrément Open Certificate OC-1/2003. Agrément Open Certificate OC-2/2003. CIDB. Best Practice Guidelines for Labour-based Methods and Technologies for Employment Intensive Construction Works. Part 3: Section 2- The BESA Building System	Agrément South Africa www.agrement@csir.co.za Construction Industry Development Board www.cidb.org.za under the section "job creation"
Brick and block making	CIDB. Best Practice Guidelines for Labour-based Methods and Technologies for Employment Intensive Construction Works. Part 3: Section 1- Precast Concrete Products, Brick and Block Making	Construction Industry Development Board www.cidb.org.za under the section "job creation"
Conditions of Employment	Code of Code of Good Practice for Employment and Conditions of Work for Special Public Works Programmes Ministerial Determination: Special Public Works Programmes	EPWP Unit of the Municipality of Public Works
Earthworks	CIDB. Best Practice Guidelines for Labour-based Methods and Technologies for Employment Intensive Construction Works. (Download from www.cidb.org.za) • Part 2: Labour-based construction methods for earth works • Appendix 1: Quantitative Employment Data on Selected Construction Activities	Construction Industry Development Board www.cidb.org.za under the section "job creation"
Labour intensive projects and programmes	McCutcheon, RT (ed) (1993). Interim Guidelines for employment-intensive construction projects. Construction and Development Series Number 2, Midrand: Development Bank of Southern Africa, February 1993 McCutcheon, RT and Marshall J (1996). Labour-intensive Construction and Maintenance of Rural Roads : Guidelines for the Training of Road Builders, Construction and Development Series, Number 14 (Midrand: DBSA, November 1996) McCutcheon, RT and Filip, LM (ed). Employment and high -standard infrastructure. Work Research Centre for Employment Creation in Construction (2003)	Development Bank of Southern Africa School of Civil Engineering, University of the Witwatersrand.
Labour productivities	CIDB. Best Practice Guidelines for Labour-based Methods and Technologies for Employment Intensive Construction Works. • Appendix 1: Quantitative Employment Data on Selected Construction Activities	Construction Industry Development Board www.cidb.org.za under the section "job creation"
Minimum wages	Wage determination for the Civil Engineering Sector	www.safcec.org.za under the section "human resources"

Topic	Reference	Obtainable from
Monitoring the employment of workers / compliance with the provisions of SANS 1914-5	SANS 10396, Implementing Preferential Procurement Policies Using Targeted Procurement Procedures <ul style="list-style-type: none"> Annex G: Implementing employment intensive infrastructure projects which target the increase of employment opportunities generated per unit of expenditure Annex J: Third party management support 	Standards South Africa (division of the South African Bureau of Standards)
Pre-cast concrete works	CIDB Best Practice Guidelines for Labour-based Methods and Technologies for Employment Intensive Construction Works. <ul style="list-style-type: none"> Part 3: Section 1- Pre-cast Concrete Products, Brick and Block Making 	Construction Industry Development Board www.cidb.org.za under the section "job creation"
Preparing procurement documents	CIDB Best Practice Guidelines for Procurement C1: Preparing Procurement Documents	Construction Industry Development Board www.cidb.org.za under the section "job creation"
	SANS 10403, Formatting and Compilation of Construction Procurement Documents	Standards South Africa (division of the South African Bureau of Standards)
Roads	CIDB Best Practice Guidelines for Labour-based Methods and Technologies for Employment Intensive Construction Works. <ul style="list-style-type: none"> Part 2: Labour-based construction methods for earthworks Part 4: Section 4 - Foam bitumen gravel Part 4: Section 5 - Cast in-situ block pavements (hysen cells) Part 4: Section 6 - Emulsion treated gravel Part 4: Section 7 - Waterbound macadam Part 4: Section 8 - Slurry bound and composite macadams Part 4: Section 9 - Labour-based methods for unsealed roads Appendix 1: Quantitative Employment Data on Selected Construction Activities 	
Rubble concrete masonry	CIDB Best Practice Guidelines for Labour-based Methods and Technologies for Employment Intensive Construction Works. <ul style="list-style-type: none"> Part 4: Section 2 – Rubble masonry dam construction technology Part 4: Section 3 – Rubble masonry concrete arch bridge construction technology 	Construction Industry Development Board www.cidb.org.za under the section "job creation"
Stormwater drainage	CIDB Best Practice Guidelines for Labour-based Methods and Technologies for Employment Intensive Construction Works. <ul style="list-style-type: none"> Part 4: Section 1 – Labour-based Open Channel Flow Technology 	Construction Industry Development Board www.cidb.org.za under the section "job creation"
Trenches	CIDB Best Practice Guidelines for Labour-based Methods and Technologies for Employment Intensive Construction Works. (Download from www.cidb.org.za) <ul style="list-style-type: none"> Part 2: Labour-based construction methods for earthworks Appendix 1: Quantitative Employment Data on Selected Construction Activities 	Construction Industry Development Board www.cidb.org.za under the section "job creation"
Concrete Block Paved Roads	Macleod, Concrete Block Paved Roads: The Development Potential Construction and Development. Series, Number 8. Development Bank of Southern Africa. September, 1993	Development Bank of Southern Africa.
Bituminous Surfacing	Methods and Procedures Labour Enhanced. Construction for Bituminous surfacings Manual 12, March 1993. SABITA.	Southern African Bitumen and Tar Association.
Bituminous Surfacing	Methods and Procedures Labour Enhanced. Construction for Bituminous surfacings Manual 11, March 1993. SABITA.	Southern African Bitumen and Tar Association.

APPENDIX B: TYPES OF INFRASTRUCTURE WHICH ARE SUITABLE FOR CONSTRUCTION USING LABOUR INTENSIVE METHODS

B.1 Roads

The following operations may be carried out using labour intensive methods:

1. Site clearance
2. Layer work construction including loading, hauling and spreading material.

Note: All compaction should be done using conventional compaction equipment and where necessary the use of heavy machinery may be employed to loosen material for excavation by hand. Where significant use of blasting is indicated, then the Works are probably not suitable for labour-intensive methods.
3. Where high categories of roads are to be constructed, the following operations may be included:
 - Macadam base course either dry, water bound or emulsion bound; foamed bitumen gravel; emulsion treated gravel; or slurry bound or composite macadams.
 - Application of bitumen bound surface treatment (cold) including spreading and dragging of chips.
 - Slurry treatments to existing or new road surfaces.
 - In situ concrete roads.
 - Segmented block paved roads.
 - Cast in-situ block pavements (hysen-cells);
 - Road markings.
4. Fencing.
5. Erection of road signs.
6. Grass maintenance.
7. Road reserve maintenance.
8. Rubble masonry bridges, culverts and retaining walls

B.2 Stormwater

The following operations may be constructed using labour-intensive construction methods:

1. Gabions and reno mattresses.
2. Small diameter pre-cast concrete elements (pipes and arches).
3. Grassed or lined water channels

B.3 Sewers

The following operations may be constructed using labour-intensive construction methods:

1. Sewer manholes either in brickwork or using specially manufactured pre-cast

manhole rings (individual mass less than 320kg).

2. Sewer manhole covers and lids using specially designed pre-cast units.
3. Maturation or flocculation ponds with least dimension not exceeding 100m.

B.4 Water

The following operations may be constructed using labour-intensive construction methods:

1. Laying of water pipelines, fittings and house connections in all materials (including steel) where the mass of individual pipe lengths does not exceed 320kg.
2. Construction of ferro-cement reservoirs.
3. Excavation for membrane lined and floating roof reservoirs.
4. Construction of small masonry reservoirs.
5. Spring and well protection measures

B.4 Haul of Material

Where the haul of any material exceeds 200m, consideration should be given to the use of local resources for transporting material. This includes the use of animal-drawn vehicles and small trailer combinations utilising locally sourced tractors. All loading and off-loading can be done by hand.

B.5 Electricity

The following operations may be constructed using labour-intensive methods:

1. Excavation of trenches for reticulation of all voltages.
2. Excavation for and erection of poles for overhead lines.
3. Installation of all electricity cables (joints and terminations by qualified persons).

B.6 Houses, schools and clinics

Housing is seen as labour-intensive, but the number of local people that could be employed may be enhanced by one or more of the following:

1. Manufacture of masonry elements on site.
2. Excavation of all foundation trenches by hand.
3. Manufacture of roof trusses on site.
4. Adoption of the BESA System

Note: 1) In the BESA system walls are constructed using bitumen emulsion stabilised adobe blocks and mortar. External and internal wall surfaces can be finished in a variety of ways using a mortar mix or a cement/sand plaster.

- 2) The BESA Building System is the subject of an open certificate issued by Agrément South Africa. The concept of an open certificate is that the technology is not the intellectual property of any company or individual and the information is available to anyone who wishes to use it. Any competent person, company or institution who wishes to use this system and is capable of carrying out this work in accordance with the terms and conditions of certification and undertakes to do so, may apply to Agrément South Africa to be registered as a holder of this open certificate.

APPENDIX C: STANDARD FORMS OF CONTRACT USED IN SOUTH AFRICA

The following standard forms of contract which is in use in South Africa use the following terminology:

Standard form of contract	Location for items covered by the scope of work	Names of the Parties to a Contract
GCC 1990, COLTO 1997, FIDIC Short Form of Contract	Specifications	Employer Contractor
FIDIC Conditions of Contract for Construction ("Red Book")	Specification and schedule	Employer Contractor
NEC Engineering and Construction Contract and Engineering and Construction Short Contract	Works Information	Employer Contractor
JBCC 2000 Principal Building Agreement, Minor Works Agreement	Schedule	Employer Contractor
NEC - The Professional Services Contract	Scope	Employer Consultant
CIDB Standard Services Contract	Scope of Work	Employer Service Provider
SAACE Form of Agreement for Consulting Services	Scope of Services	Client Consultant
GCC 2010/2015	Scope of Work	Employer Contractor

Note:

The Engineering Council of South Africa have issued in government gazette No 24938, dated 28 February 2003, a document entitled: Guideline Scope of Services and Tariff of Fees for Persons Registered in terms of the Engineering Profession Act, 2000, (Act No. 46 of 2000). This document which provides a "guideline scope of service" and a "guideline tariff of fees" repeals Government Notice R 1113 of June 1982.

This document can be referenced in the scope of work and the pricing instructions. It uses the terms "client" and "consulting engineer".

APPENDIX D: REQUIRED SKILLS PROGRAMMES

D.1 Client/Employer

It is recommended that personnel within public bodies complete skills programmes for NQF registered unit standards, as set out in Table D.1.

Table D.1: Skills programme for client / employer staff

Personnel	NQF	Unit Standard Title	Skills Programme Description
Senior management and professionals	7	Develop and Promote Labour-Intensive Construction Strategies	Skills Programme against this single unit standard
Middle management (technical)	5	Manage Labour-Intensive Construction Projects	Skills Programme against this single unit standard
Middle management (admin)	5	Manage Labour-Intensive Construction Projects	Skills Programme against this single unit standard

D.2 Consultants

The person responsible for the design and documentation of the labour-intensive works, must have completed, or be registered on a skills programme for, the NQF level 7-unit standard "Develop and Promote Labour-Intensive Construction Strategies". (see Table D.2)

The person who is responsible to the employer for the administration of the contract, must have completed, or be registered on a skills programme for, the NQF level 5-unit standard "Manage Labour-Intensive Construction Projects". (see Table D.2)

Table D.2: Skills programme for consultants

Personnel	NQF	Unit Standard Title	Skills Programme Description
Administrator / Site Supervisor	5	Manage Labour-Intensive Construction Projects	Skills Programme against this single unit standard
Designer	7	Develop and Promote Labour-Intensive Construction Strategies	Skills Programme against this single unit standard

D.3 Contractors

The unit standards for contractors are outlined in Table D.3.

For established contractors, the site agent / manager (i.e the contractors' most senior representative that is resident on the site) must have completed, or be registered on a skills programme for the NQF level 5-unit standard "Manage Labour-Intensive Construction Projects". For emerging contractors, the emerging contractor himself or herself must have completed, or be registered on a skills programme for the NQF level 2-unit standard.

For both established and emerging contractors, all other site supervisory staff (i.e. team leaders or foremen) must have completed, or be registered on a skills programme for, the NQF level 2 unit standards or NQF level 4 unit standards.

Personnel	NQF	Unit Standard Title	Skills Programme Description
Team Leader / Supervisor	2	Apply Labour-Intensive Construction Systems and Techniques to Work Activities	This unit standard must be completed, and
		Use Labour-Intensive Construction Methods to Construct and Maintain Roads and Stormwater Drainage	any one of the 3 listed unit standards must be completed
		Use Labour-Intensive Construction Methods to Construct and Maintain Water and Sanitation Services	
		Use Labour-Intensive Construction Methods to Construct, Repair and Maintain Structures	
Foreman/ Supervisor		Implement Labour-Intensive Construction Systems and Techniques	This unit standard must be completed, and
		Use Labour-Intensive Construction Methods to Construct and Maintain Roads and Stormwater Drainage	any one of the 3 listed unit standards must be completed
		Use Labour-Intensive Construction Methods to Construct and Maintain Water and Sanitation Services	
		Use Labour-Intensive Construction Methods to Construct, Repair and Maintain Structures	
Site Agent / Manager	5	Manage Labour-Intensive Construction Processes	Skills Programme against this single unit standard



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C5.2 CONTRACT DRAWINGS

The following is a list of contract drawings included in a separate volume entitled "Part C5.2: Contract Drawings."

Plan No.

Title

MAKHADO LOCAL MUNICIPALITY



CONTRACT NUMBER :79 OF 2021

MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3 (REGRAVELLING)

BOOK OF TENDER PURPOSE DRAWINGS

OCTOBER 2021

PREPARED BY

VICTORY DEVELOPMENT PROJECT
14 PAUL KRUGER STREET
POLOKWANE
0700

TEL: (015) 291 3892
FAX: (015) 291 2821



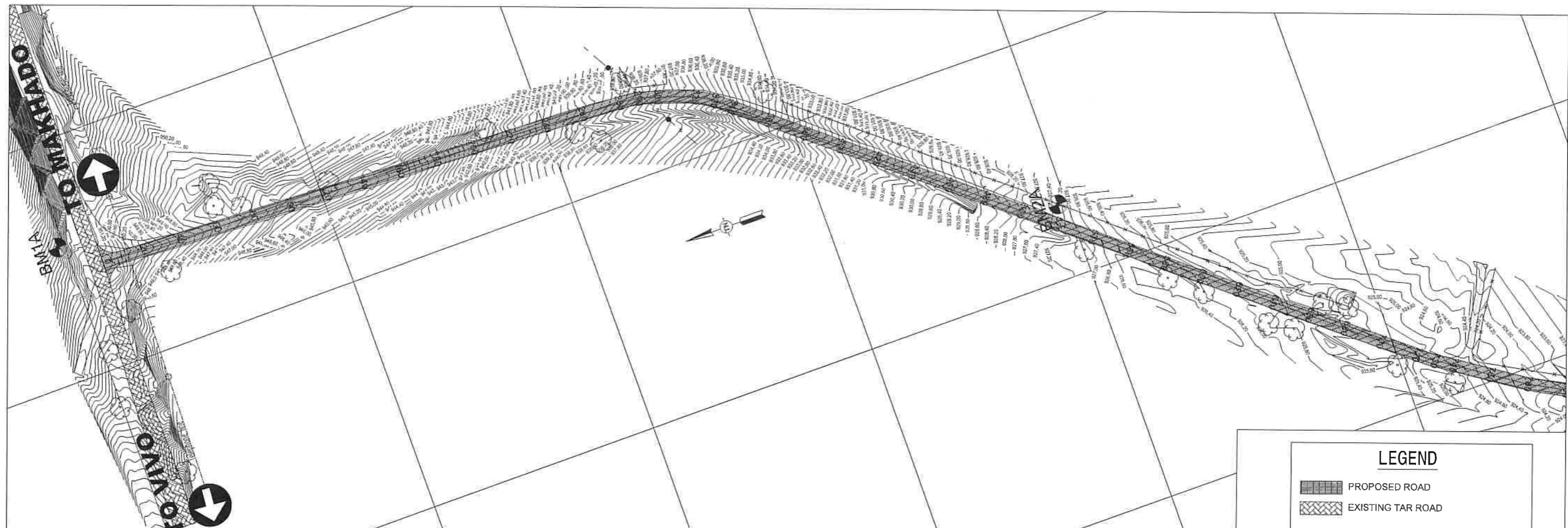
PREPARED FOR

MAKHADO LOCAL MUNICIPALITY
CIVIC CENTRE
No. 83 Krogh Street
Louis Trichardt
0920

Tel: (015) 519 5257
Fax: (015) 516 1195

LIST OF DRAWINGS						
DRAWING NUMBER	DRAWING TITLE	SIZE	REVISION			
			24/08/21			
VDP/2021/L0D	LIST OF DRAWINGS	A1	0			
VDP/2021/LP1	LAYOUT PLAN	A1	0			
VDP/2021/LP2	LAYOUT PLAN	A1	0			
VDP/2021/LP3	LAYOUT PLAN	A1	0			
VDP/2021/LP4	LAYOUT PLAN	A1	0			
VDP/2021/LP5	LAYOUT PLAN	A1	0			
VDP/2021/LS1	ROAD 1 LONG SECTION SHEET 1 of 4	A1	0			
VDP/2021/LS2	ROAD 1 LONG SECTION SHEET 2 of 4	A1	0			
VDP/2021/LS3	ROAD 1 LONG SECTION SHEET 3 of 4	A1	0			
VDP/2021/LS4	ROAD 1 LONG SECTION SHEET 4 of 4	A1	0			
VDP/2021/CS1	ROAD 1 CROSS SECTION SHEET 1 OF 8	A1	0			
VDP/2021/CS2	ROAD 1 CROSS SECTION SHEET 2 OF 8	A1	0			
VDP/2021/CS3	ROAD 1 CROSS SECTION SHEET 3 OF 8	A1	0			
VDP/2021/CS4	ROAD 1 CROSS SECTION SHEET 4 OF 8	A1	0			
VDP/2021/CS5	ROAD 1 CROSS SECTION SHEET 5 OF 8	A1	0			
VDP/2021/CS6	ROAD 1 CROSS SECTION SHEET 6 OF 8	A1	0			
VDP/2021/CS7	ROAD 1 CROSS SECTION SHEET 7 OF 8	A1	0			
VDP/2021/CS8	ROAD 1 CROSS SECTION SHEET 8 OF 8	A1	0			
VDP/2021/LS1	ROAD 2 LONG SECTION	A1	0			
VDP/2021/CS1	ROAD 2 CROSS SECTION SHEET 1 OF 3	A1	0			
VDP/2021/CS2	ROAD 2 CROSS SECTION SHEET 2 OF 3	A1	0			
VDP/2021/CS3	ROAD 2 CROSS SECTION SHEET 3 OF 3	A1	0			

[illegible]



GENERAL NOTES:

1. ALL SETTING OUT DETAILS TO BE CHECKED ON SITE.
2. SERVICES TO BE RELOCATED WHERE NECESSARY IN CONSULTATION WITH THE SERVICE PROVIDERS.
3. SUBSOIL DRAINAGE TO BE PLACED IF NECESSARY AS DIRECTED BY THE ENGINEER.
4. DRAINAGE TO BE CHECKED ON SITE BEFORE ORDERING PIPES.
5. RECOMMENDED MINIMUM SLOPE OF PIPE CULVERTS TO BE 2%.
6. MINIMUM COVER OF 600mm FOR ALL PIPE CULVERTS.
7. PIPE CULVERT INVERT LEVELS TO BE CONFIRMED ON SITE.
8. ALL ACCESSES HAVE A 8m RADIUS UNLESS OTHERWISE INDICATED.
9. THE POSITION OF ALL ACCESS POINTS TO BE VERIFIED ON SITE IN CONSULTATION WITH THE COMMUNITY.
10. ALL EXISTING PIPE CULVERTS THAT ARE NOT REQUIRED ARE TO BE REMOVED / EXCAVATED AND DISPOSED OF.
11. ALL NEW ROAD SIGNS AND ROAD MARKING REQUIREMENTS ARE TO CONFORM TO THE SOUTH AFRICAN ROAD TRAFFIC SIGNS MANUAL (S.A.R.T.S.M).

BENCHMARK LIST

NAME	Y	X	Z
BM1A	115805.057	2549739.086	953.959
BM2A	115961.645	2550238.087	927.309
BM3A	116305.257	2550618.049	918.783
BM4A	116789.339	2550854.309	907.937
BM1	117157.728	2551004.391	900.141
BM2	117598.469	2551215.484	889.458
BM3	118076.161	2551459.486	879.711
BM4	118484.787	2551678.011	872.001
BM5	118600.186	2551583.572	873.066
BM6	118727.908	2551420.320	876.762
BM7	118520.577	2551356.774	878.762

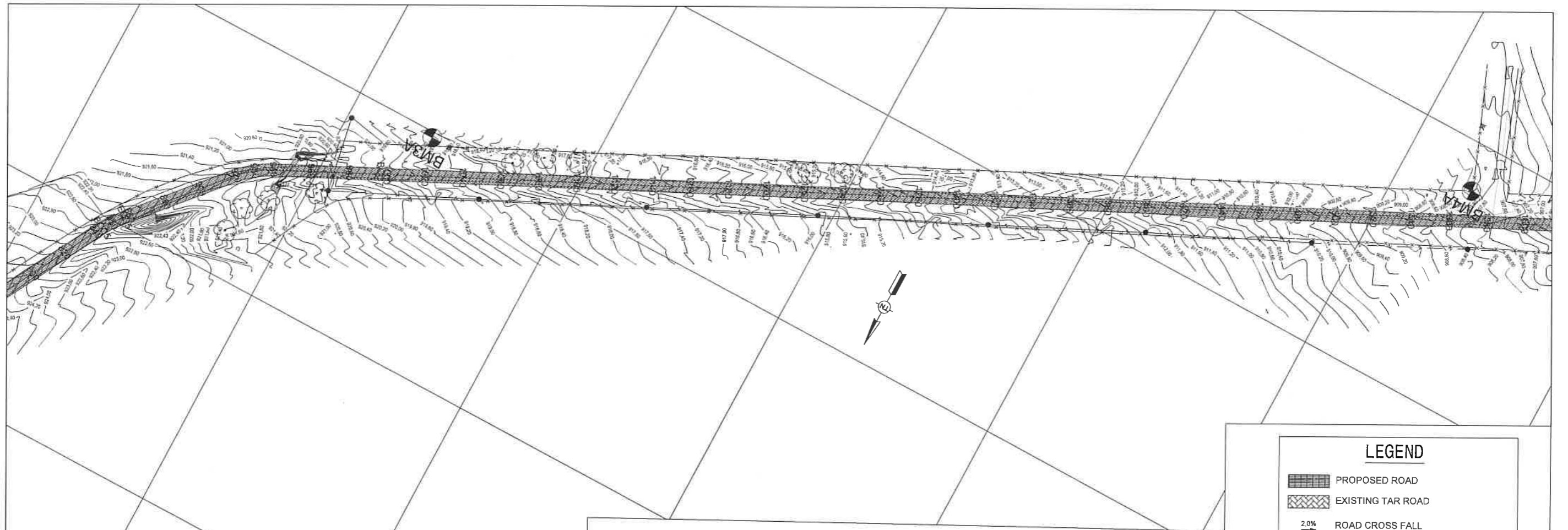
LEGEND

- PROPOSED ROAD
- EXISTING TAR ROAD
- 2.0% ROAD CROSS FALL
- STORMWATER EARTH CHANNEL
- SURVEY BENCHMARK
- ELECTIC POLE
- WATER TAP
- ELECTRIC LINE
- FENCE LINE

ABBREVIATION

- RD - ROAD
- LP - LOW POINT
- BVC - BEGINNING OF VERTICAL CURVE
- EVC - END OF VERTICAL CURVE
- HP - HIGH POINT
- BCC - BEGINNING OF CIRCULAR CURVE
- PI - POINT OF INTERSECTION
- ECC - END OF CIRCULAR CURVE
- IL - INVERT LEVEL
- EX - EXISTING
- EL - ELEVATION
- CH - CHAINAGE
- m - METER
- km/h - KILOMETERS PER HOUR
- R - RADIUS
- AL - ARC LENGTH
- TL - TANGENT LENGTH

FOR TENDER PURPOSE				DESIGNED BY FB	MAKHADO LOCAL MUNICIPALITY	VICTORY DEVELOPMENT PROJECT	MAKHADO LOCAL MUNICIPALITY		01 of 05
				CHECKED BY AM	CIVIC CENTRE 14 Paul Kruger Street Lekur Trek 0700	14 Paul Kruger Street Pretoria 0700	MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3(REGRAVELLING)		AS SHOWN
				DRAWN BY FB	TEL: (015) 519 5257 FAX: (015) 518 1195	TEL: (015) 291 3892 FAX: (015) 291 2821	CH 0+00 - CH 0+800 PLAN LAYOUT		
				CHECKED BY AM			VDP/2021/PL1		MLM/2021/PL1



- GENERAL NOTES:**
1. ALL SETTING OUT DETAILS TO BE CHECKED ON SITE.
 2. SERVICES TO BE RELOCATED WHERE NECESSARY IN CONSULTATION WITH THE SERVICE PROVIDERS.
 3. SUBSOIL DRAINAGE TO BE PLACED IF NECESSARY AS DIRECTED BY THE ENGINEER.
 4. DRAINAGE TO BE CHECKED ON SITE BEFORE ORDERING PIPES.
 5. RECOMMENDED MINIMUM SLOPE OF PIPE CULVERTS TO BE 2%.
 6. MINIMUM COVER OF 600mm FOR ALL PIPE CULVERTS.
 7. PIPE CULVERT INVERT LEVELS TO BE CONFIRMED ON SITE.
 8. ALL ACCESSES HAVE A 8m RADIUS UNLESS OTHERWISE INDICATED.
 9. THE POSITION OF ALL ACCESS POINTS TO BE VERIFIED ON SITE IN CONSULTATION WITH THE COMMUNITY.
 10. ALL EXISTING PIPE CULVERTS THAT ARE NOT REQUIRED ARE TO BE REMOVED / EXCAVATED AND DISPOSED OF.
 11. ALL NEW ROAD SIGNS AND ROAD MARKING REQUIREMENTS ARE TO CONFORM TO THE SOUTH AFRICAN ROAD TRAFFIC SIGNS MANUAL (S.A.R.T.S.M).

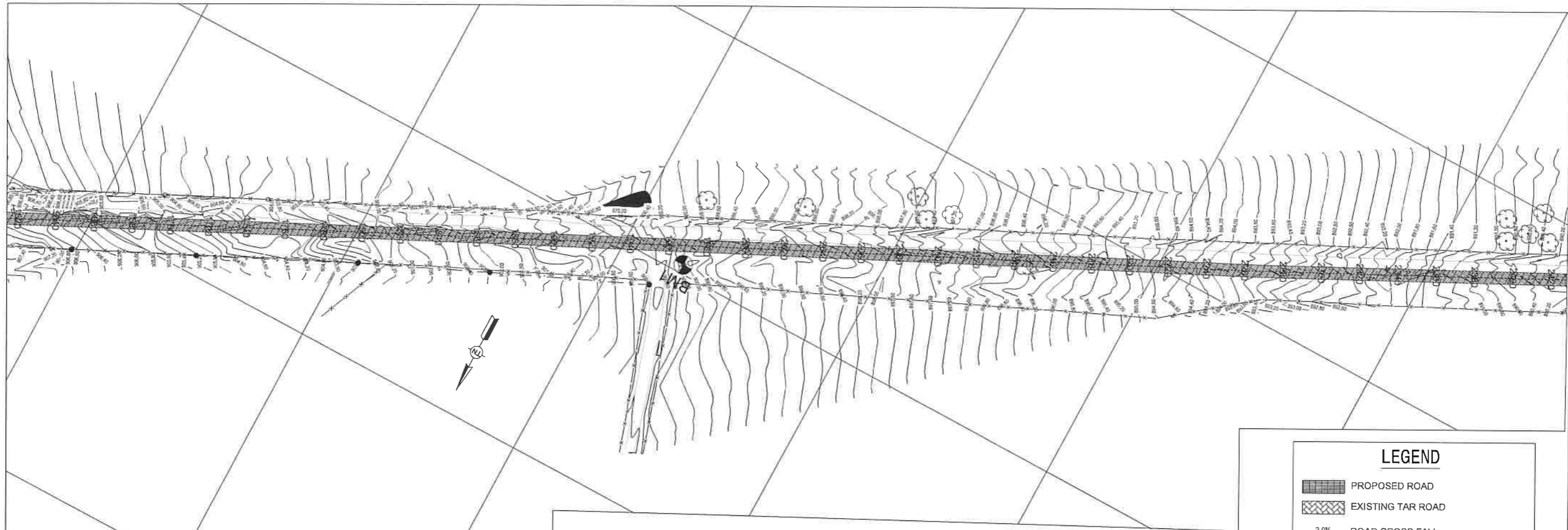
LEGEND

- PROPOSED ROAD
- EXISTING TAR ROAD
- 2.0% ROAD CROSS FALL
- STORMWATER EARTH CHANNEL
- SURVEY BENCHMARK
- ECLECTIC POLE
- WATER TAP
- ELECTRIC LINE
- FENCE LINE

- ABBREVIATION**
- RD - ROAD
 - LP - LOW POINT
 - BVC - BEGINNING OF VERTICAL CURVE
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BENCHMARK LIST			
NAME	Y	X	Z
BM1A	115805.057	2549739.086	953.959
BM2A	115961.645	2550238.087	927.309
BM3A	116305.257	2550618.049	918.783
BM4A	116789.339	2550854.309	907.937
BM1	117157.728	2551004.391	900.141
BM2	117598.469	2551215.484	889.458
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BM5	118600.186	2551583.572	873.066
BM6	118727.908	2551420.320	876.762
BM7	118520.577	2551356.774	878.762

FOR TENDER PURPOSE		DESIGNED BY: FB	MAKHADO LOCAL MUNICIPALITY	VICTORY DEVELOPMENT PROJECT	MAKHADO LOCAL MUNICIPALITY		02 of 05
		CHECKED BY: AM	CIVIC CENTRE No 53 Krogh Street Louis Trichardt 0950	TEL: (015) 519 5257 FAX: (015) 518 1195	MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3(GRAVELLING)		AS SHOWN
		DRAWN BY: FB			CH 0+800 -CH 1+600 PLAN LAYOUT		
		CHECKED BY: AM			VDP/2021/PL2		MLM/2021/PL2



LEGEND

PROPOSED ROAD

EXISTING TAR ROAD

2.0% ROAD CROSS FALL

STORMWATER EARTH CHANNEL

SURVEY BENCHMARK

ECLECTIC POLE

WATER TAP

ELECTRIC LINE

FENCE LINE

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BM7	118520.577	2551356.774	878.762

FOR
TENDER PURPOSE

DESIGNED BY
FB

CHECKED BY
AM

DRAWN BY
FB

CHECKED BY
AM

MAKHADO LOCAL MUNICIPALITY

ENGINEERING
No 82 Krogg Street
Pretoria
0001

TEL (015) 519 5257
FAX (015) 515 1195

VICTORY DEVELOPMENT PROJECT

14 Paul Kruger Street
Pretoria
0001

TEL (015) 991 2692
FAX (015) 291 2421

MAKHADO LOCAL MUNICIPALITY

MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3 (REGRAVELLING)

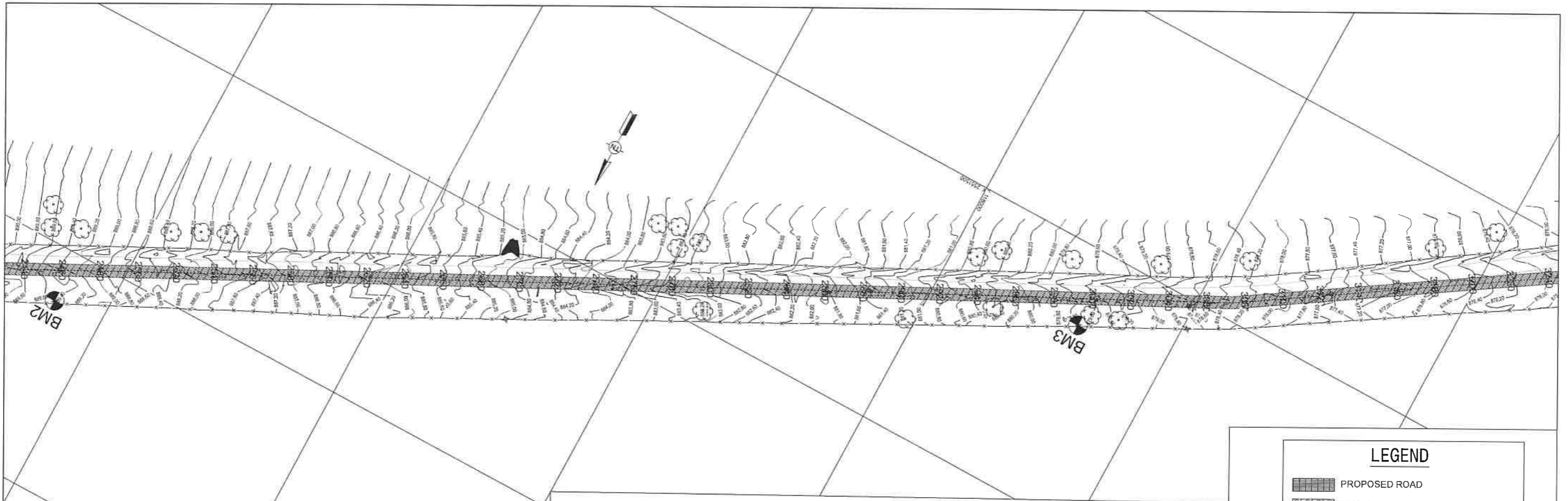
CH 1+620 - CH 2+420
PLAN LAYOUT

03 of 05

AS SHOWN

VDP/2021/PL3

MLM/2021/PL3



LEGEND

PROPOSED ROAD

EXISTING TAR ROAD

ROAD CROSS FALL

STORMWATER EARTH CHANNEL

SURVEY BENCHMARK

ECLECTIC POLE

WATER TAP

ELECTRIC LINE

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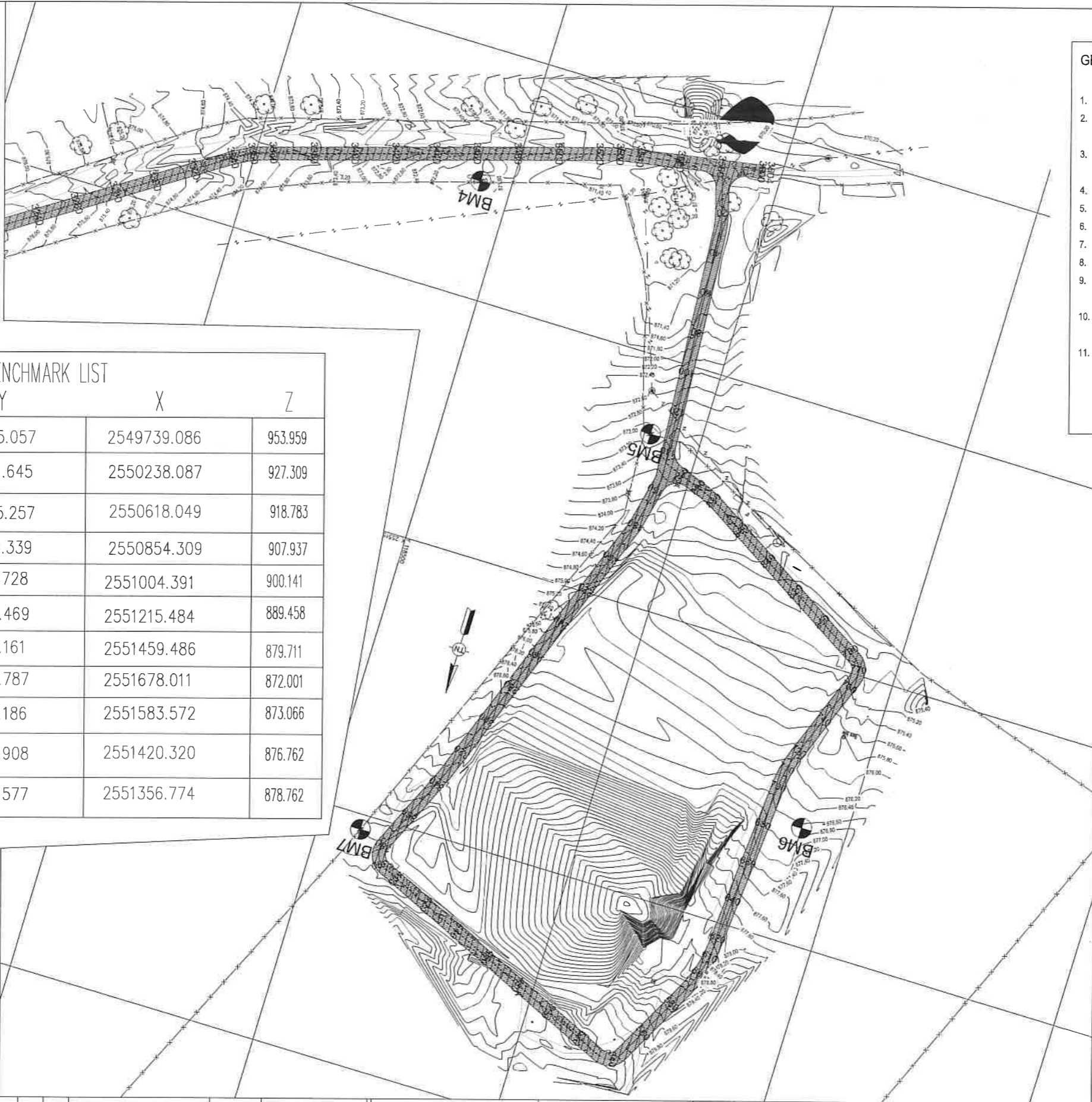
AL - ARC LENGTH

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DESIGNED BY: FB		MAKHADO LOCAL MUNICIPALITY		VICTORY DEVELOPMENT PROJECT		MAKHADO LOCAL MUNICIPALITY		04 of 05	
CHECKED BY: AM		CIVIC CENTRE 1st Floor 1st Floor 1st Floor		1st Floor 1st Floor 1st Floor		MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3 (REGRAVELLING)		AS SHOWN	
DRAWN BY: FB		TEL: (015) 515 5257 FAX: (015) 515 1195		TEL: (015) 291 3822 FAX: (015) 291 3821		CH 2 +440 - CH 3 +240 PLAN LAYOUT		VDP/2021/PL4 MLM/2021/PL4	
FOR TENDER PURPOSE									



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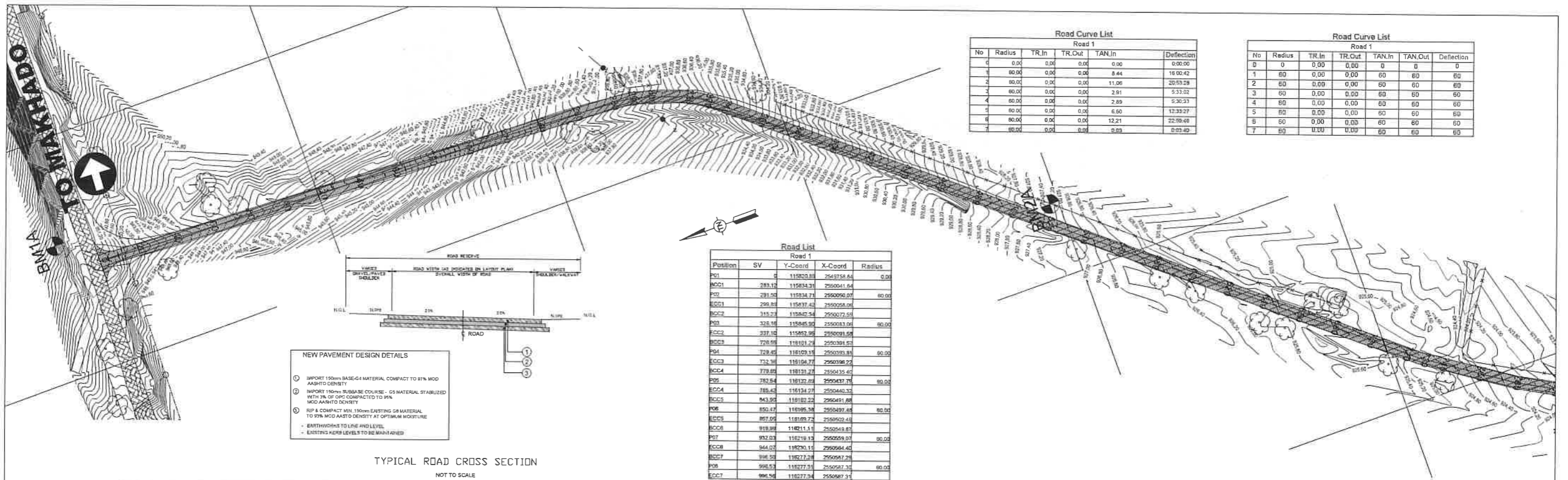
BENCHMARK LIST			
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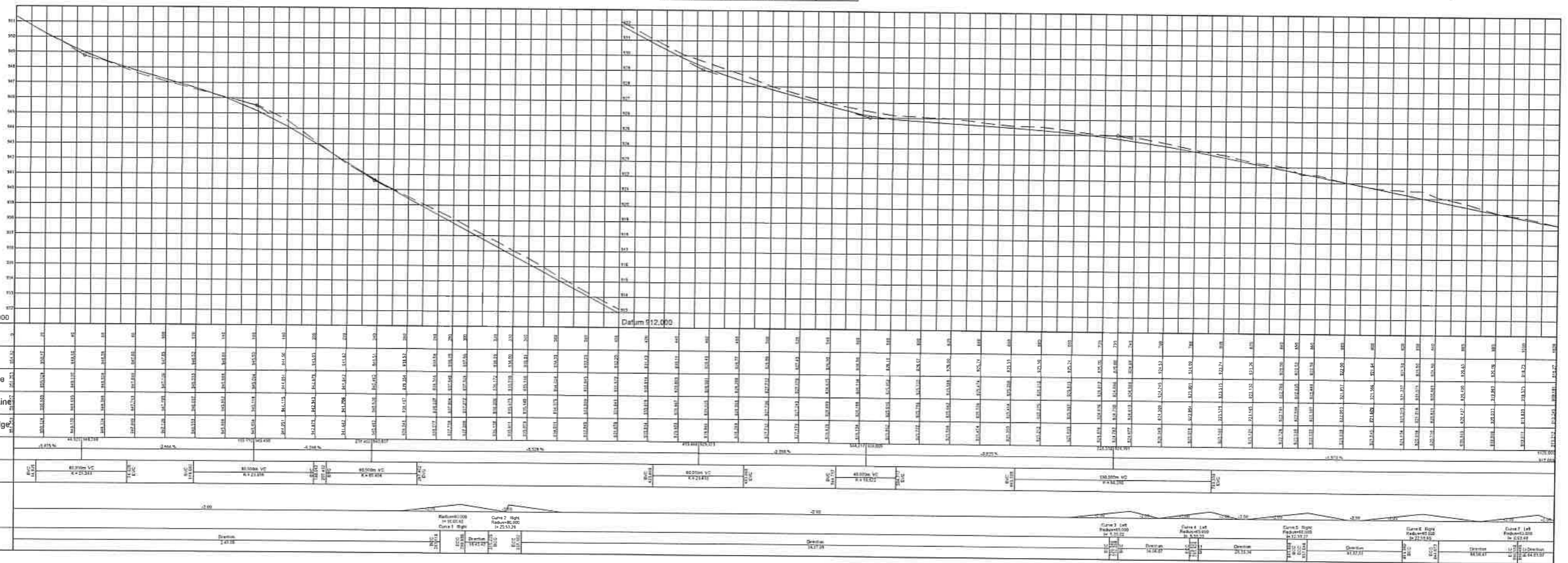
				FOR TENDER PURPOSE		DESIGNED BY: FB	MAKHADO LOCAL MUNICIPALITY		VICTORY DEVELOPMENT PROJECT		MAKHADO LOCAL MUNICIPALITY		05 of 05	
						CHECKED BY: AM	CIVIC CENTRE: 14 Paul Kruger Street, Paul Kruger, 0500		14 Paul Kruger Street, Paul Kruger, 0500		MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3 (REGRAVELLING)		AS SHOWN	
						DRAWN BY: FB	TEL: (015) 519 5267 FAX: (015) 515 1195		TEL: (015) 251 3892 FAX: (015) 251 2821		CH 3+240 -CH 3+604 & CH 0+00 -CH 0+ 909			
						CHECKED BY: AM					PLAN LAYOUT		MLM/2021/PL5	



Road Curve List				
Road 1				
No	Radius	TR.In	TR.Out	Deflection
0	0.00	0.00	0.00	0.00.00
1	80.00	0.00	0.00	8.44
2	80.00	0.00	0.00	11.06
3	80.00	0.00	0.00	2.91
4	80.00	0.00	0.00	2.89
5	80.00	0.00	0.00	6.50
6	80.00	0.00	0.00	12.21
7	80.00	0.00	0.00	0.00.40

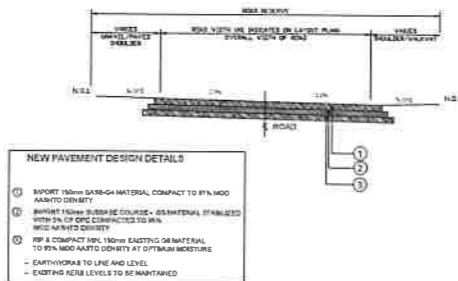
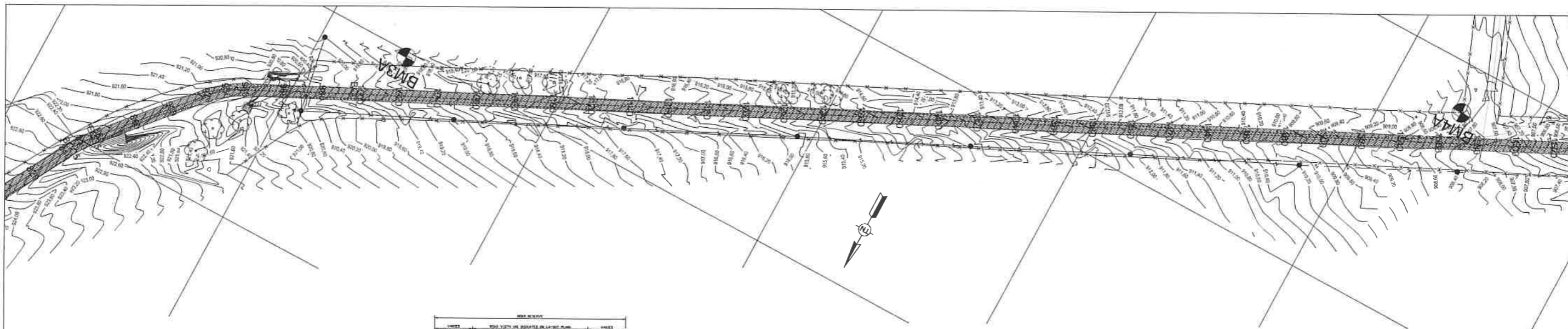
Road Curve List				
Road 1				
No	Radius	TR.In	TR.Out	Deflection
0	0	0.00	0.00	0
1	80	0.00	0.00	60
2	80	0.00	0.00	60
3	80	0.00	0.00	60
4	80	0.00	0.00	60
5	80	0.00	0.00	60
6	80	0.00	0.00	60
7	80	0.00	0.00	60

Road List				
Road 1				
Position	SV	Y-Coord	X-Coord	Radius
P01	0	115820.88	2549758.84	0.00
EC01	283.12	115834.31	2550041.64	80.00
P02	291.50	115834.71	2550090.07	80.00
EC02	298.88	115837.42	2550098.06	80.00
P03	315.23	115840.54	2550072.55	80.00
EC03	328.16	115845.90	2550083.04	80.00
P04	337.10	115852.98	2550091.58	80.00
EC04	349.58	115859.15	2550093.81	80.00
P05	372.36	115859.77	2550098.22	80.00
EC05	379.88	115861.27	2550135.40	80.00
P06	393.84	115872.89	2550137.75	80.00
EC06	399.43	115874.27	2550140.32	80.00
P07	403.80	115882.22	2550141.88	80.00
EC07	409.47	115885.38	2550149.48	80.00
P08	407.02	115889.73	2550152.43	80.00
EC08	418.88	115891.11	2550159.87	80.00
P09	432.03	115891.13	2550159.07	80.00
EC09	444.07	115890.15	2550164.40	80.00
P10	448.25	115877.28	2550161.25	80.00
EC10	458.53	115877.51	2550167.30	80.00
P11	466.56	115877.94	2550167.31	80.00

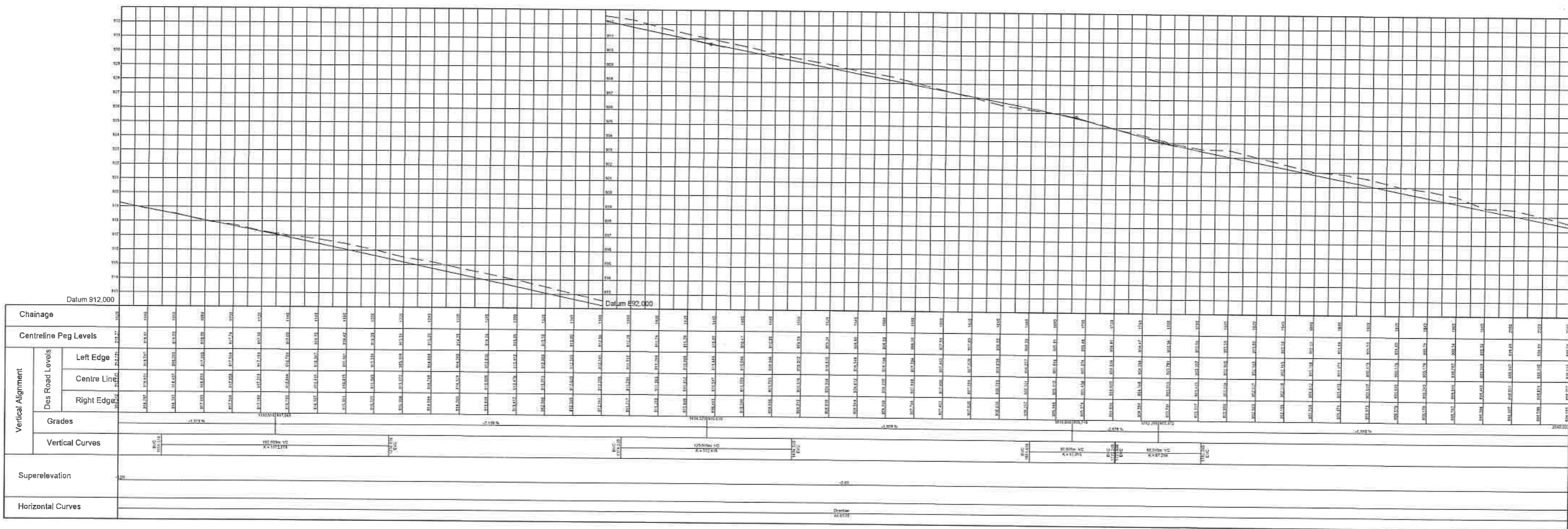


Chainage 0 to 1+020

FOR TENDER PURPOSE		DESIGNED BY: FS	MAKHADO LOCAL MUNICIPALITY	VICTORY DEVELOPMENT PROJECT	MAKHADO LOCAL MUNICIPALITY		01 of 04
		CHECKED BY: AM	CIVIC CENTRE/NER No 83 Kogel Street Lous Tichard 0920	14 Paul Kogel Street Pudmore 0700	MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3 (REGRAVELLING)		AS SHOWN
		DRAWN BY: FB	TEL: (015) 519 5257 FAX: (015) 516 1195	TEL: (015) 291 1992 FAX: (015) 291 2821	ROAD 1 LONG SECTION		MLM/2021/LS1
		CHECKED BY: AM			VDP/2021/LS1		

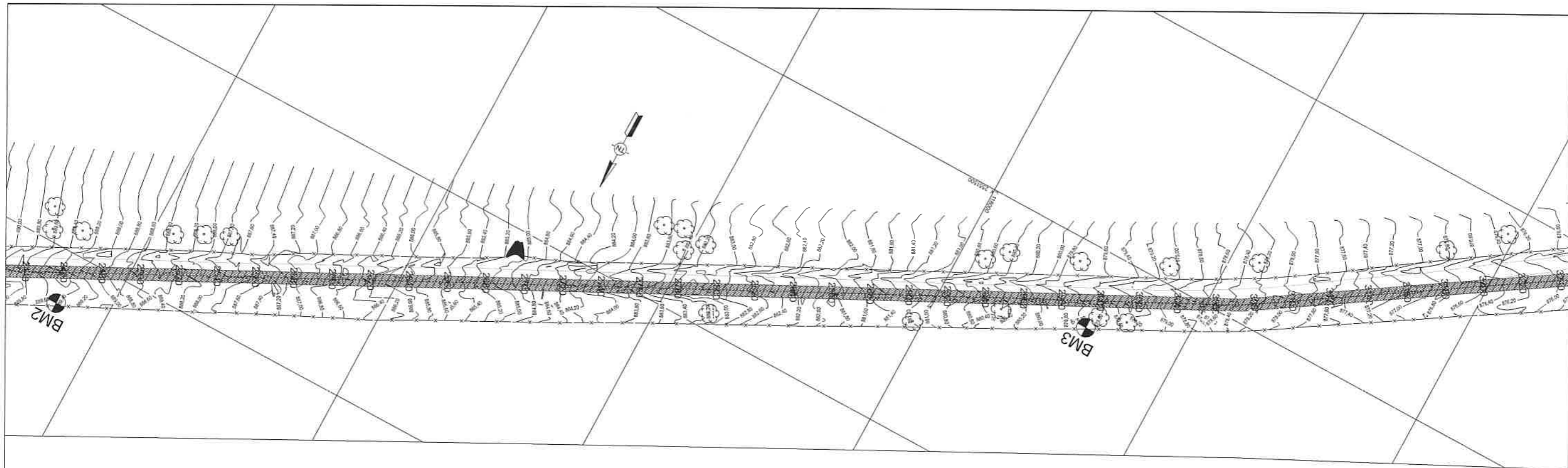


TYPICAL ROAD CROSS SECTION
NOT TO SCALE



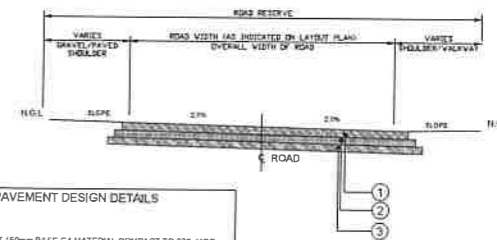
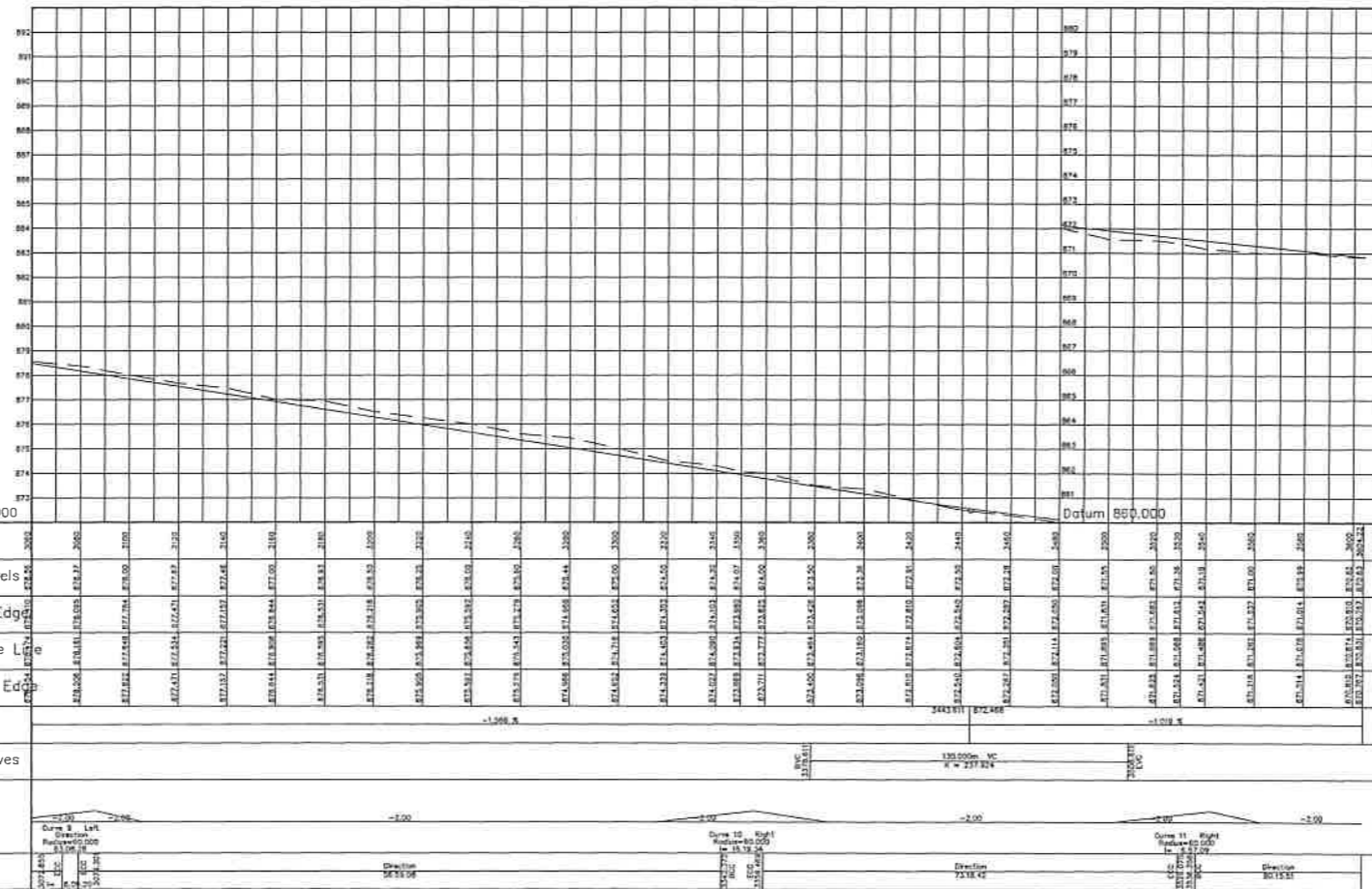
Chainage 1+020 to 2+040

FOR TENDER PURPOSE				DESIGNED BY: FB	MAKHADO LOCAL MUNICIPALITY	VICTORY DEVELOPMENT PROJECT	MAKHADO LOCAL MUNICIPALITY		02 of 04
				CHECKED BY: AM	CIVIC CENTRE No 83 Rugh Street Loush Trichard 0520	14 Paul Kruger Street Pretoria 0100	MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3 (REGRAVELLING)		AS SHOWN
				DRAWN BY: FB	TEL: (015) 519 5257 FAX: (015) 518 1195	TEL: (015) 291 3822 FAX: (015) 291 2821	ROAD 1 LONG SECTION		
				CHECKED BY: AM			VDP/2021/LS2		MLM/2021/LS2
NO	REVISION	REVISION	REVISION	REVISION	REVISION	REVISION	REVISION	REVISION	REVISION
1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9
10	10	10	10	10	10	10	10	10	10



Road Curve List						
No	Radius	TR In	TR Out	TAN In	TAN Out	Deflection
1	100.00	0.00	0.00	0.00	0.00	0.00
2	100.00	0.00	0.00	0.00	0.00	0.00
3	100.00	0.00	0.00	0.00	0.00	0.00
4	100.00	0.00	0.00	0.00	0.00	0.00
5	100.00	0.00	0.00	0.00	0.00	0.00
6	100.00	0.00	0.00	0.00	0.00	0.00
7	100.00	0.00	0.00	0.00	0.00	0.00
8	100.00	0.00	0.00	0.00	0.00	0.00
9	100.00	0.00	0.00	0.00	0.00	0.00
10	100.00	0.00	0.00	0.00	0.00	0.00

Road List				
Station	SV	Y-Coord	X-Coord	Radius
3+000	100.00	100.00	100.00	100.00
3+050	100.00	100.00	100.00	100.00
3+100	100.00	100.00	100.00	100.00
3+150	100.00	100.00	100.00	100.00
3+200	100.00	100.00	100.00	100.00
3+250	100.00	100.00	100.00	100.00
3+300	100.00	100.00	100.00	100.00
3+350	100.00	100.00	100.00	100.00
3+400	100.00	100.00	100.00	100.00
3+450	100.00	100.00	100.00	100.00
3+500	100.00	100.00	100.00	100.00
3+550	100.00	100.00	100.00	100.00
3+600	100.00	100.00	100.00	100.00



- NEW PAVEMENT DESIGN DETAILS**
- ① IMPORT 150mm BASE-G4 MATERIAL COMPACT TO 97% MOD AASHTO DENSITY
 - ② IMPORT 150mm SUBBASE COURSE - G5 MATERIAL STABILIZED WITH 3% OF OPC COMPACTED TO 95% MOD AASHTO DENSITY
 - ③ RP & COMPACT MIN. 150mm EXISTING GR MATERIAL TO 91% MOD AASHTO DENSITY AT OPTIMUM MOISTURE
 - EARTHWORKS TO LINE AND LEVEL
 - EXISTING KERB LEVELS TO BE MAINTAINED

TYPICAL ROAD CROSS SECTION
NOT TO SCALE

NO	DATE	REVISION	CONSULT	DIR
1	2021/01/14	PRELIMINARY REVISIONS	A.N.E.	A.N.
2	2021/01/14	REVISIONS	A.N.E.	A.N.

FOR
TENDER PURPOSE

DESIGNED BY	F BALOJI
CHECKED BY	AN MATHSWARI
DRAWN BY	F BALOJI
CHECKED BY	AN MATHSWARI

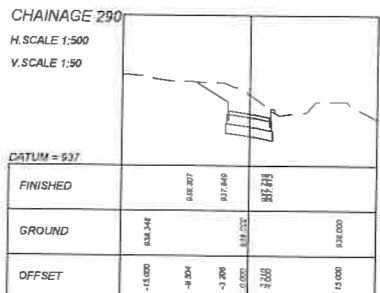
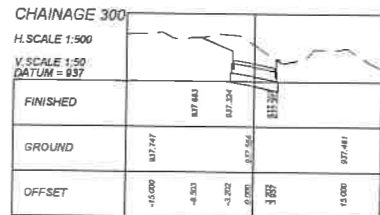
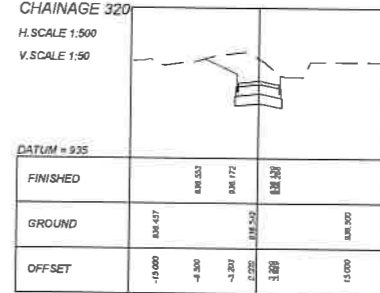
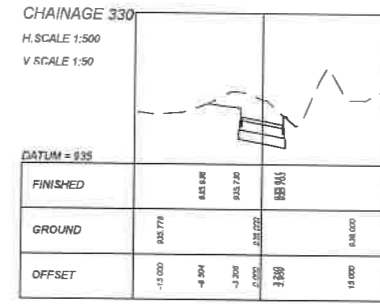
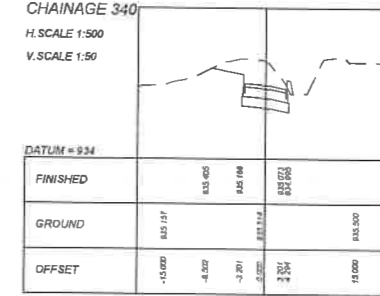
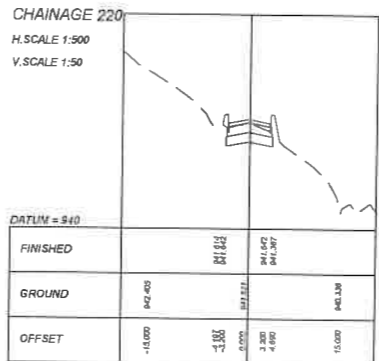
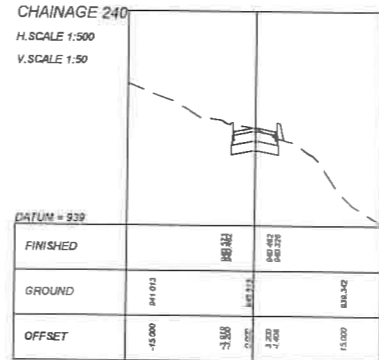
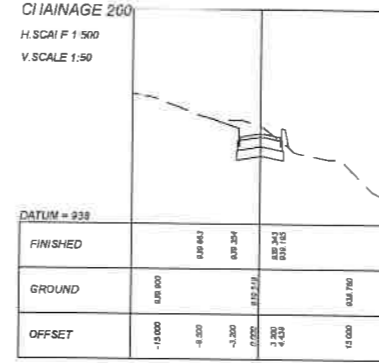
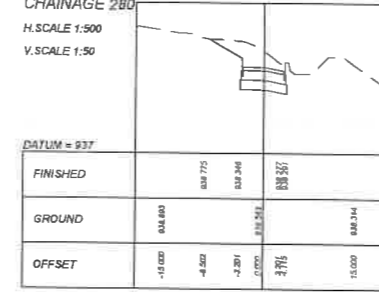
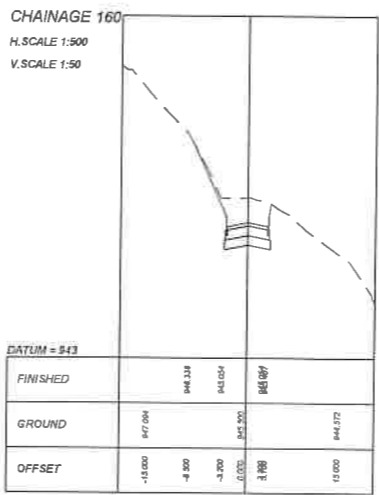
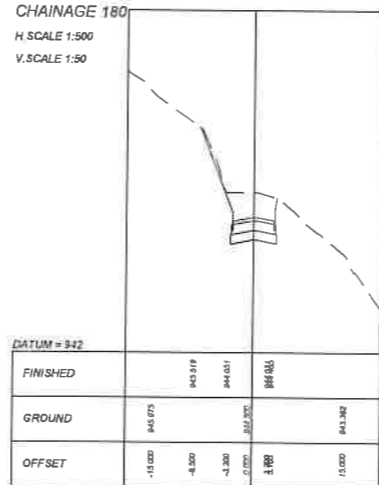
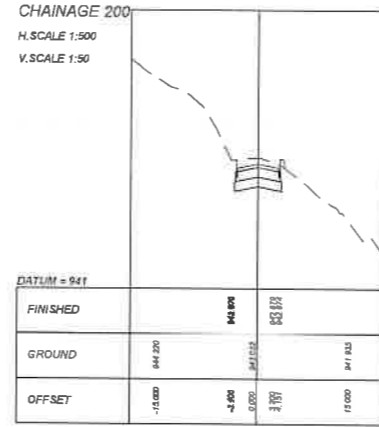
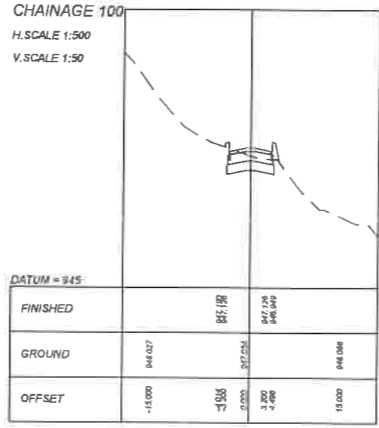
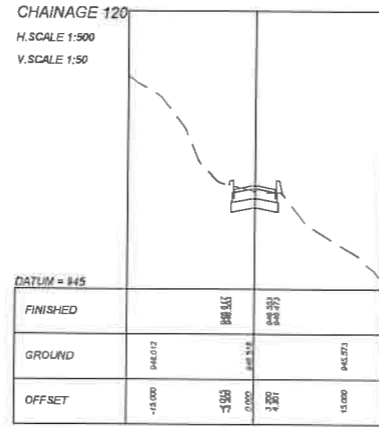
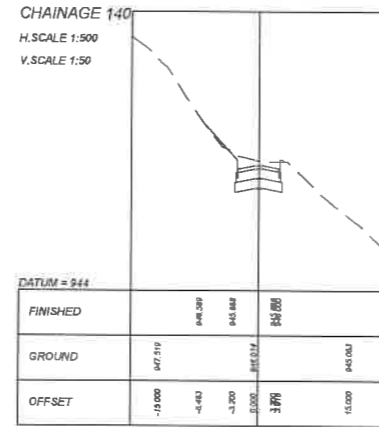
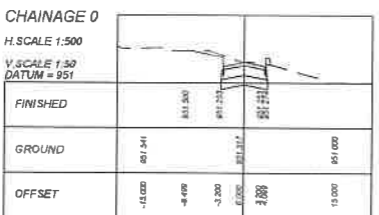
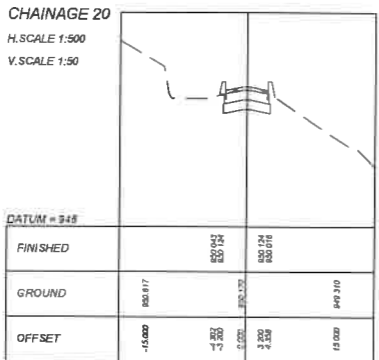
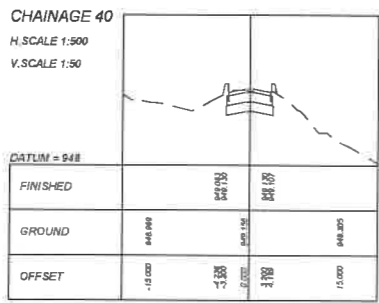
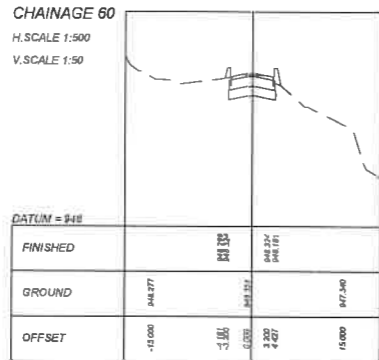
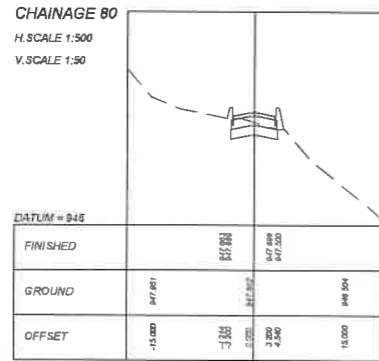
MAKHADO LOCAL MUNICIPALITY
CIVIC CENTRE
No 83 Krog Street
Louis Trichardt
0920
TEL: (015) 519 5257
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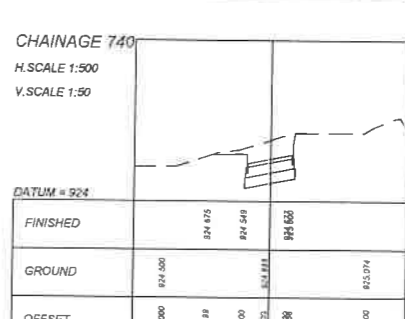
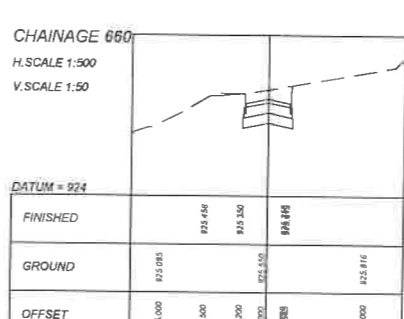
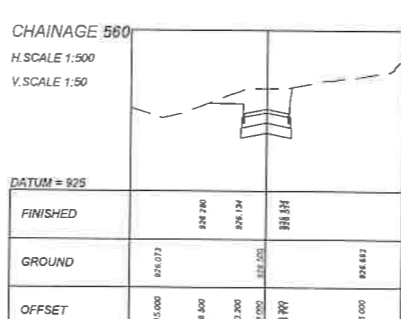
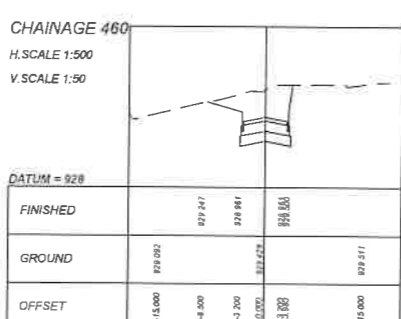
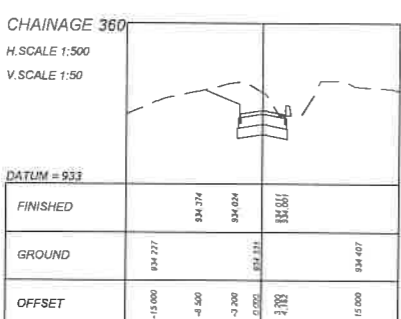
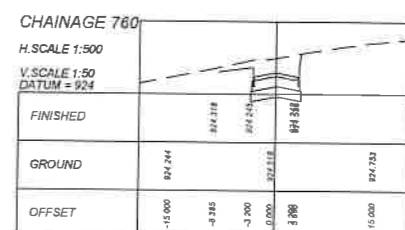
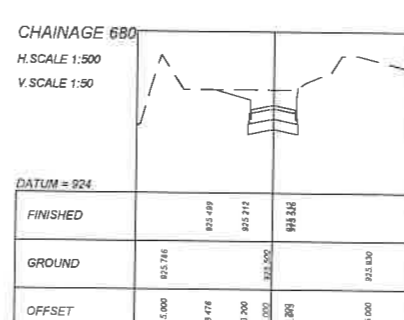
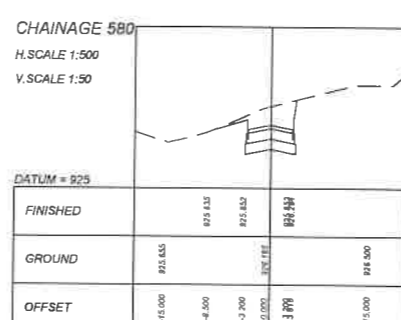
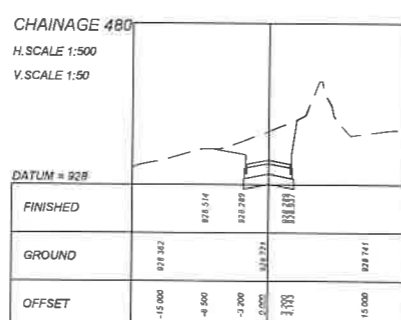
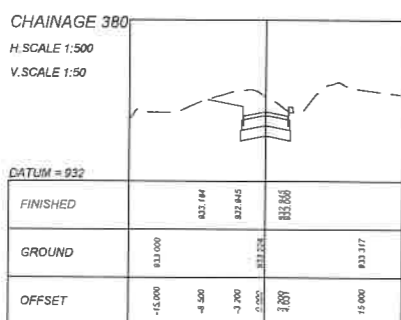
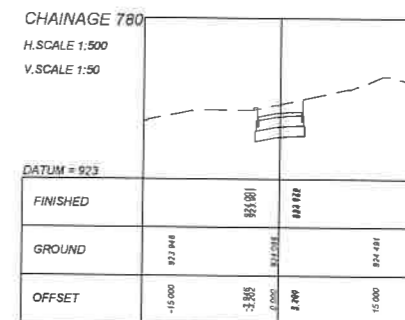
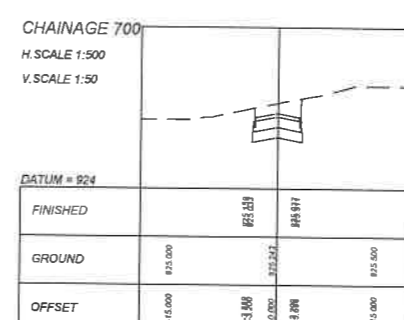
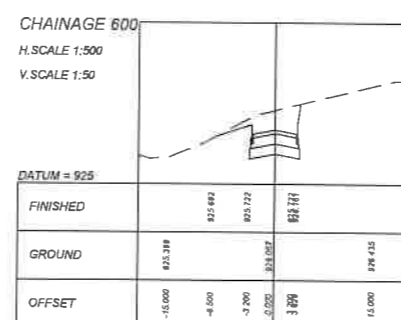
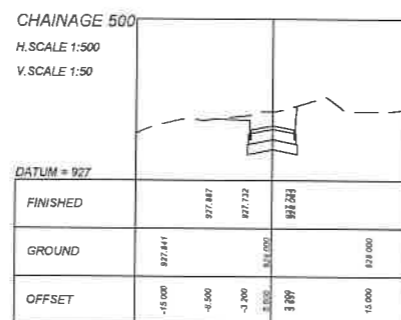
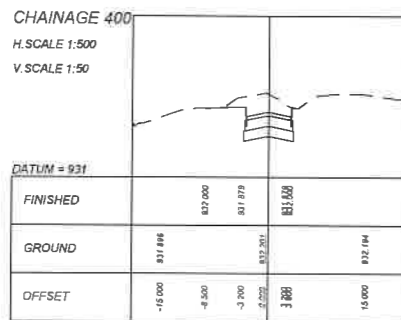
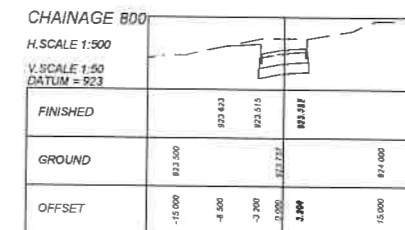
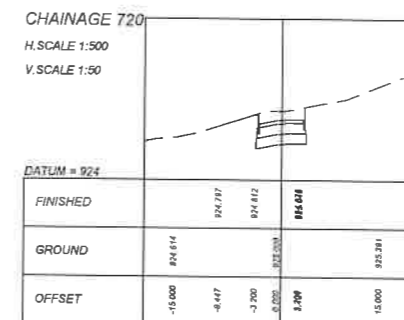
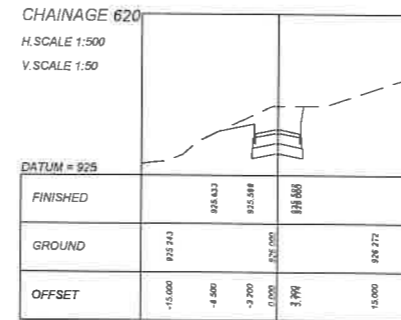
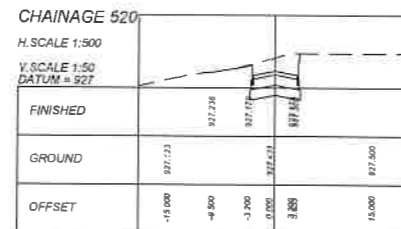
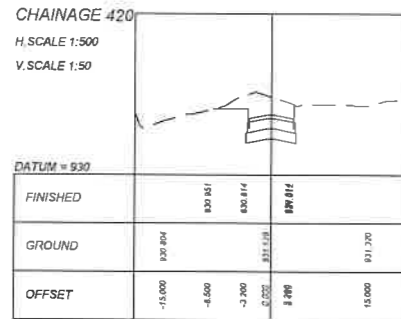
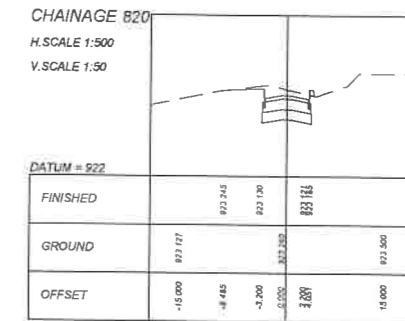
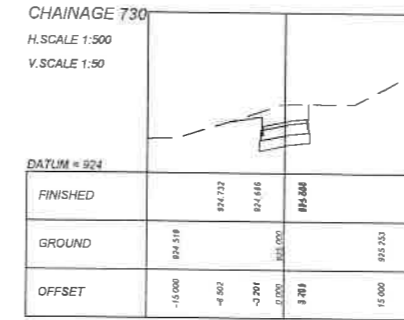
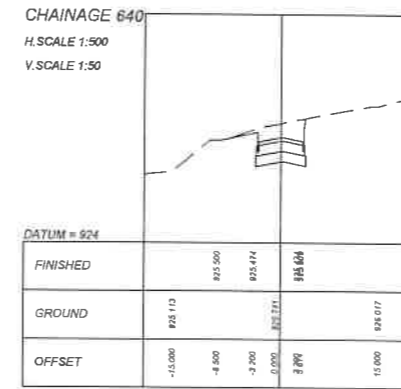
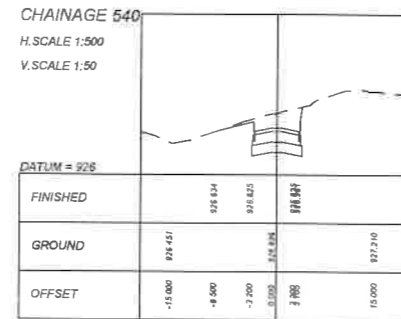
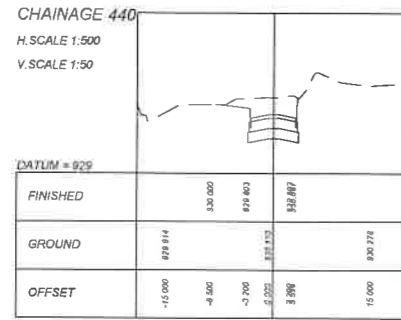
VICTORY DEVELOPMENT PROJECT
14 Paul Kruger Street
Pretoria
0100
TEL: (015) 261 3892
FAX: (015) 291 2921



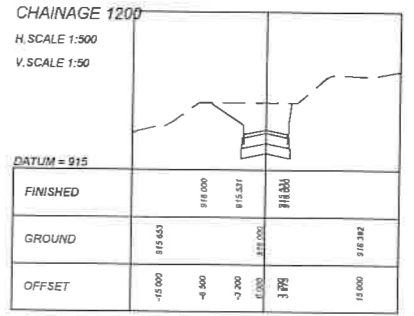
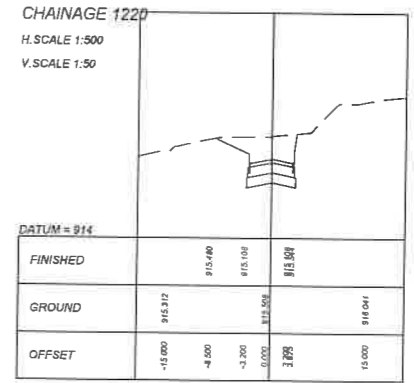
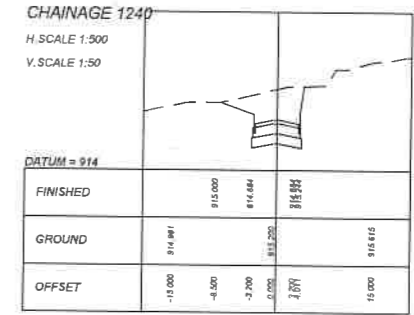
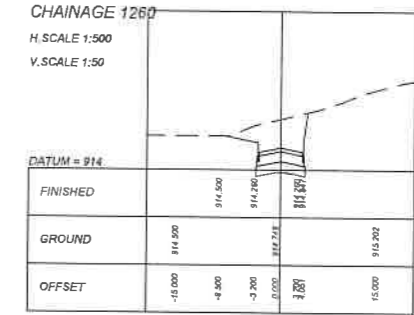
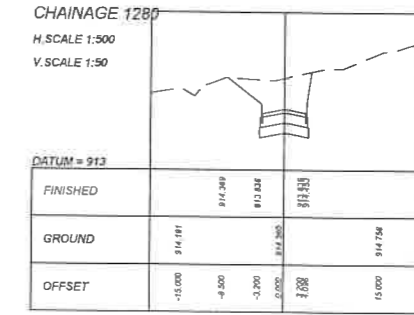
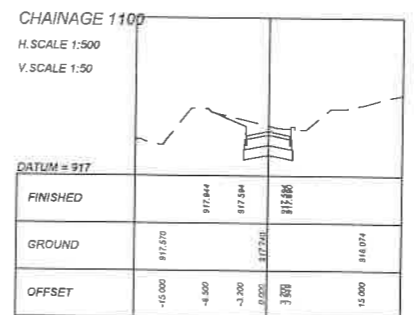
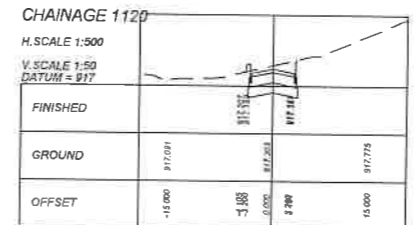
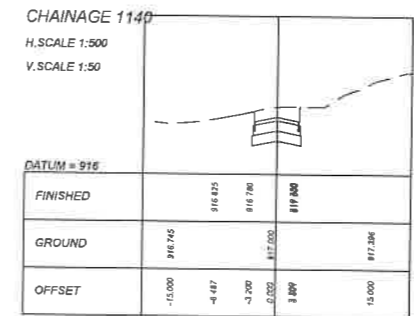
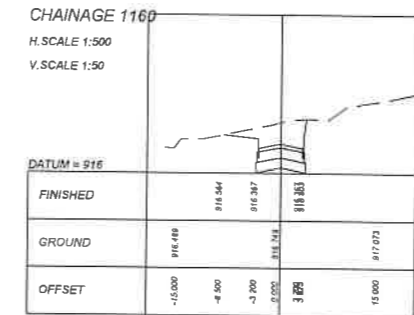
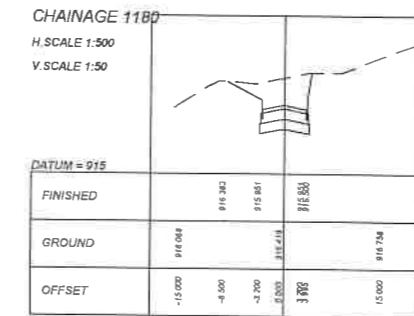
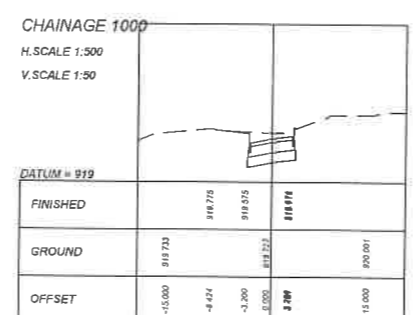
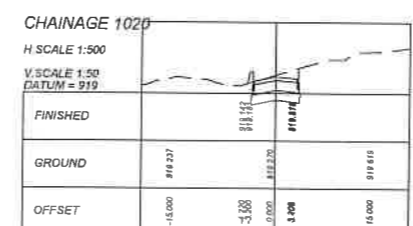
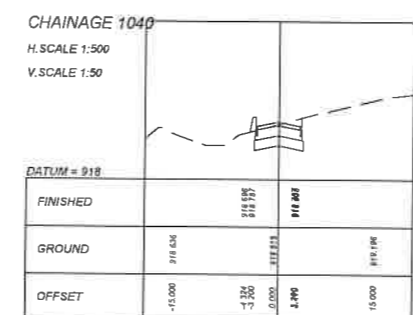
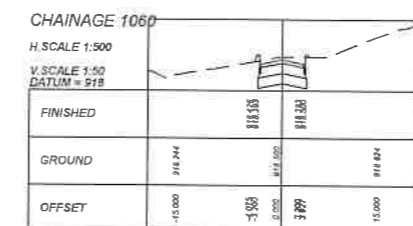
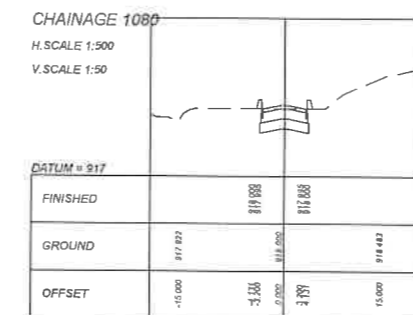
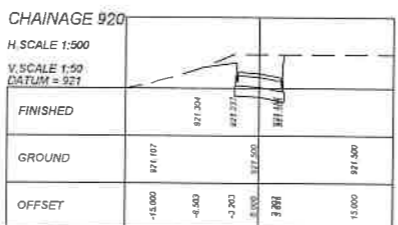
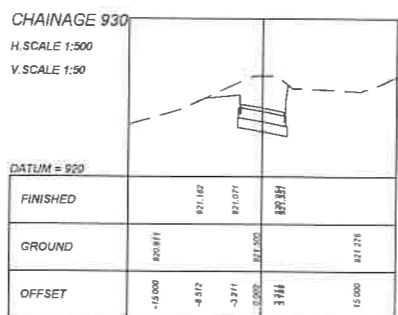
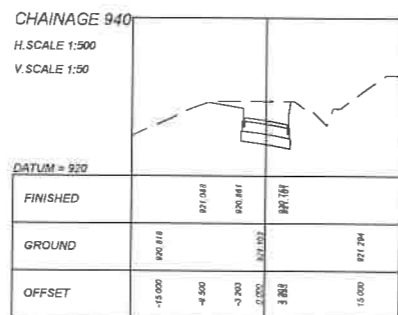
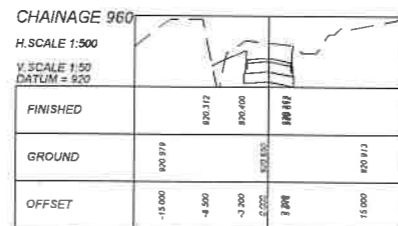
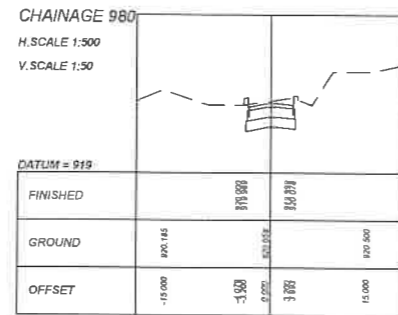
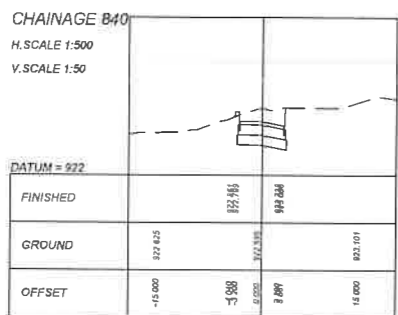
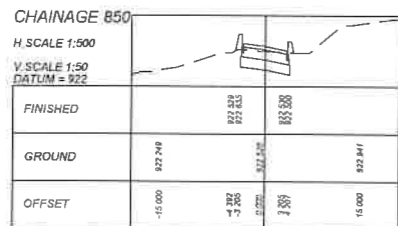
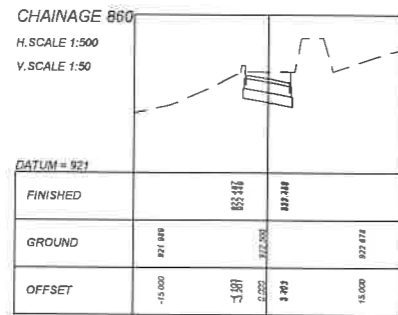
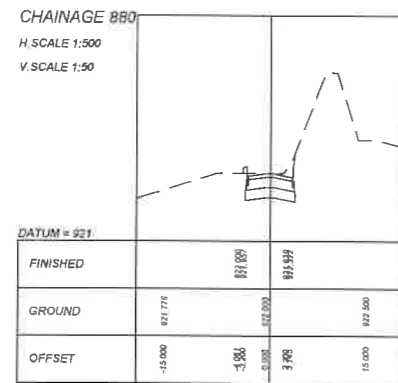
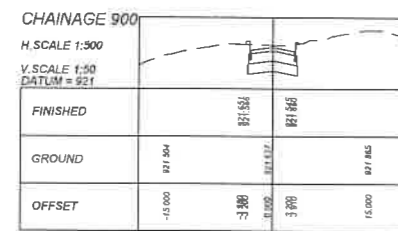
MAKHADO LOCAL MUNICIPALITY
MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3 (REGRAVELLING)
ROAD 1
LONG SECTION

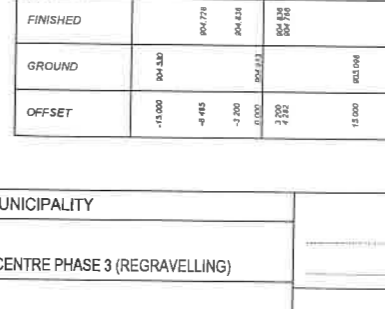
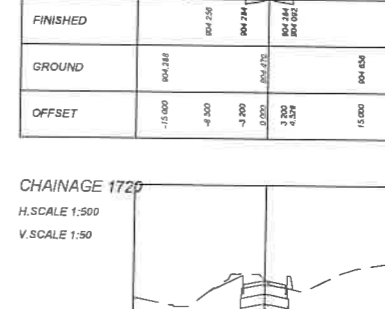
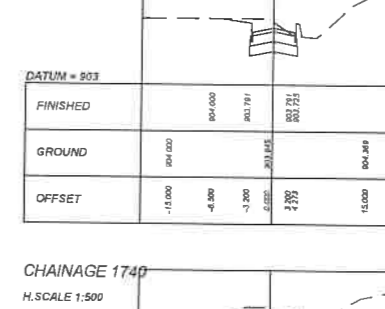
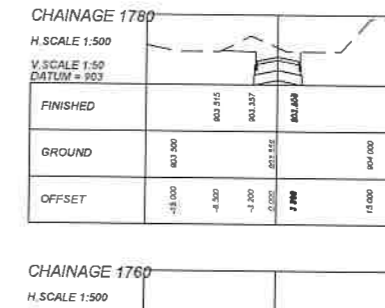
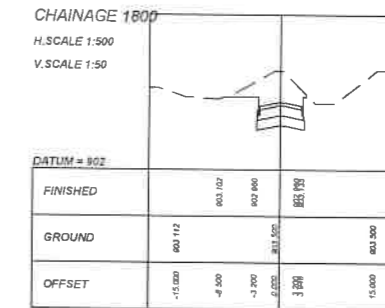
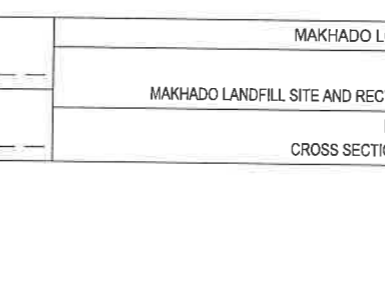
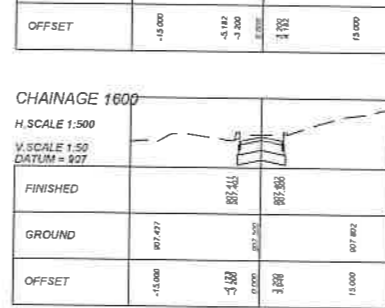
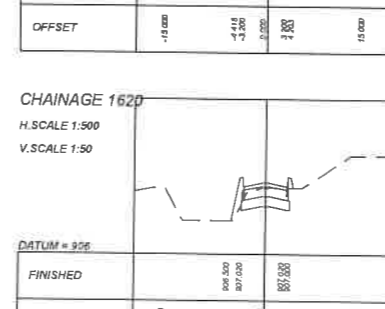
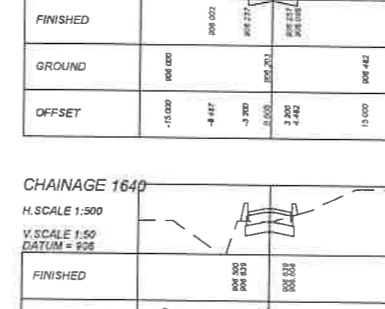
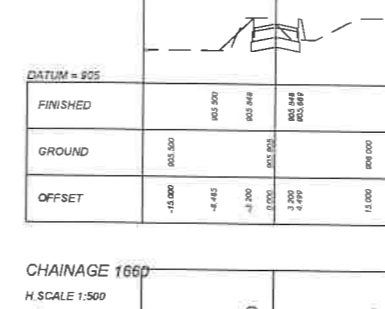
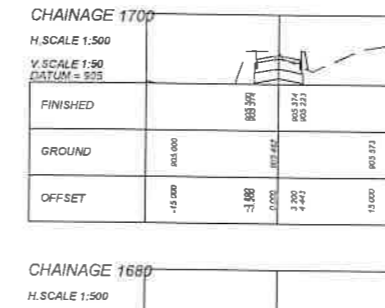
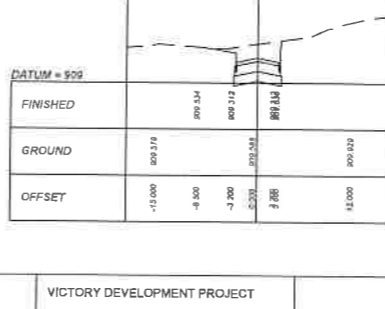
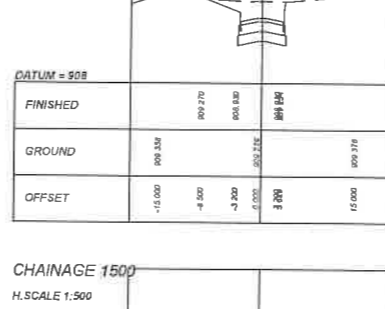
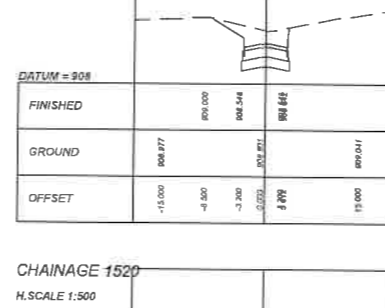
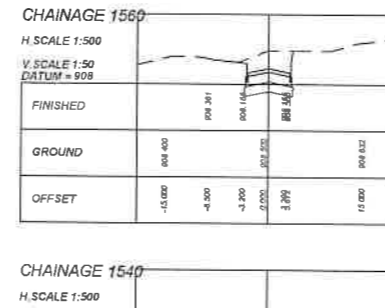
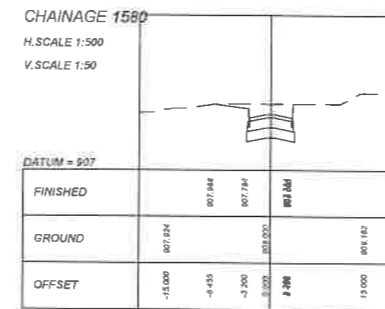
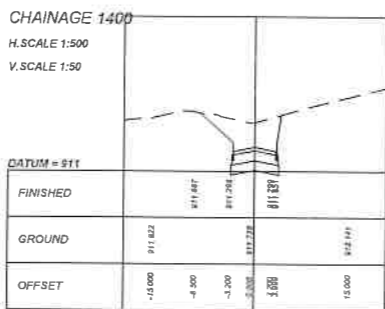
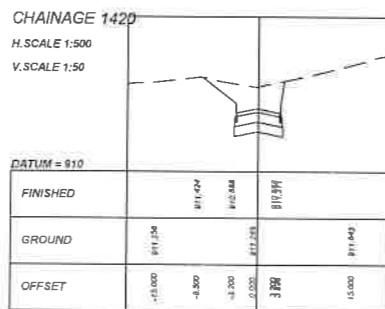
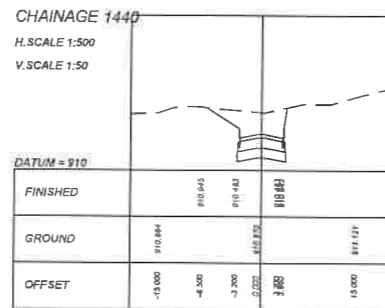
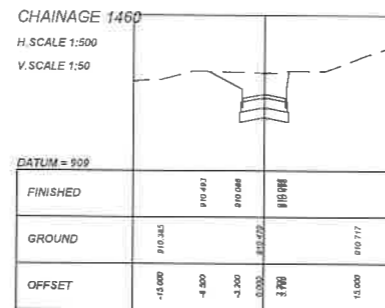
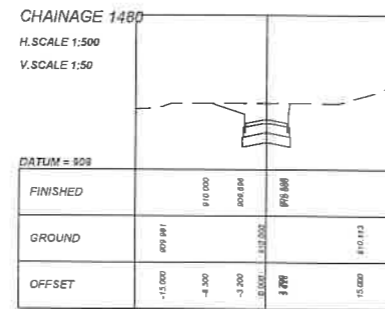
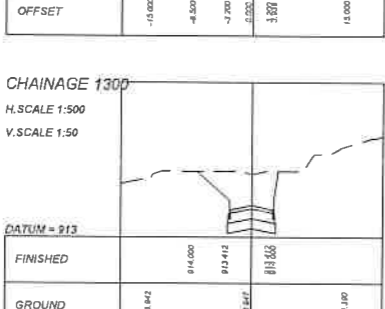
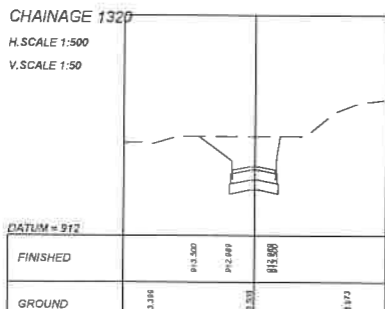
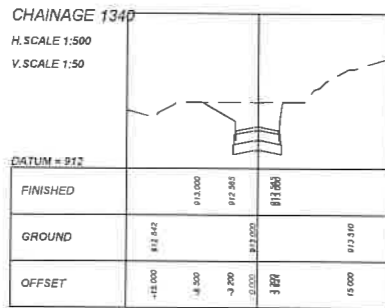
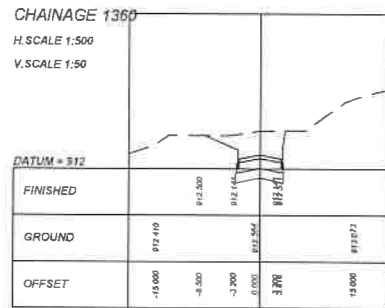
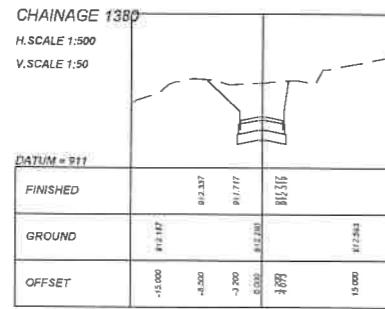
04 of 04
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VDP/2021/LS4
MLM/2021/LS4



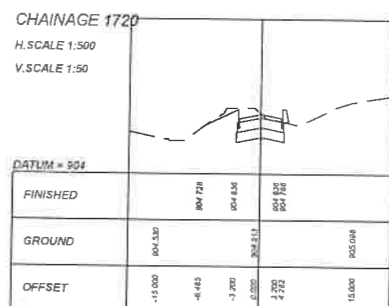
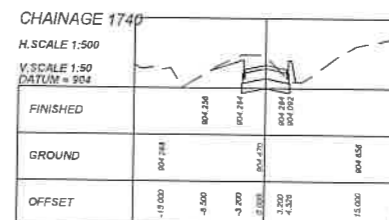
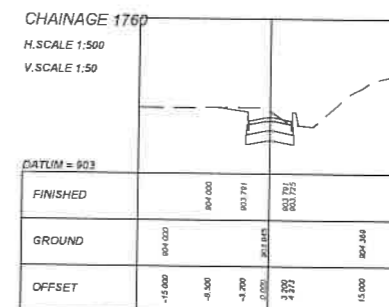
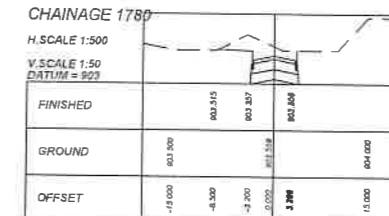
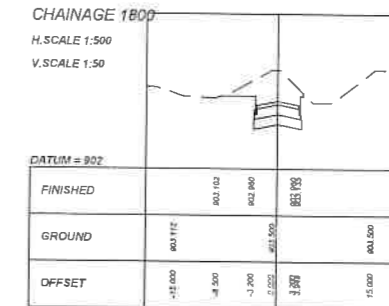
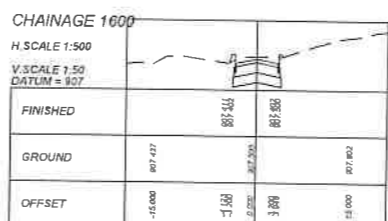
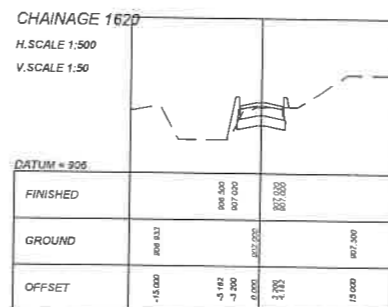
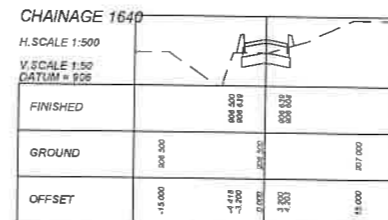
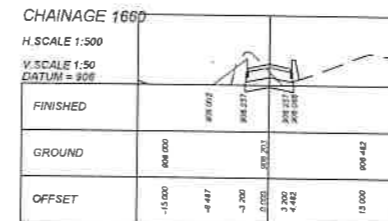
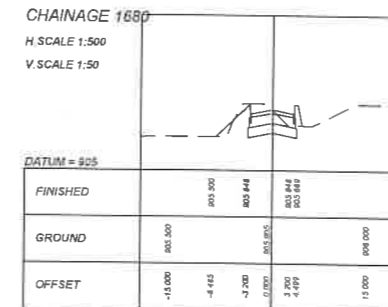
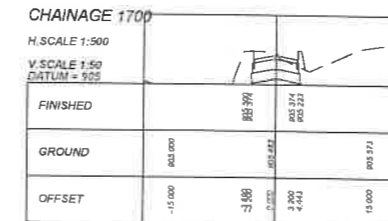
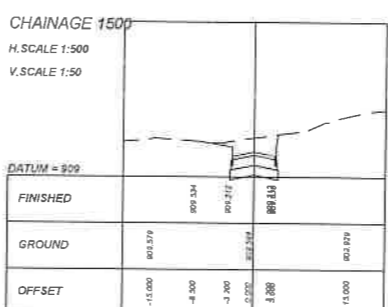
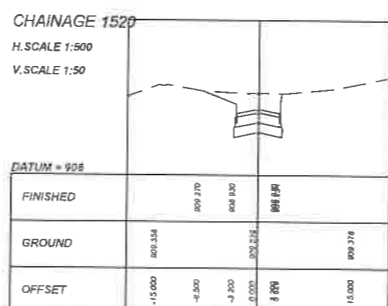
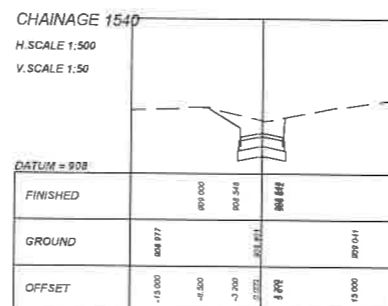
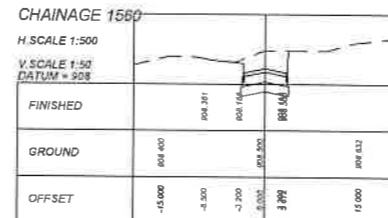
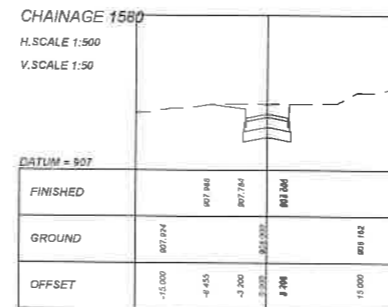
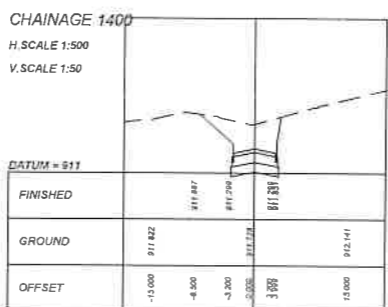
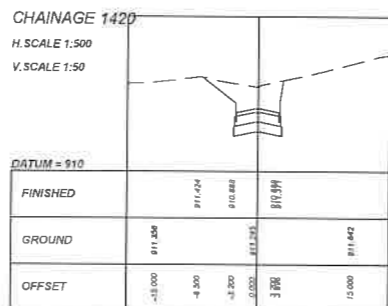
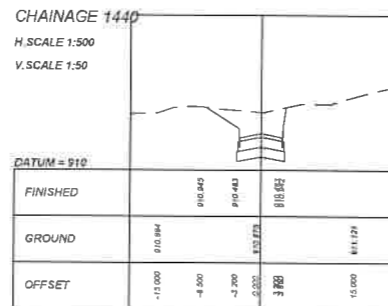
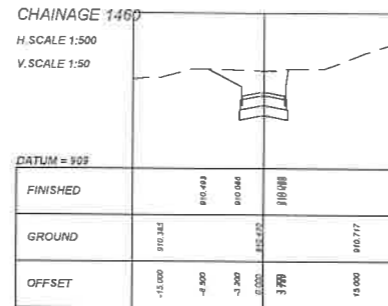
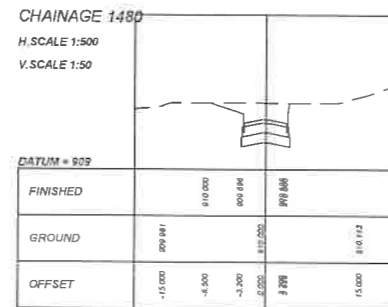
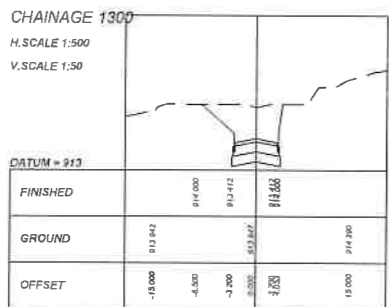
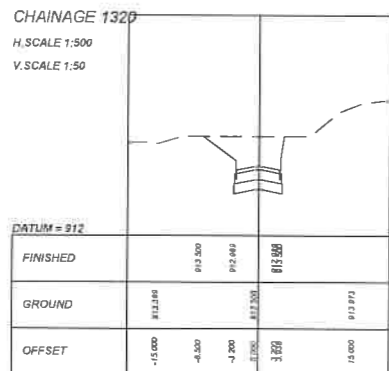
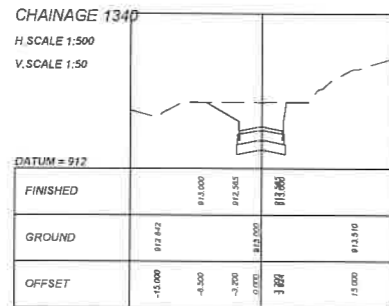
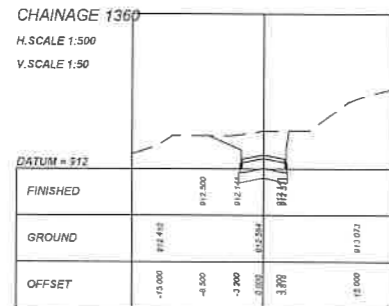
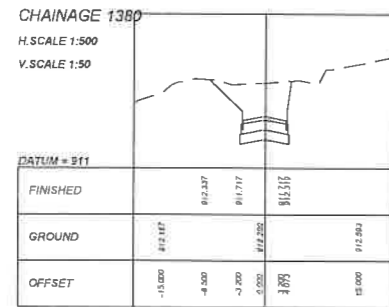


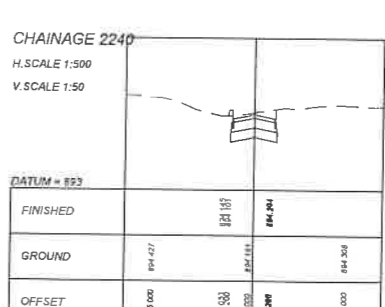
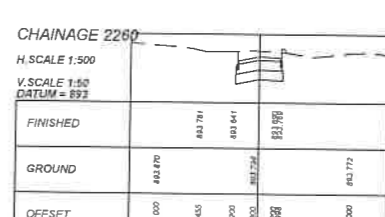
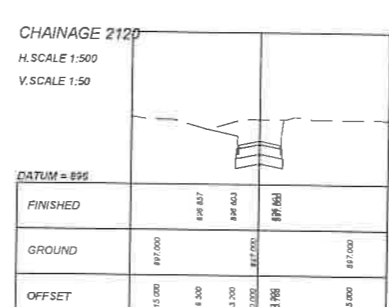
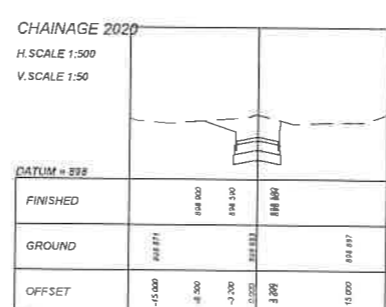
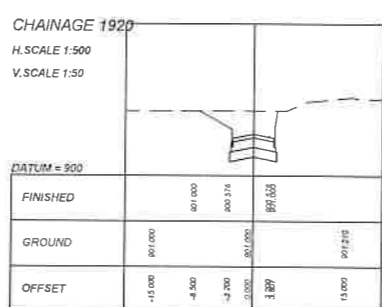
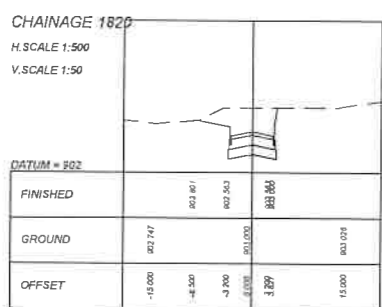
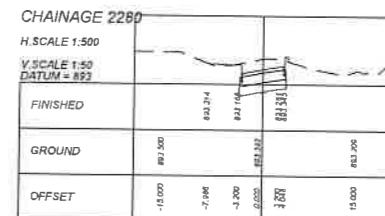
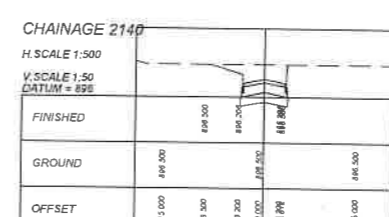
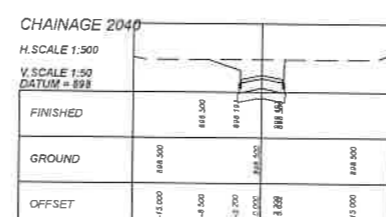
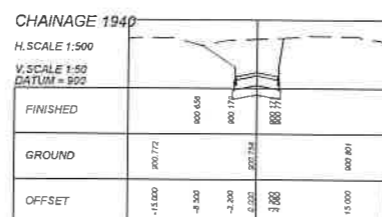
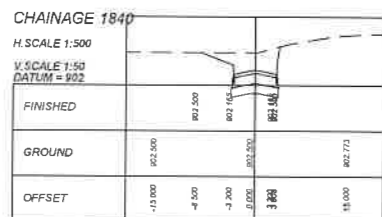
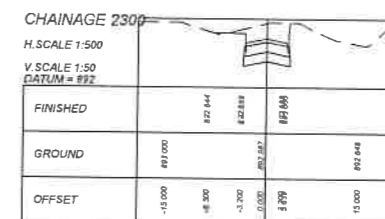
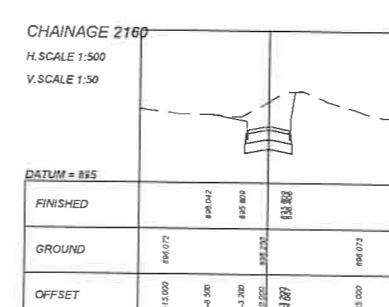
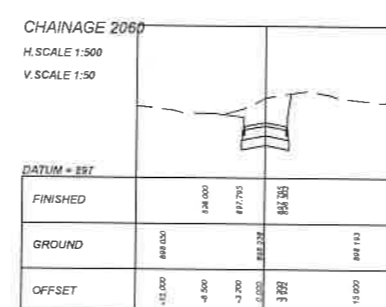
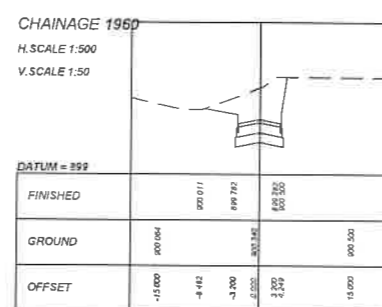
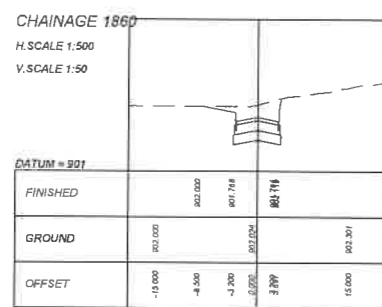
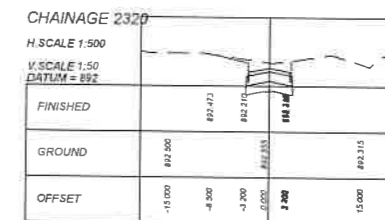
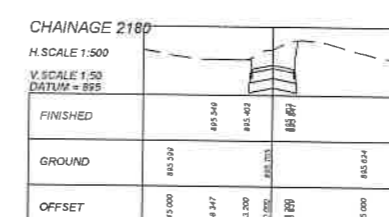
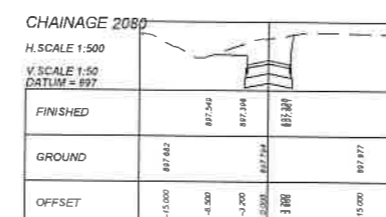
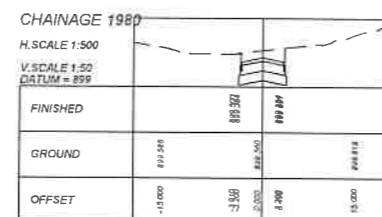
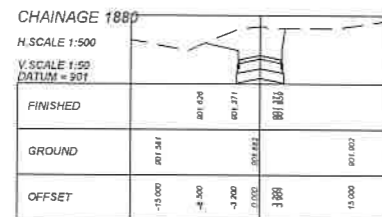
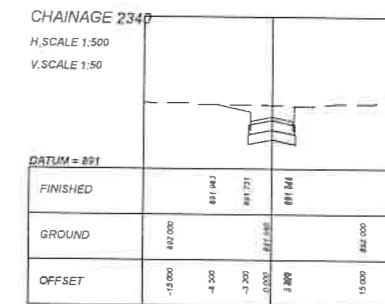
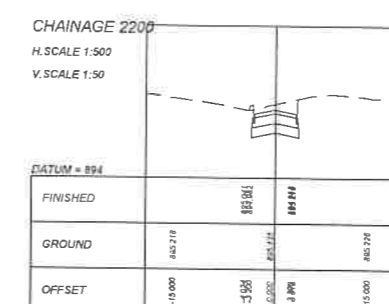
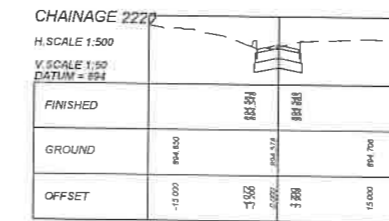
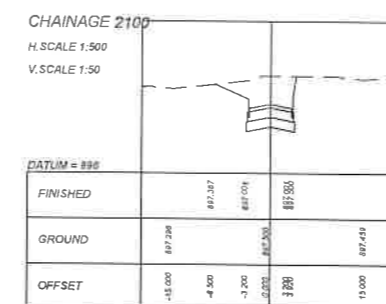
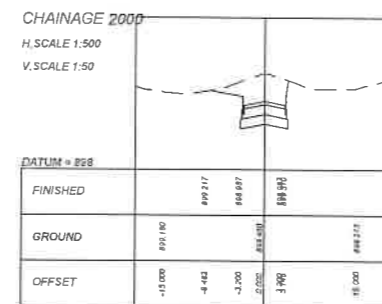
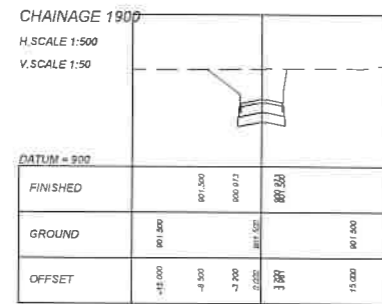
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<p>CHECKED BY: AM</p>				<p>CIVIC CENTRE</p>		<p>14 Paul Kruger Street</p>		<p>MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3 (REGRAVELLING)</p>		<p>ROAD 1</p>		<p>AS SHOWN</p>	
<p>DRAWN BY: FB</p>				<p>PO BOX 100</p>		<p>PO BOX 100</p>		<p>ROAD 1</p>		<p>CROSS SECTION</p>		<p>VDP/2021/CS2</p>	
<p>CHECKED BY: AM</p>				<p>TEL: (015) 519 5297</p>		<p>TEL: (015) 291 3892</p>		<p>MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3 (REGRAVELLING)</p>		<p>CROSS SECTION</p>		<p>MLM/2021/CS2</p>	
<p>REVISION</p>				<p>FAX: (015) 516 1195</p>		<p>FAX: (015) 291 2821</p>		<p>ROAD 1</p>		<p>CROSS SECTION</p>		<p>MLM/2021/CS2</p>	



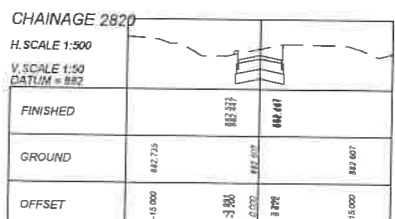
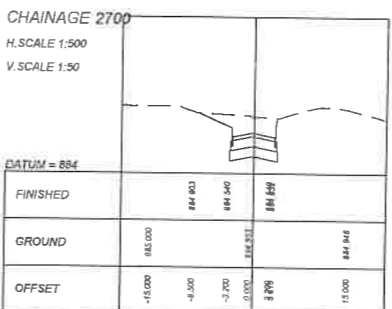
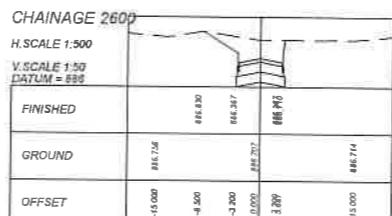
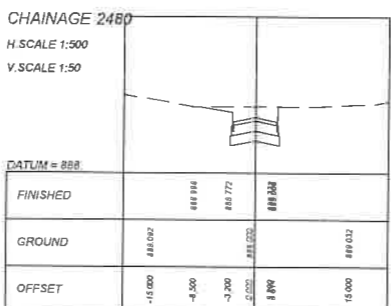
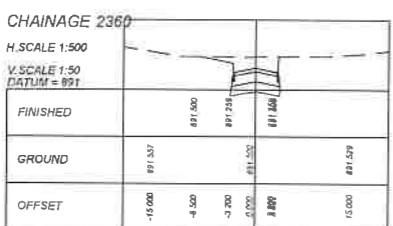
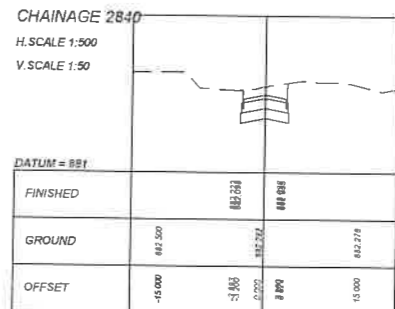
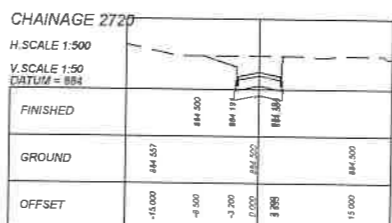
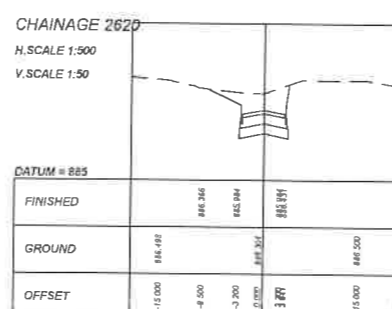
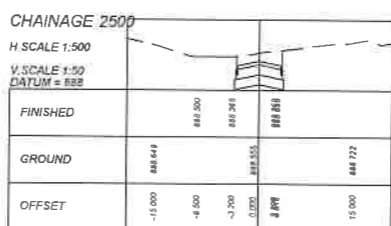
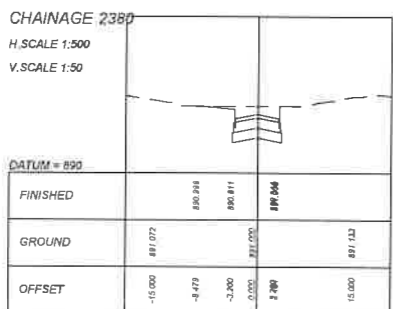
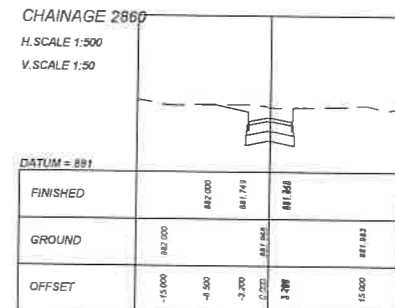
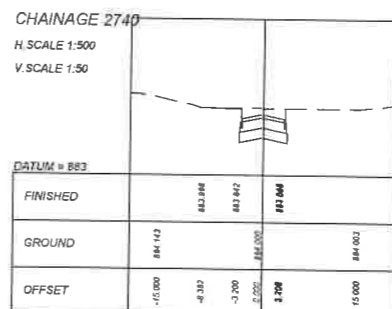
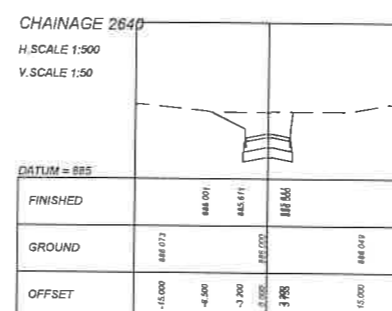
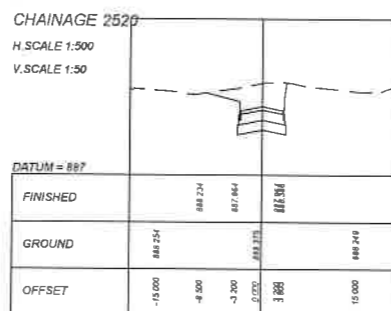
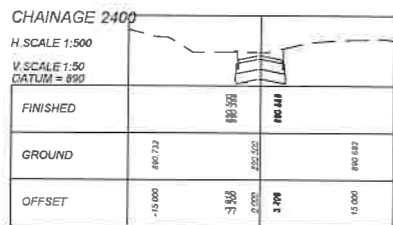
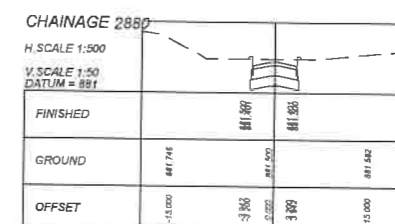
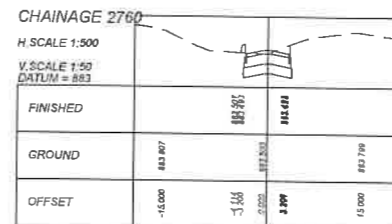
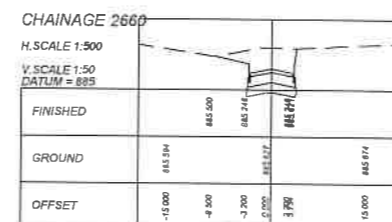
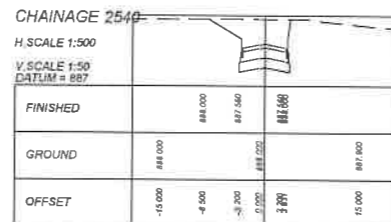
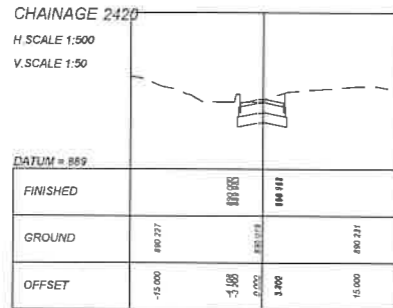
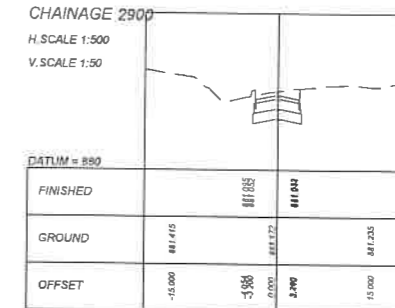
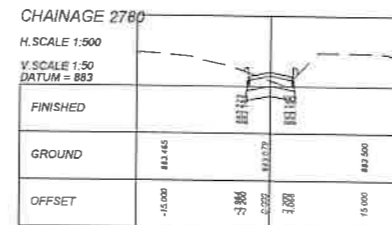
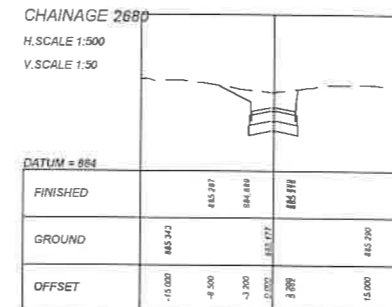
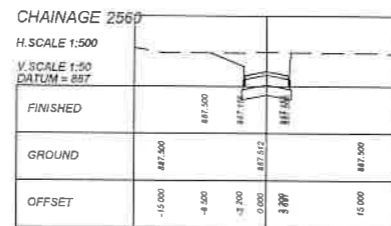
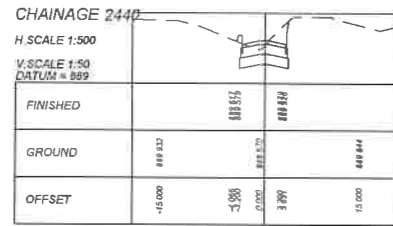
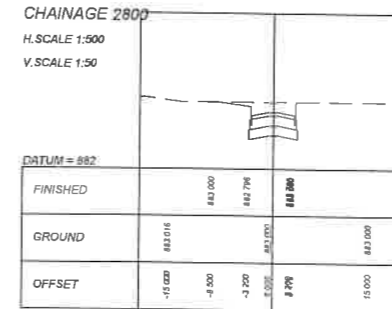
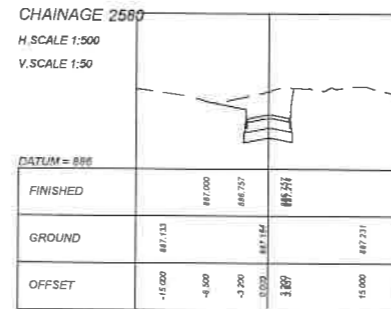
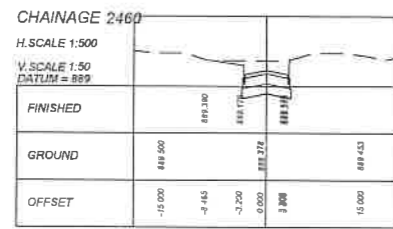


FOR TENDER PURPOSE				MAKHADO LOCAL MUNICIPALITY				MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3 (REGRAVELLING)				ROAD 1				CROSS SECTION (CH1300 - CH1800)				VDP/2021/CS4				MLM/2021/CS4			
DESIGNED BY: F BA				CIVIC CENTRE				14 Paul Kruger Street				POLYMER				TEL: (015) 291 3892				FAX: (015) 291 2821				04 of 08			
CHECKED BY: A M				No 23 Kuyt Street				POLYMER				TEL: (015) 291 3892				FAX: (015) 291 2821				AS SHOWN							
DRAWN BY: F B				LOCAL TOWN				TEL: (015) 291 3892				FAX: (015) 291 2821															
CHECKED BY: A M				TEL: (015) 291 3892				FAX: (015) 291 2821																			



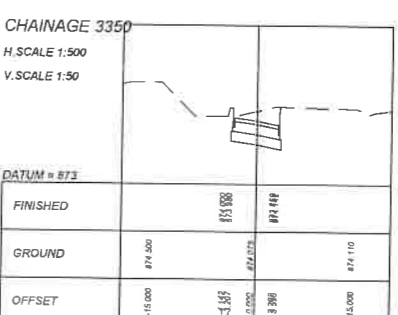
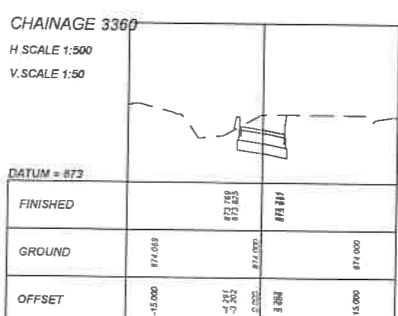
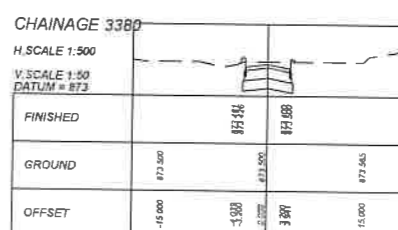
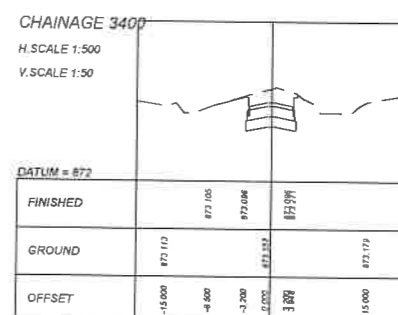
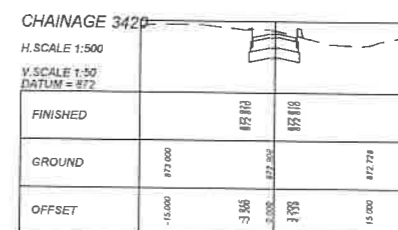
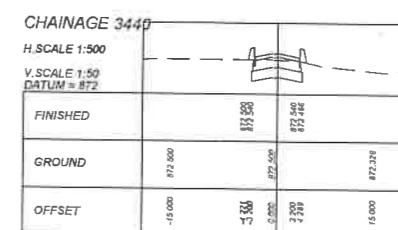
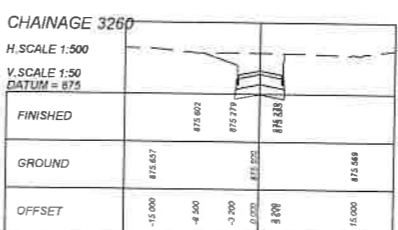
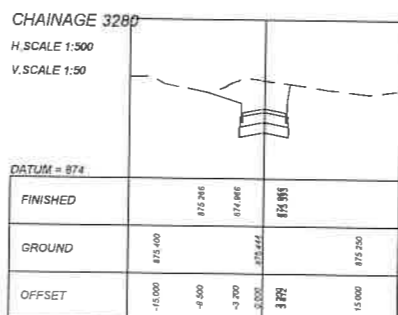
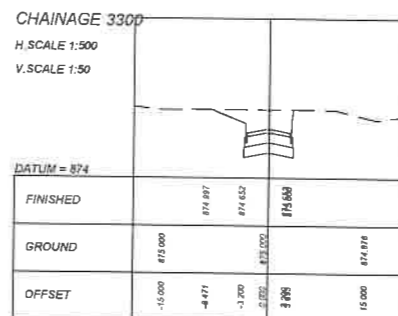
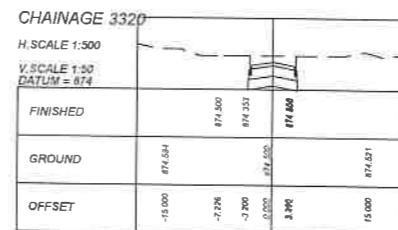
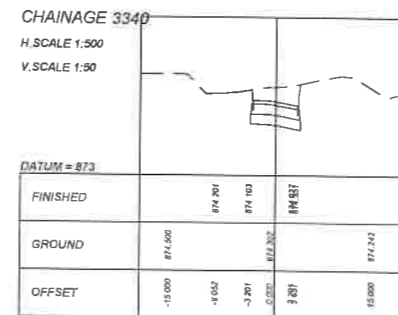
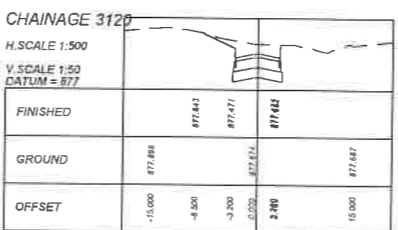
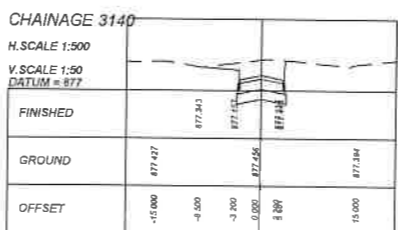
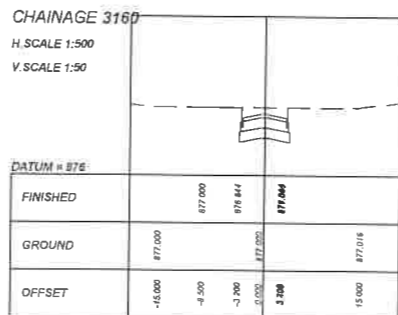
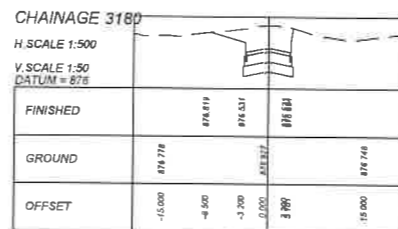
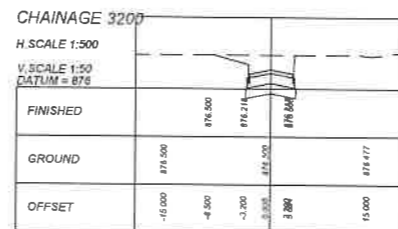
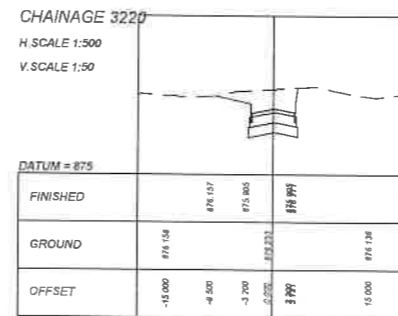
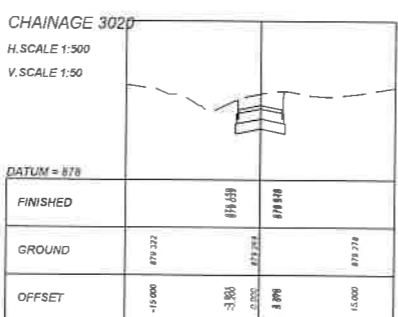
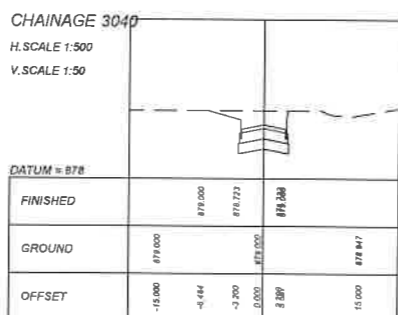
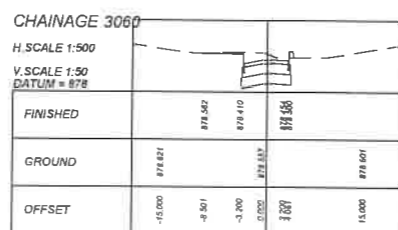
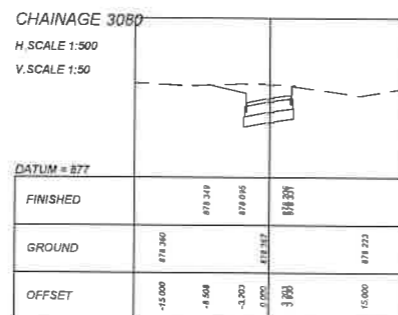
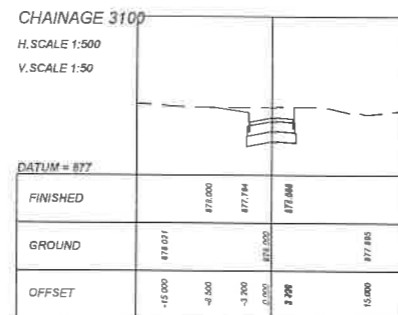
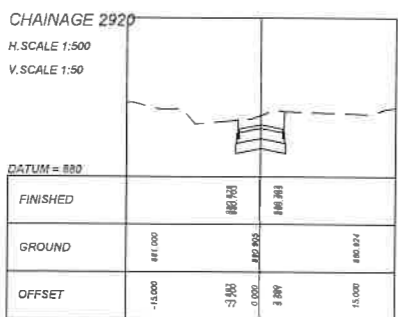
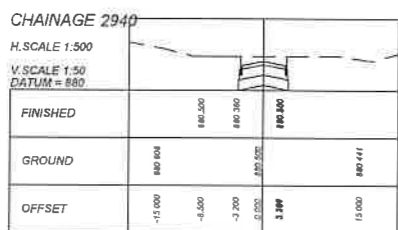
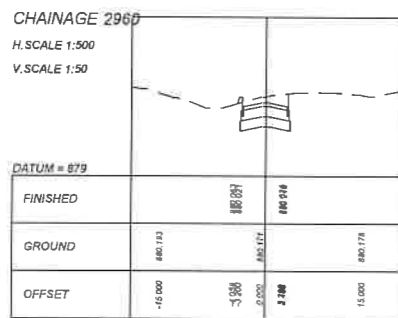
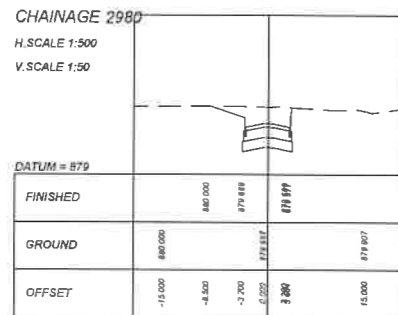
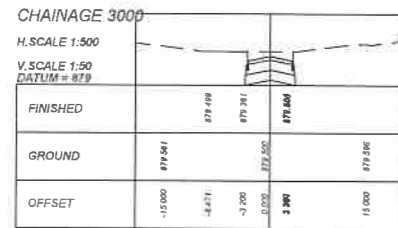


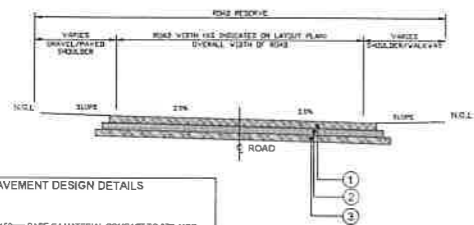
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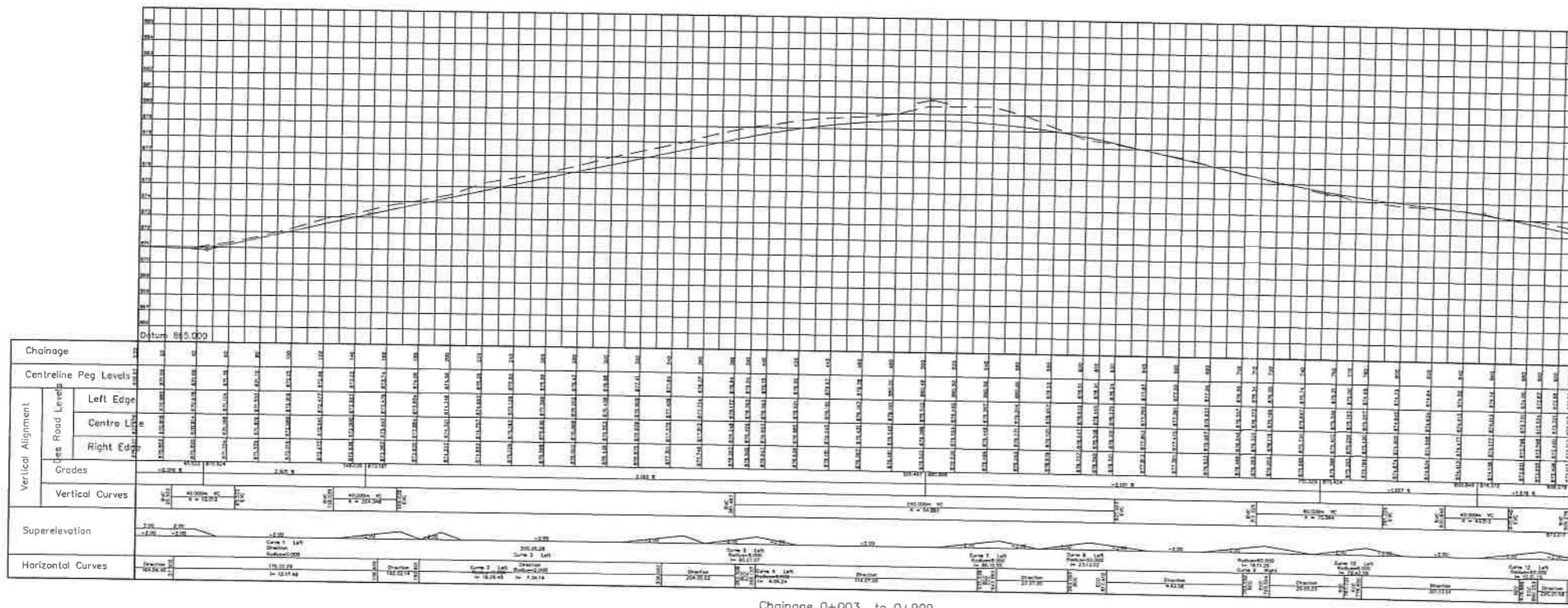
NO	DATE	REVISION	CONSULT	DIR

FOR TENDER PURPOSE	DESIGNED BY	FB	MAKHADO LOCAL MUNICIPALITY	VICTORY DEVELOPMENT PROJECT	MAKHADO LOCAL MUNICIPALITY		06 of 08
	CHECKED BY	AM	CIVIC CENTRE 15015 Kuyah Street Lorenzville 0100	14 Paul Kruger Street Pekaure 0100	MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3 (GRAVELLING)	AS SHOWN	
	DRAWN BY	FB	TEL: (015) 519 5257 FAX: (015) 519 1195	TEL: (015) 291 3482 FAX: (015) 291 2621			ROAD 1 CROSS SECTION (CH2360 - CH2900)	VDP/2021/CS6
	CHECKED BY	AM				MLM/2021/CS6	





TYPICAL ROAD CROSS SECTION
NOT TO SCALE



Road Curve List									
No.	Station	PC	PT	FA	TA	TA	TA	TA	TA
1	0+000	0+000	0+000	0+000	0+000	0+000	0+000	0+000	0+000
2	0+100	0+100	0+100	0+100	0+100	0+100	0+100	0+100	0+100
3	0+200	0+200	0+200	0+200	0+200	0+200	0+200	0+200	0+200
4	0+300	0+300	0+300	0+300	0+300	0+300	0+300	0+300	0+300
5	0+400	0+400	0+400	0+400	0+400	0+400	0+400	0+400	0+400
6	0+500	0+500	0+500	0+500	0+500	0+500	0+500	0+500	0+500
7	0+600	0+600	0+600	0+600	0+600	0+600	0+600	0+600	0+600
8	0+700	0+700	0+700	0+700	0+700	0+700	0+700	0+700	0+700
9	0+800	0+800	0+800	0+800	0+800	0+800	0+800	0+800	0+800
10	0+900	0+900	0+900	0+900	0+900	0+900	0+900	0+900	0+900

Road Curve List									
No.	Station	PC	PT	FA	TA	TA	TA	TA	TA
11	0+000	0+000	0+000	0+000	0+000	0+000	0+000	0+000	0+000
12	0+100	0+100	0+100	0+100	0+100	0+100	0+100	0+100	0+100
13	0+200	0+200	0+200	0+200	0+200	0+200	0+200	0+200	0+200
14	0+300	0+300	0+300	0+300	0+300	0+300	0+300	0+300	0+300
15	0+400	0+400	0+400	0+400	0+400	0+400	0+400	0+400	0+400
16	0+500	0+500	0+500	0+500	0+500	0+500	0+500	0+500	0+500
17	0+600	0+600	0+600	0+600	0+600	0+600	0+600	0+600	0+600
18	0+700	0+700	0+700	0+700	0+700	0+700	0+700	0+700	0+700
19	0+800	0+800	0+800	0+800	0+800	0+800	0+800	0+800	0+800
20	0+900	0+900	0+900	0+900	0+900	0+900	0+900	0+900	0+900

Chainage 0+003 to 0+909

DESIGNED BY: FB		MAKHADO LOCAL MUNICIPALITY		VICTORY DEVELOPMENT PROJECT		MAKHADO LOCAL MUNICIPALITY		01 OF 01	
CHECKED BY: AM		CIVIC ENGINEER No 93 Kogel Street Lange Thuis 0220		14 Paul Kruger Street Pretoria 0000		MAKHADO LANDFILL SITE AND RECYCLING CENTRE PHASE 3 (GRAVELLING)		AS SHOWN	
DRAWN BY: FS		TEL: (015) 519 5257 FAX: (015) 516 1195		TEL: (015) 291 3692 FAX: (015) 291 2621		ROAD 2 LONG SECTION		MLM/2021/LS	
CHECKED BY: AM						VDP/2021/LS			

